

**TABLE 2-3**  
State and Federal Action-Specific Applicable or Relevant and Appropriate Requirements

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description of ARARs
Porter-Cologne Water Quality Control Act (California Water Code Sections 13140, 13240, 13260, 13263, 13267, 13300, 13304, 13307)	SWRCB Resolution 92-49 (as amended April 12, 1994 and October 2, 1996) Subparagraph III G	Relevant and Appropriate	<p>Section III G directs the Water Boards to ensure dischargers clean up and abate the “effects” of discharges in a manner promoting attainment of either background water quality or the best reasonable water quality if background quality is not feasible. (Feasibility is determined by the factors listed in Section III G and 23 CCR, Chapter 15, Section 2550.4.) Minimum water standards must be protective of the beneficial use(s).</p> <p>Section III G directs the Water Boards to apply 23 CCR, Chapter 15, Section 2550.4 in approving any alternative cleanup levels less stringent than background quality. The requirement to obtain the Water Board’s approval is not a substantive requirement (ARAR); however, the Army will consult with the Water Board in applying the State’s criteria to establish alternative cleanup level(s).</p>
Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27/Title 23 (Waters), Division 3 (State Water Resources Control Board), Chapter 15 (Discharges of Waste to Land), Article 1 (General)  27 CCR 20090(d)/23 CCR 2511(d)	Subsection(s) as Listed Below  Relevant and Appropriate	Actions taken by or at the direction of public agencies to clean up from unauthorized releases are exempt from Title 27/Title 23. Except that wastes removed from the immediate place of release and discharged to land must be managed in accordance with classification (Title 27CCR, Section 20200/Title 23CCR, Section 2520) and siting requirements of Title 27 or 23. Wastes contained or left in place must comply with Title 27 or 23 to the extent feasible.
Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27/Title 23 (Waters), Division 3 (State Water Resources Control Board), Chapter 15 (Discharges of Waste to Land), Article 2 (Waste Classification and Management)  27 CCR, 20200, 20210, 20220, and 20230	Applicable or Relevant and Appropriate  Applicable or Relevant and Appropriate	Waste Classification: Wastes must be classified as: hazardous waste (23 CCR 2521), designated waste (23 CCR 2522), nonhazardous solid waste (23 CCR 2523), or inert waste (23 CCR 2524). A hazardous waste can only be discharged to a Class I facility (unless a variance is applicable under Title 22 regulations). A designated waste can be discharged to a Class I or Class II facility. A nonhazardous solid waste can be discharged to a Class I, II, or III facility. Inert wastes do not need to be sent to a classified facility.

**TABLE 2-3**  
State and Federal Action-Specific Applicable or Relevant and Appropriate Requirements

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description of ARARs
Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27 (Environmental Protection), Division 2 (Solid Waste), Chapter 3 (Criteria for All Waste Management Units, Facilities, and Disposal Sites), Subchapter 2 (Siting and Design) also Title 23 Division 23 (State Water Resources Control Board), Chapter 15 (Discharges of Waste to Land), Article 3 (Waste Management Unit Classification and Siting) and Article 5	<p>Subsection(s) as Listed Below</p> <p>27 CCR 20240 (c) (also 23 CCR 2530 (c)): Applicable</p> <p>27 CCR 20240 (d) (also 23 CCR 2530 (d)): Applicable</p> <p>27 CCR 20250: Relevant and Appropriate</p> <p>27 CCR 20320 (also 23 CCR 2541): Relevant and Appropriate</p> <p>27 CCR 20250 (also 23 CCR 2532)</p> <p>27 CCR 20320 (also 23 CCR 2541)</p>	<p>Classification and Siting Criteria</p> <p>27 CCR 20210/23 CCR 2522: Designated wastes are nonhazardous wastes that consist of pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in excess of applicable water quality objectives, or which could cause degradation of waters of the state. Wastes in this category shall be discharged only at Class I waste management units or at Class II waste management units.</p> <p>The Base Realignment and Closure Property soil proposed for onsite consolidation are nonhazardous but may potentially release concentrations that could cause degradation of waters of the state. Therefore, the soil is classified as designated waste. The onsite consolidation unit shall comply with requirements for Class II waste management units.</p> <p>27 CCR 20240 (c): New waste piles shall be designed, constructed, and operated to ensure that wastes will be a minimum of five feet above the highest groundwater elevation.</p> <p>27 CCR 20240 (d): All containment structures at the unit shall have a foundation or base capable of supporting the structures and capable of withstanding hydraulic pressure gradients. The unit needs to be able to withstand flooding without washout, ground rupture, and rapid geological change.</p>

