

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2

HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737

June 7, 1996



Engineering Field Activity, West
Naval Facilities Engineering Command
Attn: Mr. Richard Powell [1832]
900 Commodore Drive
San Bruno, California 94066-5006

Dear Mr. Powell:

IDENTIFICATION OF STATE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS FOR THE PARCEL B FEASIBILITY STUDY, HUNTERS POINT ANNEX

The Department of Toxic Substances Control (Department) received the above request letter on April 25, 1996. AS you may know, the process of ARARs solicitation is an iterative one, as articulated in the section 7.6 (a) of the Federal Facility Agreement (FFA). To that end, we believe further refinement of ARARs will be likely.

In accordance with the FFA, the Department forwarded your letter to several state agencies/departments for their input and consideration. The enclosed are : A) Department's Table of ARARs; B) List of Non-respondents ; and C) responses from Department of Fish and Game, San Francisco Bay Conservation and Development Commission, Integrated Waste Management Board and Regional Water Quality Control Board.

Sincerely,

A handwritten signature in black ink that reads "Cyrus Shabahari".

Cyrus Shabahari
Project Manager
Office of Military Facilities

cc: US EPA, Region IX
Attn: Anna-Marie Cook [H-9-2]
75 Hawthorne Street
San Francisco, California 94105

Regional Water Quality Control Board
Attn: Richard Hiatt
2101 Webster Street, Suite 500
Oakland, California 94612

RECEIVED

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ENCLOSURE A

California Code of Regulations
Division 4, Environmental Health,

Under this division, the Department of Health Services has set chemical specific values for drinking water

Chapter 15
Domestic Water Quality and Protect potential drinking waters of California Monitoring Regulations

Article 4 Primary Standards for Inorganics along with monitoring and compliance

Article 5 sets restriction and standards for radiation in the groundwater

Article 5.5 sets specific organic chemical values along with sampling of treated water

Article 12 Best Available technologies for treating water to meet MCL values-

Article 16 Secondary Drinking Water Standards set secondary MCLs, Laboratories

Title 22, Division 4.5
Environmental Health Standards for Management of Hazardous Waste

<p>Identification and listing of hazardous wastes</p> <p>This chapter identifies those wastes which are subject to regulation as hazardous wastes under this division and which are subject to the notification requirements of Health and Safety Code section 25153.6]</p>	<p>Chapter 11</p>	<p>Article 1</p>	<p>General; purpose and scope, definition of waste and hazardous waste, exclusions, requirements for recyclable Materials and contaminated containers 66261.1 - 66261.7</p>
		<p>Article 2</p>	<p>Criteria for identifying Characteristics of Hazardous Waste 66261.10</p>
		<p>Article 3</p>	<p>Characteristics of Hazardous Waste 66261.20 - 66261.35</p>
		<p>Article 4</p>	<p>List of RCRA Hazardous Wastes 66261.30 - 66261.35</p>
		<p>Article 5</p>	<p>Categories of Hazardous Waste 66261.100-66261.126</p>

Standards Applicable to generators of hazardous waste	Chapter 12	Article 1	Applicability [66262.10 - 66262.12]
		Article 2	A generator who transports, or offers for transportation, hazardous waste for off-site transfer, treatment, storage or disposal shall prepare a Manifest. [66262.20 - 66262.23]
		Article 3	Pre-Transport Equipment are to be included for packaging, labeling, marking, placarding, and accumulation time 66262.30 - 66262.34
		Article 4	Recordkeeping and Reporting. The article establishes requirements for the generator to keep records of manifests 66262.40 - 66262.47
		Article 5	This article establishes requirements applicable to exports of hazardous waste to a foreign country from the State. Except to the extent 40 CFR section 262.58 provides otherwise, a primary exporter of hazardous waste shall comply with the requirements of this article.

