



May 27, 1997

Cal/EPA

Department of
Toxic Substances
Control

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Mr. Hubert Chan
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Environmental Compliance
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Pete Wilson
Governor

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Secretary for
Environmental
Protection

DRAFT AND DRAFT FINAL REMEDIAL INVESTIGATION REPORTS,
INSTALLATION RESTORATION PROGRAM SITES 10, 11, 12,
13, 14, 16, 17, AND 18, CROWS LANDING NAVAL AUXILIARY
LANDING FIELD

Dear Mr. Chan:

The Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB), Central Valley Region, (collectively, the State) have reviewed the subject reports. Please find enclosed comments from RWQCB on the Draft and Draft Final versions of the reports. DTSC has the following general and specific comments on the Draft and Draft Final versions of the reports:

General Comment:

1. Please incorporate the following into the report's introduction:

DTSC uses a "target risk range" of 100-in-one million to one-in-one million chance of getting cancer (1×10^{-4} to 1×10^{-6}) to establish health protection goals as part of a site cleanup. Risks greater than 1×10^{-4} are considered unacceptable and immediate action is recommended. Risks less than 1×10^{-6} are considered acceptable. For risks that fall within the range of 1×10^{-4} to 1×10^{-6} , site-specific information is evaluated to determine whether action is warranted.



Mr. Hubert Chan
May 27, 1997
Page Two

Specific Comments:

1. As discussed at the Base Cleanup Team meeting on March 26, 1997, DTSC does not concur with the No Further Action designation for Site 11. A soils cap and fencing will be necessary for Site 11. Since Site 11 is not being remediated to a residential scenario, restrictions in the property deed will be necessary for Site 11.
2. DTSC concurs with the No Further Action designation for soils at Sites 10, 12, 13, 14, 16, 17, and 18.

If you have any questions or comments regarding this matter, please contact me at (916) 255-3705.

Sincerely,



Kent Strong
Remedial Project Manager
Northern California Operation
Office a Military Facilities

Enclosures

cc: Mr. Neil Bingert
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Mr. Hubert Chan
May 27, 1997
Page Three

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1 April 1997

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**DRAFT REMEDIAL INVESTIGATION REPORT, INSTALLATION RESTORATION PROGRAM,
NAVAL AUXILIARY LANDING FIELD, CROWS LANDING, STANISLAUS COUNTY**

I have reviewed the *Draft Investigation Report, Installation Restoration Program, Naval Auxiliary Landing Field Report* for the Naval Auxiliary Landing Field in Crows Landing. The remedial investigation (RI) report describes the nature and extent of soil and groundwater contamination at eight installation restoration program (IRP) sites at the facility. My comments on the RI report are presented below.

General Comments

1. References to background pesticide concentrations should be removed since the background concentrations for these chemicals are zero. Regardless of the source, if the concentrations of pesticides/PCBs pose a threat to human health and the environment, they should be remediated. For water quality purposes, the Navy must perform a water quality assessment to determine whether or not the leachable concentrations of these chemicals pose a threat to water quality.
2. Background data for metals were collected from the surface to five feet below ground surface (bgs). Therefore, site metals data from the same depth and from similar soil types should be compared with the background data. If the comparison of background and site data shows there is a significant difference, then the Navy should perform a water quality assessment to determine if the metal concentrations at a site pose a threat to water quality. If there is a threat to water quality, the site must be remediated.
3. Table 4-2, which shows metal concentrations in background soil samples, should include leachable concentrations.
4. Soil sample results should be shown on a convenient map for each site. Groundwater results should be represented by isoconcentration maps.
5. A toxicologist should review the human health risk assessment in Section 5 and the phase 1 ecological risk assessment in Section 6.
6. The report should specify what "common laboratory contaminants" are and explain why and how their detection is attributed to laboratory contamination and not due to their actual presence.
7. As much as possible, analytical detection limits should be stated.

Specific Comments

1. Page 4-14, Site 12 Remedial Investigation

The approximate location of UST 138 should be shown on Figure 4-6 or a similar map.

2. Page 4-16, Site 12 Investigation by Excavation

The report should explain why the initial soil samples along the outer boundary of the drains were terminated at two feet bgs.

