



California Regional Water Quality Control Board

San Francisco Bay Region



Winston H. Hickox
Secretary for
Environmental
Protection

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N00221_000770
MARE ISLAND
SSIC NO. 5090.3.A

Date: **OCT 14 2003**
File No. 2129.2011B (GJR)

Commander
Attn: Mr. Jerry Dunaway (Code 06CM.JD)
Southwest Division, Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, California 92132-5190

SUBJECT: Staff Comments on Draft Feasibility Study, Installation Restoration Site 17 and Building 503 Area. Investigation Area A1, Mare Island Naval Shipyard, Vallejo, California (January 8, 2003)

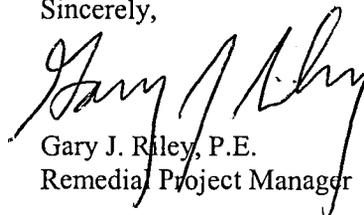
Dear Mr. Dunaway:

RWQCB staff have reviewed the above-referenced document. State Applicable or Relevant and Appropriate Requirements (ARARs) for the protection of water quality are not identified in the Feasibility Study (FS). Potential ARARs are attached to this letter for inclusion in the draft final FS. An evaluation of ARARs must be conducted for all remedial alternatives, including Alternative 1 (No Action). Furthermore, staff concur with US EPA's Specific Comment 5 in their May 28, 2003 correspondence on this issue disagreeing with the FS report statement that identification of ARARs is not necessary.

Staff also concur with US EPA's comments regarding the need for future institutional controls to prevent residential use of the site, and those requesting removal of statements in the FS that there is no unacceptable human health risk at the site. As discussed in a number of meetings, the regulatory agencies and the Navy disagree over the methodology used to model future indoor air exposures to site occupants. Resolution of these concerns may include soil gas and/or indoor air sampling for which planning discussions are underway. Regardless, the risk identified in the Remedial Investigation exceeds 1×10^{-6} , making a statement of no unacceptable risk inappropriate in the FS.

RWQCB staff have no further comments at this time. If you have any further questions regarding this matter, please contact me at (510) 622-2462 or via email to gjr@rb2.swrcb.ca.gov.

Sincerely,



Gary J. Riley, P.E.
Remedial Project Manager

Attachments:
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RWQCB ARARs

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ARARs for Ground Water Remediation

#	Source	Standard, Requirement, Criterion, or Limitation	Description	ARARs, or To Be Considered	Comments
1	Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.)	California Water Code Section 13243	The RWQCB may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.	Applicable	Applies to groundwater remedial action.
2	Porter-Cologne Water Quality Control Act (California Water Code Sections 13240, 13241, 13242, 13243)	Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin, RWQCB, SFB.	Establishes water quality objectives, including narrative and numerical standards, that protect the beneficial uses and water quality objectives of surface and ground waters in the region. Describes implementation plans and other control measures designed to ensure compliance with statewide plans and policies and provide comprehensive water quality planning. Mare Island lies within the Napa-Sonoma Groundwater Basin. Existing and potential beneficial uses of this groundwater are: municipal and domestic supply, industrial process water supply, industrial service water supply, agricultural water supply, and freshwater replenishment to surface water.	Applicable	Specific applicable portions of the Basin Plan include beneficial uses of affected water bodies and water quality objectives to protect those uses. Any activity, including, but not limited to, the discharge of contaminated soils or waters or in-situ treatment or containment of contaminated soils or waters, must not result in actual water quality exceeding water quality objectives.
3	Porter-Cologne Water Quality Control Act (California Water Code Sections 13000, 13304, 13240, 13241, 13242, 13243)	RWQCB, SFB Basin Plan, "Implementation Plan, Groundwater Protection and Management, Cleanup of Polluted Sites."	Establishes and describes policy for investigation and remediation of contaminated sites. Also includes implementation actions for setting groundwater and soil cleanup standard.	Applicable	Cleanup standards for water should be equal to background concentrations unless such levels are technically and economically infeasible to achieve. In such cases, cleanup standards should not exceed applicable water quality objectives.

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4	Porter-Cologne Water Quality Control Act (California Water Code Sections 13240, 13241, 13242, 13243)	RWQCB, SFB Basin Plan, "Water Quality Objectives"	This policy defines water quality objectives and explains how the Regional Water Board applies numerical and narrative water quality objectives to ensure the reasonable protection of beneficial uses of water and how the Regional Water Board applies Resolution No. 68-16 to promote the maintenance of existing high-quality waters.	Applicable	Applies to groundwater remedial actions.
5	Porter-Cologne Water Quality Control Act (California Water Code Sections 13240, 13241, 13242, 13243)	RWQCB, SFB Basin Plan, "Discharge of Treated Groundwater "; RWQCB Resolution No. 88-160.	Requires applicants for waste discharge requirements and discharge permits to evaluate land disposal as an alternative to discharge to surface waters.	Applicable	Applies to groundwater extracted by groundwater treatment system.
6	Porter-Cologne Water Quality Control Act (California Water Code Sections 13000, 13140, 13263, 13304)	State Water Resources Control Board Resolution No. 68-16 ("Anti-degradation Policy").	Requires that high quality surface and ground waters be maintained to the maximum extent possible. Degradation of waters will be allowed (or allowed to remain) only if it is consistent with the maximum benefit to the people of the state, does not unreasonably affect present and anticipated beneficial uses, and does not result in water quality less than that prescribed in RWQCB and SWRCB policies. If degradation is allowed, the discharge must meet best practicable treatment or control, which must prevent pollution or nuisance and result in the highest water quality consistent with maximum benefit to the people of the state.	Applicable	Applies to discharges of waste to waters, including discharges to soil that may affect surface or ground waters. In-situ cleanup levels for contaminated ground waters must be set at background level, unless allowing continued degradation is consistent with the maximum benefit of the people of the state. If degradation of waters is allowed, or allowed to remain, the discharge must meet best practical treatment or control standards, and result in the highest water quality possible that is consistent with the maximum benefit to the people of the state. In no case may water quality objectives be exceeded.