<p>Standards for owners and operators of hazardous wastes transfer, treatment, storage and disposal facilities</p>	<p>Chapter 14</p>	<p>Article 2</p>	<p>Requirements apply to the owners and operators of hazardous waste facilities. These requirements are for inspection ,Personal Training, General Requirements, Location Standards, Construction Quality Assurance Program, Seismic and precipitation design standards 66264.13 - 66264.25</p>
		<p>Article 3</p>	<p>Preparedness and Prevention apply to the owners and operators of hazardous waste facility. These are related to design and operation, required equipment, testing and maintenance of equipment, access to communication or alarm system, required aisle space and informing the local authorities. 66264.30 - 66264.37</p>
		<p>Article 4</p>	<p>Contingency plan and emergency procedures apply to the owners and operators of hazardous waste facilities. The owners and operators shall have contingency plan for the facility. 66264.52 - 66264.56</p>
		<p>Article 5</p>	<p>Manifest System, Recordkeeping, and Reporting The regulations in this article apply to owners and operators of both on-site and off-site facilities 66264.71 - 66264.77</p>
		<p>Article 7</p>	<p>Closure and Post-Closure Requirements apply to the owners and operators of hazardous waste management facilities. 66264.111 through 66264.120</p>
		<p>Article 10</p>	<p>Requirements that apply to the owners and operators of facilities that use Tank Systems[66264.190 - 66264.199]</p>
		<p>Article 11</p>	<p>Regulations in this article apply to owners and operators of facilities that use surface impoundment to treat, store or dispose of hazardous waste. 66264.221 through 66264.231</p>
		<p>Article 12</p>	<p>Regulations in this article apply to owners and operators of facilities that store or treat hazardous waste in piles unless exempt. 66264.251 through 66264.259</p>

	Chapter 14	Article 27	Regulations in this article apply to owners and operators of facilities that treat, store or dispose of RCRA hazardous waste by process vents associated with distillation, fraction, thin-film evaporation, solvent extraction, or air steam stripping. 66264.1030 through 1035
		Article 28	Regulations in this article apply to owners and operators of facilities that treat, store or dispose of RCRA hazardous waste, unless exempt. 66264.1052 through 66264.1065
Recyclable of Hazardous Waste	Chapter 16	Article 2	Regulations that apply to the recycling Hazardous Materials (Recyclable Hazardous Wastes). 66266.3 through 66266.12
Land Disposal Restrictions Except as specifically provided otherwise in this chapter (chapter 18) or Chapter 11 (Identification of Hazardous Waste) of this division, the requirements of this chapter apply to persons who generate hazardous waste and owners and operators of hazardous waste treatment, storage and disposal facilities.	Chapter 18	Article 1	Identification of hazardous wastes that are restricted from land disposal. 66268.1 through 66268.9
		Article 2	Schedule for Land Disposal Prohibition and Establishment of Treatment Standards. 66268.10 through 66268.29
		Article 3	Prohibitions on Land Disposal. 66268.30 through 66268.38
		Article 4	Treatment Standards. 66268.40 through 66268.48
		Article 5	Prohibitions on Storage of Restricted Wastes. 66268.50
		Article 10	Land Disposal- Prohibitions-Non-RCRA Wastes 66268.100
		Article 11	Treatment Standards- Non-RCRA Waste Categories. 66268.105 through 66268.114

ENCLOSURE B

List of Non-Respondents to the letter from the Department dated April 26, 1996

1. State Historical Resources Commission
Department of Parks and Recreation
P.O.Box 942896
Sacramento, California 94296-0001
2. Department of Pesticides Regulation
3065 Richmond Parkway, Suite 106
Richmond, California 94806
3. Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109
4. Office of Environmental Health Hazard Assessment
2151 Berkeley Way, Annex 11
Berkeley, California 94704
5. Wildlife Conservation Board
801 K Street, Suite 806
Sacramento, California 95814

ENCLOSURE C

STATE OF CALIFORNIA

PETE WILSON, Governor

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

2101 WEBSTER STREET, SUITE 500

OAKLAND 94612

PHONE: (510) 286-1255

FAX: (510) 286-3986



VIA FACSIMILE

510.540.3819

Mr. Cyrus Shabahari

DTSC, Office of Military Facilities

700 Heinz Avenue

Berkeley, CA 94710

June 5, 1996

File: 2169.6032

**RE: SOLICITATION OF APPLICABLE OR RELEVANT AND APPROPRIATE
REQUIREMENTS (ARARs), HUNTER'S POINT ANNEX, SAN FRANCISCO**

Dear Mr. Shabahari:

Board staff are in receipt of your April 26, 1996 letter requesting ARARs for preliminary alternatives for Parcel B cleanup. This request is in response to the Navy's letter of April 23, 1996 asking for specific citation, brief description and rationale for using state ARARs. Board staff have sent information to the Navy in our January 18, 1994 letter on ARARs and To Be Considered (TBCs). This letter specifically cites and describes ARARs and TBCs for the type of wastes and discharges proposed for Parcel B. Navy staff are encouraged to revisit this letter. The Navy should then propose ARARs and TBCs for Parcel B. Board staff will review these proposed ARARs and TBCs for accuracy and completeness.

