



California Regional Water Quality Control Board

San Francisco Bay Region



Winston H. Hickox
Secretary for
Environmental
Protection

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N00296.000407
MOFFETT FIELD
SSIC NO. 5090.3.A.

Gray Davis
Governor

July 12, 2001

Commander
Attn: Ms. Andrea Muckerman
BRAC Environmental Coordinator
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

Subject: Comments on Draft Record of Decision for Site 22 Landfill, Moffett Federal Airfield, dated May 21, 2001

Dear Ms. Muckerman:

San Francisco Bay Regional Water Quality Control Board (RWQCB) staff have reviewed the subject document. For the most part, this document is acceptable.

However, it should include greater detail pertaining to institutional controls. Please forward a copy of the MOU between the Navy and NASA, cited as the mechanism for implementing institutional controls, for our legal review.

In addition, State ARAR's for evaluating groundwater and protecting species of concern (burrowing owls) should be added to Tables 17 and 18 of this document and the selection of Final ARARs (Table 18) needs further explanation. Additional specific comments are attached.

If you have questions, please contact me at (510) 622-2353, or by e-mail: avc@rb2.swrcb.ca.gov.

Sincerely,

Adriana Constantinescu,
Project Manager

Attachment

cc: Carmen White, EPA
Sandy Olliges, NASA
James McClure, RAB Representative

California Environmental Protection Agency

Ms. Andrea Muckerman

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July 12, 2001

Kevin Woodhouse, City of Mt. View
James Boarer, MEW Co. Representative
Sonce DeVries, USFWS
Mr. Peter Strauss, RAB Representative

**San Francisco Bay Regional Water Quality Control Board
Comments on**

**Draft Record of Decision for Site 22 Landfill
Moffett Federal Airfield
dated May 21, 2001**

1. **P. iv. Authorizing Signatures.** Replace “To Be Determined . . .” with Loretta K. Barsamian, Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region
2. **P. 1-2. Section 1.6 Site Description.** Please include the dates that the landfill was active as part of this summary description.
3. **P. 5-3, second paragraph, last sentence.** This sentence is not quite accurate and should be revised to make the following two points:
 - 1). The San Francisco Bay Water Quality Control Plan (Basin Plan) identifies potential and beneficial uses of groundwater in the region (see p. 2.5 and Tables 2-8 and 2-9 of the 1995 Basin Plan). For the Santa Clara Valley Basin all four beneficial uses of groundwater (municipal/domestic, industrial process, industrial, and agricultural water supply) are listed as **existing uses**. However, at Site 22 none of these is an existing uses, although industrial and industrial process supply are **potential uses**, since treatment technologies can create the desired water quality (e.g. cooling water, hydraulic conveyance, fire protection, etc.). Municipal/domestic and agricultural supply are **neither existing nor potential uses** due to elevated total dissolved solids (TDS). The preferred alternative will adequately protect industrial and industrial process supply beneficial uses of groundwater outside the landfill.
 - 2) At Site 22, the primary concern is protection of beneficial uses of nearby surface waters (perimeter ditches, Northern Channel). Beneficial uses of these water bodies are freshwater/estuarine habitat, as identified by the SF Bay Basin Plan. The threat to these surface waters is limited by geologic conditions (tight silt/clay soils), and the cap will further decrease the potential threat. Groundwater in wells at the perimeter of the landfill will be monitored to insure protection of beneficial uses. The water quality standards, promulgated by EPA for the State of California in the California Toxics Rule (based on EPA’s ambient water quality criteria), will be used to evaluate groundwater monitoring data in the event that a release of contaminants is detected. See Tables 8-10 of this draft ROD for an example of how this comparison is made.
4. **P. 7-3, second paragraph.** Please delete the phrase “the distance from Site 22 to the bay is over 1 mile.” The ditches, Northern Channel and Cargill Evaporation

Ponds are all part of San Francisco Bay. The important point is that migration of contaminants to these water bodies is limited by the stratigraphy at Site 22.