**TABLE 2-3**  
State and Federal Action-Specific Applicable or Relevant and Appropriate Requirements

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description of ARARs
27 CCR 20250 (also 23 CCR 2532)	27 CCR 20320 (also 23 CCR 2541)	Relevant and Appropriate	27 CCR 20250: Class II waste management units shall be located where site characteristics and containment structures isolate waste from waters of the state. Requires that new Class II landfills shall be immediately underlain by either natural geologic materials or a liner system with permeabilities of not more than $1 \times 10^{-6}$ cm/sec. Additionally, Class II units shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return period.
27 CCR 20330 (also CCR 2542)	27 CCR 20340 (also CCR 2543)		27 CCR 20320: Construction standards for waste management units are provided for Class II non-municipal solid waste landfills. Requires a clay liner and leachate collection and removal system for Class II landfills.
27 CCR 20410 (also 23 CCR 2550.6)	27 CCR 20415 (also 23 CCR 2550.7)	Relevant and Appropriate	27 CCR 20330: Sets forth specific standards for liners. Clay liners for a Class II unit shall be a minimum of 2 feet thick and shall be installed at a relative compaction of at least 90 percent.
27 CCR 20420 (also 23 CCR 2550.8)		Relevant and Appropriate	27 CCR 20340: Sets forth specific standards for leachate collection and removal systems. Class II landfills and waste piles which contain only dry wastes may be allowed to operate without an LCRS if the discharger demonstrates, based on climatic and hydrogeologic conditions, that leachate will not be formed in or migrate from the unit
		Relevant and Appropriate	Requires monitoring for compliance with cleanup standards for three years from the date of achieving cleanup levels (23 CCR 2550.6) at waste management units.
			Requires general soil, surface water, and groundwater monitoring (23 CCR 2550.7) which states: <ul style="list-style-type: none"> <li>- there is a sufficient number of monitoring points, including background points</li> <li>- the monitoring points should be located at appropriate locations and screened in the zones of concern</li> </ul>
			Detection Monitoring Program Requirements. Requires establishment of a water quality monitoring system that is appropriate for detecting at the earliest possible time a release from the unit.

**TABLE 2-3**  
State and Federal Action-Specific Applicable or Relevant and Appropriate Requirements

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description of ARARs
	27 CCR 20425 (also 23 CCR 2550.9)	Relevant and Appropriate	Evaluation Monitoring Program Requirements. Requirements under this subsection are triggered if results of the Detection Monitoring Program indicate that there is a “measurably significant” evidence of a release or if there is significant physical evidence of a release. Requires an assessment of the nature and extent of the release, including a determination of the spatial distribution and concentration of each constituent.
	27 CCR 20430 (also 23 CCR 2550.10)	Relevant and Appropriate	Corrective Action Program Requirements. Requires implementation of corrective action measures that ensure that cleanup levels are achieved throughout the zone affected by the release by removing the waste constituents or treating them in place. Source control may be required. Also requires monitoring to determine the effectiveness of corrective actions. To demonstrate cleanup, the concentration of each COC in the groundwater must be equal to, or less than, the cleanup goal for at least one year following suspension of the corrective action.
	27 CCR 20950 (also 23 CCR 2580)	Relevant and Appropriate	Provides Closure and Post-Closure Maintenance requirements for disposal sites and landfills. Requires that Class II landfills shall be closed in accordance with 27 CCR 21090.
	27 CCR 21090 (also 23 CCR 2581)	Relevant and Appropriate	Provides final cover requirements for Class II landfills including specifications for final cover slopes, foundation layer, low-hydraulic-conductivity layer, and erosion resistance layer.
	27 CCR 21769 (also 23 CCR 2597)	Relevant and Appropriate	Requirements promulgated in this section set forth the requirements for the discharger’s development and implementation of the preliminary and final closure and post-closure maintenance plans and for the RWQCB’s review and approval of such plans. The purpose of the closure and post-closure plans is to ensure that the discharger meets performance standards set forth in the regulatory closure requirements and that sufficient funds are available to achieve these goals.