Sincerely,

Richard Hiatt
Groundwater and Waste Containment
Division

SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

THIRTY VAN NESS AVENUE, SUITE 2011
SAN FRANCISCO, CALIFORNIA 94102-6080
PHONE: (415) 557-3686

May 31, 1996



Cyrus Shabahari
Department of Toxic and Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710

SUBJECT: Applicable or Relevant and Appropriate Requirements for Hunters Point Shipyard,
San Francisco, California

Dear Mr. Shabahari:

Thank you for the opportunity to submit the Commission's requirements for the implementation of remedial investigations and response actions at Hunters Point Shipyard. Although the San Francisco Bay Conservation and Development Commission does not have remediation standards per se, the Commission has regulatory authority over any development or changes in use of properties within 100 feet of the shore of San Francisco Bay, as well as regulatory authority over any filling or dredging of San Francisco Bay. A permit must be obtained from the Commission for any of these activities if they are conducted by property owners or state, regional, or local government agencies.

The Commission also has authority under the federal Coastal Zone Management Act over activities that affect the coastal zone (16 USC 1456(c)). Under this authority, federal actions or federally funded or approved actions that affect the coastal zone must be consistent with the policies of the Commission's federally-approved coastal management program, and therefore pertains to actions such as environmental remediation.

The Commission's coastal management program consists of the McAteer-Petris Act, the Commission's regulations, the San Francisco Bay Plan, and other plans adopted by the Commission. The Bay Plan contains policies on water quality, public access, fill, dredging, and other uses of the Bay and shoreline.

Several of the Commission's policies apply to remedial activities undertaken by the Navy at Hunters Point Shipyard. Under the federal Coastal Zone Management Act, federal activities or development that affects the coastal zone must be consistent with the applicable Commission policies on water quality, marshes and mudflats, fish and wildlife, and mitigation in the course of the remedial investigations, cleanup, and closures of contaminated areas. These policies can be summarized as follows:

Water Quality: The policies, recommendations, and decisions of the State Water Resources Control Board and the Regional Water Quality Control Board serve as the bases for carrying out the Commission's water quality responsibilities. In addition, Bay marshes, mudflats, and water surface area and volume should be maintained and, whenever possible, increased.

Fish and Wildlife: To the greatest extent feasible, remaining marshes and mudflats around the Bay, the remaining water volume and surface area of the Bay, and adequate fresh water inflow to the Bay should be maintained. Specific habitats that are needed to prevent the extinction of any species, or to maintain or increase any species that would provide substantial public benefits, should be protected, whether in the Bay or on the shoreline behind dikes.

Cyrus Shabahari
May 31, 1996
Page 2

Marshes and Mudflats: Marshes and mudflats are an integral part of the Bay tidal system, and therefore should be protected in the same manner as open water areas. Filling and diking should only be allowed for purposes providing substantial public benefits and only if there is no reasonable alternative.

Mitigation: Mitigation should consist of measures to compensate for the adverse impacts of Bay fill to the natural resources of the Bay, such as to water surface area, volume, or circulation, and to fish and wildlife habitat or marshes or mudflats. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act concerning fill.

Remedial investigations and response actions that affect the coastal zone at the Hunters Point Shipyard will require the Navy to submit a consistency determination before commencing the activities, and should describe how the Navy's activities are consistent with the policies described above. The Commission must concur with the Navy's finding of consistency before any action can occur. A consistency determination is processed much like a Commission permit application. Please contact Steve McAdam, our Chief of Permits and Enforcement, at your earliest convenience to discuss the activities occurring at the Naval Station and the process for the consistency determination.

Sincerely,



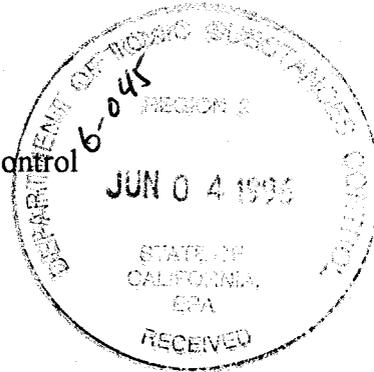
JENNIFER RUFFOLO
Assistant Executive Director
for Government Affairs

JR/LS/gg

BCDC File: Base Closure - Hunters Point
Inquiry File SF.SB.7126.1

Memorandum

Mr. Cyrus Shabahari
Department of Toxic Substances Control
Site Mitigation Branch
700 Heinz Avenue, Building F
Berkeley, CA 94710



Date : May 29, 1996

From : Department of Fish and Game

Subject : State Applicable or Relevant and Appropriate Requirements (ARARs) for Parcel B Feasibility Study, Hunters Point Annex (5920/60120 /NTX403 30:00)

This is in response to your letter of April 26, 1996 to Dr. Michael Martin, Staff Toxicologist, Department of Fish and Game, Monterey, requesting potential State location specific ARARs for the subject site. The Department of Fish and Game appreciates your request to provide State laws and regulations to guide the planned Removal Action and site remediation at Hunters Point.