5. **P. 8-1. Remedial Action Objective.** Since the human health risks are within the risk management range for residential use, an institutional control to prohibit residential use is needed as a remedial action objective. In addition, institutional controls to prevent human digging activities are needed.
6. **P. 9-4. Institutional Controls.** This section needs to be expanded to explain how the previously signed MOU would address the specific institutional controls needed for Site 22. This MOU should be reviewed by the agencies before signing the ROD. Please provide a copy of this MOU as soon as possible for our review.
7. **Section 9.2.4.** Please revise the fifth sentence. The groundwater monitoring program should evaluate whether there is a statistically significant increase over **background levels** for any waste constituent. Water quality protection standards, based on the California Toxics Rule and San Francisco Bay Basin Plan may be considered to determine the appropriate action if a release (contamination above background) is detected.
8. **P. 9-5.** Either delete the reference to “16 samples annually” or provide a more specific rationale for the 16 samples. This rationale should include the specific wells that would be monitored, constituents monitored, and detection limits. It would be more appropriate to simply delete the reference, since the Navy has proposed to develop the monitoring plan during the RD/RA phase
9. **P. 10-2, second paragraph.** Please revise the first sentence to state that implementation of institutional controls (access, digging, and use restrictions) is an additional remedial action objective for Alternatives 2 and 3.
10. **P. 10-4, Section 10.2.2.** The first sentence should be revised to add that chemical-specific standards are promulgated for adjacent surface waters, including the ditches along the perimeter of Site 22 and the Northern Channel. These standards were promulgated for the State of California by EPA in the California Toxics Rule (May, 2000) and should be used to determine contingency actions if groundwater monitoring indicates a release of contaminants from the landfill.
11. **P. 12-2, third bullet.** Please revise to include restriction of residential use as an institutional control.
12. **P. 14-1.** Ambient Water Quality Criteria, promulgated by EPA for the State of California and Water Quality Objectives established by the San Francisco Bay Water Quality Control Plan (Basin Plan) are applicable ARARs. The reason for this is that the leachate poses a potential threat to adjacent surface waters (perimeter ditches and Northern Channel), so that the water quality standards

promulgated in these regulations are used to develop a groundwater monitoring plan. In addition, the Basin Plan establishes beneficial uses of groundwater and surface water for the San Francisco Bay Region, pursuant to the Act of Porter-Cologne. These regulations should be cited and included in ARARs Tables 17 and 18.

13. **Figure 15.** The reproduction of this figure is poor, so that the stratigraphic layers cannot be differentiated. Please make sure that the figures in subsequent versions of this document are clear.
14. **Table 16.** EPA's Ambient Water Quality Criteria are Federal ARARs that are applicable in groundwater monitoring, since a release of contaminants from the landfill could impair beneficial uses of adjacent surface water (perimeter ditches, Northern Channel, Cargill pond).
15. **Table 17.** The California Toxics Rule and San Francisco Bay Basin Plan are State ARARs that are applicable in groundwater monitoring. The former is a promulgated regulation that establishes chemical-specific standards for protection of surface waters of the State of California. The Basin Plan establishes beneficial uses of groundwater and surface water, as well as narrative and chemical-specific objectives for protecting beneficial uses. The Record of Decision for OU1 correctly included the Basin Plan (the CTR had not yet been promulgated) (see Table 1 of the OU1 ROD). This Record of Decision should be consistent with the OU1 ROD.
16. **Tables 17 and 18.** The ARARs for the California Department of Fish & Game should be included, particularly those which apply to actions that could impact burrowing owls. These include Fish & Game Code Section 3005, which prohibits the taking of birds and mammals, and Fish & Game Code Section 2014, which authorizes the State to collect damages for the taking of birds, mammals, fish, reptiles or amphibians.
17. **Tables 17 and 18.** The groundwater monitoring regulations cited in Table 18 as **Final** ARARs are not listed in Table 17 as **Potential** ARARs. Specifically, Table 18 lists 22 CCR 66264.100, 22CCR 66264.95 and 66264.97, 22 CCR Section 66264.98, and 22 CCR Section 66264.94 as relevant and appropriate. Yet these are not listed at all in Table 17 as potential ARARs. Please explain this apparent error and revise.
18. **Tables 18.** It is not clear why some regulations listed as potential ARARs were not selected as Final ARARs. Please provide the rationale for the Navy's selection of Final ARARs. Specifically:
 - The State's 27 CCR regulations for groundwater monitoring were excluded from the Final ARARs Table.

- Three 27 CCR Section pertaining to gas monitoring (Section 20923, 20932,21160) were excluded.
- Federal groundwater monitoring regulations (40 CFR 258.51(a)(c)(d); 258.53(a)-(f); 258.54(a)(b)) were excluded.
- Federal gas monitoring regulations (40 CFR 258.23) were excluded. Please provide the rationale for excluding these regulations from the final list, so that we can evaluate whether the Navy's selection is appropriate.
- The State's 23 CCR Sections 2520 and 2521 for Waste Identification were excluded