**TABLE 2-3**

State and Federal Action-Specific Applicable or Relevant and Appropriate Requirements

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description of ARARs
<b>Other State of California TBCs</b>			
Resolution 92-145	Interim Final Sediment Screening Criteria and Testing Requirements for Wetland Creation and Upland Beneficial Reuse dated December 1992, Resolution No. 92-145 (referenced in the San Francisco Bay Region Water Quality Control Plan, approved in 1995).	TBC	In this Resolution, the Regional Board established screening criteria to be used to evaluate the appropriateness of using dredged material for beneficial purposes. This document is not an ARAR because the HAAF is not reusing dredged sediments from the San Francisco Bay area. This document is, however, a TBC because the screening criteria presented in this Resolution were considered as guidelines.
	Draft Staff Report entitled Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines dated May 2000.	TBC	This document is an update of the December 1992 document described above. These guidelines fall into the category of "to be considered" (TBC). The screening values presented in this document were considered as guidelines.

ARAR	Applicable or relevant and appropriate requirements
BAAQMD	Bay Area Air Quality Management
BMP	Best management practice
CAMU	Corrective action management unit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CCR	California Code of Regulations
CFR	Code of Federal Regulation
cm/sec	centimeter per second
COC	Contaminant of Concern
DWQ	Department of Water Quality
ERA	U.S. Environmental Protection Agency
HAAF	Hamilton Army Airfield
LDR	Land disposal restriction
mg/L	milligram per liter
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resource Control Board
TBC	To-be-considered
TDS	Total dissolved solids
USC	United States Code

**TABLE 2-4**  
 Comparator Values – Former Sewage Treatment Plant

Chemical of Concern	COC Basis	Comparator Values (mg/kg)
Alpha-chlordane	1	0.0023 <sup>a</sup>
Gamma-chlordane	1,2	0.0023 <sup>a</sup>
DDD	1	0.007 <sup>b</sup>
DDE	1	0.007 <sup>b</sup>
DDT	1	0.007 <sup>b</sup>
Dieldrin	1,2	0.00072
Endosulfan sulfate	1	0.00286

<sup>a</sup> Based on total chlordanes

<sup>b</sup> Based on total DDTs

**COC Basis**

1 - Potential ecological hazard

2 - Potential human health risk

COC = chemical of concern

DDD = dichlorodiphenyldichloroethane

DDE = dichlorodiphenyldichloroethylene

DDT = dichlorodiphenyltrichloroethane

mg/kg = milligrams per kilogram

**TABLE 2-5**  
Comparator Values – Building 26

<b>Chemical of Concern</b>	<b>COC Basis</b>	<b>Comparator value (mg/kg)</b>
TPH measured as diesel	1	144

COC Basis

1 - Potential ecological hazard

2 - Potential human health risk

COC = chemical of concern

TPH = total petroleum hydrocarbon

mg/kg = milligrams per kilogram

**TABLE 2-6**  
 Comparator Values – Building 35/39 Area

<b>Chemical of Concern</b>	<b>COC Basis</b>	<b>Comparator Values (mg/kg)</b>
DDD	1	0.007 <sup>a</sup>
DDE	1	0.007 <sup>a</sup>
DDT	1	0.007 <sup>a</sup>

<sup>a</sup> Based on total DDTs

COC Basis

1 - Potential ecological hazard

2 - Potential human health risk/hazard

COC = chemical of concern

DDD = dichlorodiphenyldichloroethane

DDE = dichlorodiphenyldichloroethylene

DDT = dichlorodiphenyltrichloroethane

mg/kg = milligrams per kilogram

**TABLE 2-7**  
Comparator Values – Building 41 Area

<b>Chemical of Concern</b>	<b>COC Basis</b>	<b>Comparator Values (mg/kg)</b>
TPH measured as diesel	1	144
2-methylnaphthalene	1	0.0194
Acenaphthene	1	0.026
Fluoranthene	1	0.6
Fluorene	1	0.0253
Naphthalene	1	0.382
Phenanthrene	1	0.24

COC Basis

- 1 - Potential ecological hazard
- 2 - Potential human health risk/hazard

COC = chemical of concern

mg/kg = micrograms per kilogram

TPH = total petroleum hydrocarbon

**TABLE 2-8**  
Comparator Values – Building 82/87/92/94 Area

<b>Chemical of Concern</b>	<b>COC Basis</b>	<b>Comparator Values (mg/kg)</b>
Barium	1	190
Beryllium	1	1

COC Basis

1 - Potential ecological hazard

2 - Potential human health risk/hazard

COC = chemical of concern

mg/kg = milligrams per kilogram