As the lead State agency for toxic cleanup, you are making an inquiry to the Department for purposes of coordination and definition of appropriate State cleanup requirements under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as a portion of the site remediation process. This letter also serves to advise you of the Department's interest, as one of the State natural resource trustees, in coordinating any natural resource issues which may be necessary should the release(s) of any hazardous materials at the subject site affect State natural resources, pursuant to CERCLA.

We have not had the opportunity to do a site inspection of Parcel B, but from the documents we have received, it appears to include an intertidal zone which falls under the definition of a wetland adopted by the Fish and Game Commission. The parcel also appears to have some open space. As a designated natural resource trustee, the Department is responsible for protecting all of the native plant, fish and wildlife resources of the state, and their respective habitats.

In addition to these general public trust responsibilities, the Department is responsible for protecting special status species. After a preliminary review, Department staff identified the following listed species that could be affected by the proposed alternatives.

- California clapper rail (*Rallus longirostris obsoletus*) - State and federally endangered
- California black rail (*Laterallus jamaicensis coturniculus*) - State threatened
- Chinook salmon (winter run) (*Oncorhynchus tshawytscha*) - State and federally endangered
(Note: Although Hunters Point does not fall within the critical habitat of the winter-run Chinook salmon, individuals have been found in the South Bay during high water years.)

Mr. Cyrus Shabahari
May 29, 1996
Page 2

Once preferred alternatives are identified for each type of waste, the Department will assess potential impacts and make specific recommendations. However, it can be anticipated that any alternative which disturbs a wetland or intertidal area will impact these species. Excavation and off-site disposal of contaminated sediment from a wetland area could reduce wetland values. For example, if sediment is exported from an intertidal mudflat, the water depth increases, eliminating wetland acreage and habitat value. In this type of scenario, mitigation to create additional wetland from adjacent upland areas may be necessary.

For terrestrial sites, deed restrictions may not adequately remediate for these contaminants, which will continue to pose a long-term impact to the state's natural resources. In some terrestrial areas, which may be historic State Lands, it may be inappropriate for the Navy to determine deed restrictions.

Discharging treated contaminated groundwater into the bay may also pose a threat to listed and other species. If discharge into the bay is identified as the preferred alternative, a toxicologist will need to determine if the level of treatment selected is adequate.

The enclosed table is a complete list of Fish and Game Code sections that are possible State location-specific ARARs or TBCs (to be considered). The specific citation and explanation for each listed ARAR and TBC are included.

Thank you for the opportunity to comment upon the ARARs request. If you have any questions or need additional information, please contact me at (916) 484-3026.



Susan R. Ellis, Senior Biologist
Environmental Services Division

Enclosure: 4 pages

cc: Department of Fish and Game

Mr. John Turner
Sacramento

Dr. Michael Martin
Monterey

Ms. Jennifer Decker
Sacramento

LOCATION SPECIFIC ARARs AND TBCs FOR HUNTERS POINT ANNEX, PARCEL B

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
Wildlife species	Action must be taken to prohibit the taking of birds and mammals, including taking by poison.	Fish & Game Code Section 3005	This code section prohibits the taking of birds and mammals, including taking by poison. "Taking" is defined by Fish and Game Code Section 86 to include killing. "Poison" is not defined in the code but contaminants of concern (heavy metals, herbicides and pesticides) are all poisons by definition. Federal law recognizes that poison may effect an incidental taking. (Defenders of Wildlife v. Administrator, Environmental Protection Agency (1989) 882 F.2d 1295.) This code section imposes a substantive, promulgated environmental protection requirement. This section should be included as an ARAR.
Streambed	Any bed, channel or bank of any river or stream may not be altered without first notifying the Department	Fish and Game Code Section 1603	This section requires notification to and action by the Department. Section 1603 also imposes a substantive requirement to the extent it requires streambed alteration to not substantially adversely affect an existing fish or wildlife resource. This section applies to any alteration of the Bay adjacent to Parcel B. This section should be included as an ARAR.