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7	Porter-Cologne Water Quality Control Act (California Water Code Sections 13000, 13140, 13240, 13260, 13263, 13267, 13300, 13304, 13307)	State Water Resources Control Board Resolution No. 92-49 (As amended April 21, 1994)	Establishes requirements for investigation and cleanup and abatement of discharges. Among other requirements, dischargers must clean up and abate the effects of discharges in a manner that promotes the attainment of either background water quality, or the best water quality that is reasonable if background water quality cannot be restored. Requires the application of Title 23, CCR, Section 2550.4, requirements to cleanups.	Applicable	Applies to groundwater remedial actions.
8	Porter-Cologne Water Quality Control Act (California Water Code Sections 13000, 13140, 13240)	State Water Resources Control Board Resolution No. 88-63 ("Sources of Drinking Water Policy") (as contained in the RWQCB's Water Quality Control Plan)	Specifies that, with certain exceptions, all ground and surface waters must have the beneficial use of municipal or domestic water supply.	Applicable	Applies in determining beneficial uses for waters that may be affected by discharges of waste.
9	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27, CCR, Division 2, Subdivision 1 (Section 20080 et seq.) Title 23, CCR, Division 3, Chapter 15 (Section 2510 et seq.).	Establishes waste and siting classification systems and minimum waste management standards for discharges of waste to land for treatment, storage, and disposal. Engineered alternatives that are consistent with Title 27/Title 23 performance goals may be considered. Establishes corrective action requirements for responding to discharges to land, including spills and leaks and other unauthorized discharges.	Applicable	The Application of specific sections of Title 27/ Title 23 is discussed below. Provisions of Title 23 apply to hazardous waste and provisions of Title 27 apply to designated and nonhazardous solid waste.

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10	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304).	Title 27, CCR, Section 20090(d) Title 23, CCR, Section 2511 (d)	Action taken by public agencies to clean up unauthorized releases are exempt from Title 27/ Title 23 except that wastes removed from immediate place of release and discharged to land must be managed in accordance with classification (Title 27, CCR, Section 20200/ Title 23, CCR, Section 2520) and siting requirements of Title 27 or Title 23 and wastes contained or left in place must comply with Title 27 or Title 23 to the extent feasible.	Applicable	Applies to remediation and monitoring of sites.
11	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304).	Title 27, CCR, Section 20400 Title 23, CCR, Section 2550.4.	Concentration limits must be established for groundwater, surface water, and the unsaturated zone. Must be based on background, equal to background, or for corrective actions, may be greater than background, not to exceed the lower of the applicable water quality objective or the concentration technologically or economically achievable. Specific factors must be considered in setting cleanup standards above background levels.	Applicable	Applies in setting ground water cleanup levels for all discharges of waste to land.
12	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304).	Title 27, CCR, Section 20410 Title 23, CCR, Section 2550.6	Requires monitoring for compliance with remedial action objectives for three years from the date of achieving cleanup standards.	Applicable	Applies to groundwater remedial actions.

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13	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304).	Title 27, CCR, Section 20415 Title 23, CCR, Section 2550.7.	Requires general soil, surface water, and ground water monitoring.	Applicable	Applies to all areas at which waste has been discharged to land.
14	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304).	Title, 27, CCR, Section 20425 Title, 23, CCR, Section 2550.9.	Requires an assessment of the nature and extent of the release, including a determination of the spatial distribution and concentration of each constituent.	Applicable	Applies to areas at which monitoring results show statistically significant evidence of a release.
15	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304).	Title 27, CCR, Section 20430 Title 23, CCR Section 2550.10	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 the corrective actions.	Applicable	Applies to groundwater remedial acations.

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16	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267 13304).	Title 27, CCR, Section 21090	Requires a final cover constructed in accordance with specific prescriptive standards, to be maintained as long as wastes pose a threat to water quality.	Applicable Relevant & Appropriate	Applies to wastes contained or left in place at the end of remedial actions that could affect water quality. Includes closure of landfills and other areas where wastes have been discharged to land. Relevant and appropriate for "closed, abandoned, or inactive" landfills and other areas where wastes have been discharged to land and water quality is threatened.
17	California Safe Drinking Water Act (California Health & Safety Code Section 4010 et seq.)	Title 22, CCR, Section 64400 et seq.	Requirements for public water systems. Includes Maximum Contaminant Levels (MCLs) and Secondary Maximum Contaminant Levels (SMCLs).	Relevant and Appropriate	The act is legally applicable for an aquifer and associated distribution and pre-treatment system that is currently defined as "public water system" If it is only a potential "Public water system," then the act is relevant and appropriate.
18	Staff Report of the RWQCB, Central Valley Region	"A Compilation of Water Quality Goals"	Provides guidance on selecting numerical values to implement narrative water quality objectives contained in the Basin Plan.	To Be Considered	Performance Standard. To be considered in selecting appropriate numerical values to implement the Basin Plan for setting cleanup levels and discharge limits. The numerical values contained in the staff report may be ARAR's, or Performance Standards, depending on the source of the values.