LOCATION SPECIFIC ARARs AND TBCs FOR HUNTERS POINT ANNEX, PARCEL B

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
Streambed	The Department must propose reasonable modifications to public construction projects that would alter the bed, channel or bank of any river, stream or lake and may substantially adversely affect an existing fish or wildlife resource.	Fish and Game Code Section 1601	This section requires notification to and action by the Department. It also imposes a substantive requirement to the extent it requires streambed alteration to not substantially adversely affect an existing fish or wildlife resource. The section is relevant to the extent the operations impact the beds, channel or bank of San Francisco Bay adjacent to Parcel B. Section 1601 complements the operation of federal ARAR 40CFR Section 231.1, which authorizes the USEPA Administrator to prohibit activity whenever he determines that the discharge of dredge or fill material may have an "unacceptable adverse affect" on fish and wildlife. Section 1601 also complements the operation of federal ARAR 16 USC Section 662, which requires the determination of possible damage to wildlife resources and the means and measures that should be adopted to prevent the loss of or damage to such resources caused by proposed streambed alterations. This section should be included as an ARAR.
Wildlife species/habitats	Action must be taken for the general protection and conservation of fish and wildlife resources.	Fish & Game Code Section 1600	This code section declares the protection and conservation of fish and wildlife to be an important public interest. This section is a general statement of policy that does not impose a substantive requirement. This section should be included as a TBC.

LOCATION SPECIFIC ARARs AND TBCs FOR HUNTERS POINT ANNEX, PARCEL B

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
Aquatic and wildlife species/habitats	Action may be taken to collect damages for the taking of birds, mammals, fish, reptiles or amphibia	Fish and Game Code Section 2014	This code section declares that it is the policy of the state to conserve its natural resources. It allows the state to recover damages in a civil action against any person or local agency which unlawfully or negligently takes or destroys a bird, mammal, fish, reptile or amphibia protected by the laws of the state. This section should be included as an ARAR.
Endangered Species	Action must be taken to conserve endangered species, there can be no releases and/or actions that would have a deleterious effect on species or habitat.	Fish & Game Code Section 2080	This section prohibits the taking, importation or sale of any species, or any part thereof, of an endangered species or a threatened species. The winter-run Chinook salmon, California clapper rail and California black rail are on the California and/or Federal endangered species lists and the Department has the authority to protect these species and their habitat. This section should be included as an ARAR.
Endangered Species	Action must be taken to conserve endangered species, there can be no releases and/or actions that would have a deleterious effect on species or habitat.	Fish & Game Code Sections 2090-2096	These code sections comprise Article 4 of Chapter 1.5 of the California Endangered Species Act. These sections make provisions concerning Department coordination and consultation with state and federal agencies and with project applicants. These sections do not impose substantive requirements. These sections should be included as TBCs.

LOCATION SPECIFIC ARARs AND TBCs FOR HUNTERS POINT, PARCEL B

LOCATION	STANDARD	SPECIFIC CITATION	ARAR/TBC EXPLANATION
Wetlands	Action must be taken to assure that there is "no net loss" of wetlands acreage or habitat value. Action must be taken to preserve, protect, restore and enhance California's wetland acreage and habitat values.	Fish and Game Commission Wetlands Policy (adopted 1987) included in Fish and Game Code Addenda	This policy seeks to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California. Further, it opposes any development or conversion of wetland which would result in a reduction of wetland acreage or habitat value. It adopts the USFWS definition of a wetland which utilizes hydric soils, saturation or inundation, and vegetable criteria, and requires the presence of at least one of these criteria (rather than all three) in order to classify an area as a wetland. In the case of Parcel B, the intertidal mudflat, and possibly other wetland areas exist. This policy is not a regulatory program and should be included as a TBC.



California
Environmental
Protection
Agency

*Integrated
Waste
Management
Board*

8800 Cal Center Dr.
Sacramento CA 95826
(916) 255-2200



Pete Wilson
Governor

James M. Strock
Secretary for
Environmental
Protection

May 17, 1996

Mr. Cyrus Shabahari
Project manager
Department of Toxic Substances Control
Region 2
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737

Subject: Applicable or Relevant and Appropriate Requirements
(ARARs) for Hunters Point Shipyard, San Francisco

Dear Mr. Shabahari:

This letter is in response to the Department of Toxic Substance Control's (DTSC) letter dated April 26, 1996, requesting ARARs for Parcel B at Hunters Point Shipyard, San Francisco, California. DTSC's request was received by the Integrated Waste Management Board (IWMB) May 3, 1996.

Previously we submitted ARARs to the Department of Toxic Substance Control in a letter dated March 16, 1995. Although the ARARs have not changed since our last letter, we have attached the *OMF ARARs FACT SHEET #4*, for your information. Note that to date we have not received any technical documents to review for the Hunters Point Shipyard.

If you have any questions regarding this letter, please feel free to call me at 916-255-3840.

Sincerely,

Albert M. Johnson
Closure and Remediation Branch
Permitting and Enforcement Division

Attachments

cc: Henry Louie, San Francisco Department of Public Health, LEA



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OMF ARARs FACT SHEET # 4

Spring 1996

The California Integrated Waste Management Board's (CIWMB) statutory and regulatory authority at solid waste disposal sites

INTRODUCTION

A major area of the California Integrated Waste Management Board's (CIWMB) involvement at military facilities has been in the identification, interpretation and implementation of the CIWMB's statutory and regulatory requirements as they pertain to closure, postclosure maintenance and consolidation of solid waste disposal sites at military facilities. This fact sheet should: 1) raise awareness regarding the CIWMB's jurisdiction over solid waste disposal sites; and 2) improve coordination with the CIWMB by ensuring timely inclusion of the CIWMB in the request for Applicable or Relevant and Appropriate Requirements (ARARs) and the full disclosure of the conditions at the site to allow for timely integration of the CIWMB's requirements.

The Department of Toxic Substances Control (DTSC) has the role of coordinating the concerns of regulatory agencies and the identification of their statutory and regulatory requirements. As such, it is the Remedial Project Managers (RPMs) responsibility to ensure that these requirements are adequately addressed by the appropriate military branches. The following questions and answers are designed to assist the RPMs in understanding the CIWMB's jurisdiction over issues related to solid waste disposal sites at military facilities:

- 1. What are the CIWMB's statutory and regulatory requirements pertaining to closure, postclosure maintenance and consolidation of solid waste disposal sites?**

The CIWMB has the following general statutory and regulatory authority:

- o **Statutory authority:** The Integrated Waste Act of 1989, as embodied in Public Resources Code (PRC) Section 40000 et seq.
- o **Regulatory authority:** Title 14, California Code of Regulations (14 CCR), Division 7.

The CIWMB is mandated by statute to coordinate all actions regarding solid waste disposal sites with state and federal agencies (PRC 43301). These actions include approval of closure activities and other activities related to solid waste disposal sites's excavation, consolidation, and postclosure maintenance (PRC 43505 and 43506). Furthermore, pursuant to the PRC, the

ENCLOSURE C
OMF ARARS FACT SHEET #4
PAGE 2

IDENTIFICATION OF STATE APPLICABLE OR
RELEVANT AND APPROPRIATE REQUIREMENTS
FOR THE PARCEL B FEASIBILITY STUDY

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SOUTHWEST DIVISION TO LOCATE THIS PAGE.
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SHOULD THE MISSING ITEM BE LOCATED.

QUESTIONS MAY BE DIRECTED TO:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

ARARs to ensure compliance with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 121 (d), and the NCP, the CIWMB's staff will need to review relevant section of the RI Report and other pertinent documents, and possibly visit the site. Specific ARARs activities include:

1. Identification of initial ARARs (see attachments);
2. Collection of information to clarify and possibly reduce initial ARARs based on site specific conditions;
3. Site-specific and remedy-specific interpretation and application of ARARs;
4. Concurrence that ARARs will be met by the proposed remedy; and
5. Assurance that design and implementation comply with ARARs.

ARARs need to be accurately and completely identified and interpreted at the earliest possible point (i.e., during the Remedial Investigation (RI) scoping) according to the National Contingency Plan (NCP) and the Base Realignment and Cleanup (BRAC) Plans. Therefore, RPMs are encouraged to contact the CIWMB during the RI scoping and no later than the final FS and should continue to work closely with the CIWMB throughout the remediation phases to obtain information on data needs and to ensure compliance with CERCLA. Some of the major areas of concern during solid waste disposal sites' closure, postclosure maintenance and consolidation include:

Landfill Gas:

Several gases are typically generated by decomposition of organic materials in a landfill. The composition, quantity, and generation rates of the gases depend on such factors as refuse quantity and composition, refuse placement characteristics, age of the disposal unit, landfill depth, refuse moisture content, and the amount of oxygen present. The principal gases generated by volume are carbon dioxide, methane, and occasionally, hydrogen sulfide. Trace volatile organic compounds, such as trichloroethylene, vinyl chloride and benzene, can also be present in landfill gases, particularly at co-disposal facilities (areas where solid waste and, to a lesser extent, hazardous wastes have been co-disposed). Data generated during site characterization of landfill gases are used to determine the type of landfill gas monitoring and control that would be required. Data collection covers:

- o Landfill gas characteristics, including composition, moisture content, quantity, temperature, and methane content. Common test methods for landfill gas characterization are ASTM method D-1945 for natural gasses and EPA's method TO-14 for trace gasses; and
- o Measuring the presence of offsite combustible gases in concentrations > 5% measured as methane by volume, subsurface migration of combustible gases > 1.25% measured as methane by volume in and around structures, and surface emissions of trace gases that may pose a threat to public health and the environment.

ENCLOSURE C
OMF ARARS FACT SHEET #4
PAGE 4

IDENTIFICATION OF STATE APPLICABLE OR
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RECORDS MANAGEMENT SPECIALIST
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

If you have further general questions on the CIWMB's ARARs, or if you need a copy of the attached tables on computer disk, contact Pauline Batarseh, Interagency Coordination Unit, Office of Military Facilities, at 255-3603.

Attachments:

Table 1. State ARARs for solid waste disposal site closure and postclosure maintenance.

Table 2. State ARARs for solid waste disposal site excavation and consolidation.

Table 1

State ARARs for Solid Waste Disposal Site Closure and Postclosure Maintenance

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description	Comment	Associated Site
California Integrated Waste Management Act of 1989 PRC 40502 & 43020	14 CCR 17766 Chapter 3, Article 7.8 Disposal Site Closure and Postclosure Maintenance	Applicable	Emergency Response Plan (ERP): potential emergency conditions that may exceed the design of the site and could endanger the public health or environment must be anticipated. The events that the plan shall address include but are not limited to: vandalism; fires; explosions; earthquakes; floods; and other waste product releases. Response procedures for these conditions must be addressed in the RD/RA plans. This section does not apply to corrective actions under the ground water or gas monitoring provisions.	Closure or Postclosure Maintenance Standard of Title 14, CCR, Chapter 3, Article 7.8. Scope and Applicability pursuant to 14 CCR 17760.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43020	14 CCR 17767 Chapter 3, Article 7.8 Disposal Site Closure and Postclosure Maintenance	Applicable	Security at Closed Sites: all points of access to the site must be restricted, except permitted entry points. All monitoring, control, and recovery systems shall be protected from unauthorized access.	Closure or Postclosure Maintenance Standard of Title 14, CCR, Chapter 3, Article 7.8. Scope and Applicability pursuant to 14 CCR 17760.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43020	14 CCR 17773 Chapter 3, Article 7.8 Disposal Site Closure and Postclosure Maintenance	Applicable	Final Cover: the design and construction of the final cover must meet specific prescriptive standards of 23 CCR 2581(a). These include minimum thickness and quality of the construction material. If the prescriptive standard is not feasible then an engineered alternative that meets the performance goals (i.e. limiting infiltration, controlling gas emissions, compatibility with reuse) can be proposed.	Closure or Postclosure Maintenance Standard of Title 14, CCR, Chapter 3, Article 7.8. Scope and Applicability pursuant to 14 CCR 17760.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43020	14 CCR 17774 Chapter 3, Article 7.8 Disposal Site Closure and Postclosure Maintenance	Applicable	Construction Quality Assurance (CQA): a CQA program must be designed and implemented. It must include specific parameters (and for some components specific testing methods) for each component of the final cover. For example, pass/fail criteria for compaction testing for soil barrier layer and seam testing for flexible membrane liners should be included with corrective measures for failed tests.	Closure or Postclosure Maintenance Standard of Title 14, CCR, Chapter 3, Article 7.8. Scope and Applicability pursuant to 14 CCR 17760.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43020	14 CCR 17776 Chapter 3, Article 7.8 Disposal Site Closure and Postclosure Maintenance	Applicable	Final Grades: the final grades for the covered landfill must meet grading standards provided in 23 CCR 2581, they must be appropriate to control runoff and erosion. A minimum of grade of 3% is required unless an effective system is provided for diverting surface drainage from covered wastes.	Closure or Postclosure Maintenance Standard of Title 14, CCR, Chapter 3, Article 7.8. Scope and Applicability pursuant to 14 CCR 17760.	For closing sites

ENCLOSURE C

TABLE 1
STATE ARARs SOLID WASTE DISPOSAL SITE
CLOSURE AND POSTCLOSURE MAINTENANCE
PAGE 2

IDENTIFICATION OF STATE APPLICABLE OR
RELEVANT AND APPROPRIATE REQUIREMENTS
FOR THE PARCEL B FEASIBILITY STUDY

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State ARARs for Solid Waste Disposal Site Closure and Postclosure Maintenance

Source	Standard, Requirement, Criteria, or Limitation	ARAR Status	Description	Comment	Associated Site
California Integrated Waste Management Act of 1989 PRC 40502 & 43509	14 CCR 18262.3 Chapter 5, Article 3.4 Closure and Postclosure Maintenance Plans	Relevant and Appropriate	Closure Plan: Provides the minimum substantive content requirements for closure plans for solid waste disposal sites. The content include but are not limited to, a site plot plan, final grading contour maps, desing drawings for the final cover and environmental monitoring and control systems, and a discription of the monitoring and control systems , the sequence of closure with an implementation schedual.	Applies to solid waste disposal sites that received waste after January 1, 1988.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43509	14 CCR 18275 Chapter 5, Article 3.4 Postclosure Maintenance Plans	Relevant and Appropriate	Closure Certification: Provides the mininum substantive content requirements to obtain certification that the solid waste disposal sites has closed pursuant to state standards.	Applies to solid waste disposal sites that received waste after January 1, 1988.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43509	14 CCR 18265.3 Chapter 5, Article 3.4 Closure and Postclosure Maintenance Plans	Relevant and Appropriate	Postclosure Maintenance Plan: Provides the minimum substantive content requirements for postclosure maintenance plans for solid waste disposal sites. The contence include but are not limited to persons responsible for postclsoure maintenace, as-built plans, monitoring tasks, O&M of collection and recovery systems and a discription of the intended postclosure land use.	Applies to solid waste disposal sites that received waste after January 1, 1988.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43020	14 CCR 17796 Chapter 3, Article 7.8 Disposal Site Closure and Postclosure Maintenance	Applicable	Post Closure Land Use: Site Closure Design shall show one or more proposed uses of the closed site or show development that is compatible with open space. Changes in postclosure land use must be approved by the appropriate State agency prior to implementation.	Closure or Postclosure Maintenance Standard of Title 14, CCR, Chapter 3, Article 7.8. Scope and Applicability pursuant to 14 CCR 17760.	For closing sites
California Integrated Waste Management Act of 1989 PRC 40502 & 43020	14 CCR 17788 Chapter 3, Article 7.8 Disposal Site Closure and Postclosure Maintenance	Applicable	Post Closure Maintenance: the landfill must be maintained and monitored for no less than 30 years following closure.	Closure or Postclosure Maintenance Standard of Title 14, CCR, Chapter 3, Article 7.8. Scope and Applicability pursuant to 14 CCR 17760.	For closing sites

14 CCR - California Code of Regulations, Title 14

ARAR - applicable or relevant and appropriate requirement ROD - Record of Decision RD/RA - remedial design/remedial action

Table 2

State ARARs for Solid Waste Disposal Site Excavation and Consolidation

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description	Comment	Associated Site
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 18222 Chapter 5, Article 3.2 Reports of Facility Information	Relevant and Appropriate	Report of Disposal Site Information: The planning and procedural requirements necessary to ensure that solid waste is handled and disposed in manners that protect public health and safety and the environment must be conducted.	Applies to operating solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17636 Chapter 3, Article 7.3 Disposal Site Records	Applicable	Weight/Volume Records: the weight or volume of waste accepted must be determined to an accuracy of ±10%	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17637 Chapter 3, Article 7.3 Disposal Site Records	Applicable	Subsurface Records: the length and depth of any cut(s) made in natural terrain where fill will be placed and the depth to groundwater must be determined and documented.	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17658 Chapter 3, Article 7.4 Disposal Site Improvements	Applicable	Site Security: the perimeter of the landfill must be secured either through barriers or topographic constraints to discourage unauthorized entry.	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17659 Chapter 3, Article 7.4 Disposal Site Improvements	Applicable	Access Roads: landfill roads must be reasonably smooth to minimize dust and tracking of materials onto public roads.	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17676 Chapter 3, Article 7.5 Disposal Site Operations	Applicable	Confined Unloading: Requires limiting unloading area, controlling windblown materials, and deposition at toe of fill.	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation sites

ENCLOSURE C
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STATE ARARs SOLID WASTE DISPOSAL SITE
EXCAVATION AND CONSOLIDATION
PAGE 2

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State ARARs for Solid Waste Disposal Site Excavation and Consolidation

Source	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description	Comment	Associated Site
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17690 Chapter 3, Article 7.5 Disposal Site Operations	Applicable	Storage of Salvage: Salvage material must be safely isolated for storage.	No salvage planned as a part of the selected action. Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation and excavation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17691 Chapter 3, Article 7.5 Disposal Site Operations	Applicable	Removal: Storage time for salvage materials shall be limited to a safe duration.	No salvage planned as a part of the selected action. Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation and excavation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17692 Chapter 3, Article 7.5 Disposal Site Operations	Applicable	Non-Salvageable Items: Items capable of impairing public health shall not be salvaged without approval by Enforcement Agency and local health entity.	No salvage planned as a part of the selected action. Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation and excavation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17686 Chapter 3, Article 7.5 Disposal Site Operations	Applicable	Scavenging: Scavenging is prohibited.	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation and excavation sites
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021 and 43030	14 CCR 17688 Chapter 3, Article 7.5 Disposal Site Operations	Applicable	Volume Reduction and Energy Recovery: Volume reduction and energy recovery are permitted in planned and controlled manners.	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.	For consolidation and excavation sites