3. Page 4-19, Site 13 Remedial Investigation

The report states that Table 4-10 includes alpha-chlordane results, but it does not. Table 4-10 should include the alpha-chlordane results. Furthermore, the Navy should perform a water quality assessment to determine if the residual alpha-chlordane concentrations pose a water quality threat. If there is a threat to water quality, the site must be remediated.

4. Page 4-21, Site 14 Previous Investigations

The first complete paragraph states that no detectable contaminants were found in soil beneath 10 feet bgs or in ground water. The report should include these results.

5. Page 4-23, Site 16 Previous Investigations

The last paragraph should specify how many sampling rounds were conducted at monitoring well 16-MW-01.

6. Page 4-26, Site 16 Investigation by Excavation

The report should explain why the sample from three feet bgs at 16-EX-07, which contained arsenic at a total concentration of 65.1 mg/kg (exceeding the maximum background concentration), was not removed from the excavation. The report also should compare the leachable concentration at 16-EX-07 with background leachable concentrations. In summary, the Navy must perform a water quality assessment to find out if the elevated levels of arsenic left in the soil will impact water quality. If the assessment shows there will be an impact to water quality, then the elevated levels of arsenic must be removed.

7. Page 4-29, Site 17 Sump Excavation

The last sentence of the first paragraph states that all samples were analyzed for volatile organic compounds (VOCs), semi-VOCs, total petroleum hydrocarbons extractable (TPH-E), and total metals. All the sample results should be shown on a site map.

8. Page 4-30, Site 17 Initial Borehole and Monitoring Well Installation

The first sentence of the first paragraph states that the areal distribution of carbon tetrachloride detected in initial groundwater samples is shown on Figure 4-13. The sample results are better represented graphically. Therefore, Figure 4-13 should present the carbon tetrachloride distribution via an isoconcentration map.

9. Page 4-50, Table 4-12

An explanation for the asterisk is not included in the footnotes.

10. Pages 5-2 and 5-3, Background Comparison

See General Comment Item 1.

11. Page 5-3, Background Comparison

The second and third sentences of the last paragraph state that where there is an insufficient number of samples, the mean and maximum detected site concentrations were compared to the mean and maximum detected background concentrations. The report should provide the rationale for this procedure.

12. Page 5-9, Conclusions and Discussions

The first paragraph states that at Sites 11, 12, 17, and 18, the carcinogenic risk is mainly due to beryllium, which occurs naturally in soils at Crows Landing. The fact that beryllium is naturally occurring is immaterial. The analysis shows there is a risk, and the Navy should address this issue. Furthermore, since the U.S. EPA is not involved at this facility, the Navy is required to comply with State requirements. Thus, the Department of Toxic Substances Control point of departure of 1×10^{-6} for screening evaluation applies.

13. Page 7-3, Summary and Recommendations, Site 12

The Navy must perform a water quality assessment to determine whether or not the pesticides pose a threat to water quality. If there is a threat to water quality, the site must be remediated.

14. Page 7-4, Summary and Recommendations, Site 13

The Navy must perform a water quality assessment to determine if the leachable alpha-chlordane poses a water quality threat. Information such as no detectable pesticide leachable concentrations, except for alpha-chlordane, were detected should be included in this section.

15. Page 7-6, Summary and Recommendations, Site 16

See Specific Comment 6.

If you have any questions, you may call me at (916) 255-3049.


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20 May 1997

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DRAFT FINAL REMEDIAL INVESTIGATION REPORT, INSTALLATION RESTORATION PROGRAM, NAVAL AUXILIARY LANDING FIELD, CROWS LANDING, STANISLAUS COUNTY

I have reviewed the 2 May 1997 *Draft Final Investigation Report, Installation Restoration Program, Naval Auxiliary Landing Field Report* for the Naval Auxiliary Landing Field in Crows Landing and PRC's responses to comments by the Navy and the State on the report. My comments on these documents are presented below.

1. Soil types should be included in all cross-sections.
2. All references to background pesticide concentrations have not been removed and should be removed.
3. Figure 4-8 shows a UST 138 excavation. The report should describe the status of UST 138 and the excavation.
4. Page 4-24 of the report states that at Site 14, the results of the soil investigation did not detect soil contamination below approximately 10 feet below the ground surface (bgs). However, Figure 4-11 shows only results of samples taken above 10 feet bgs, except at B11. The results for B11 show the presence of toluene at the sampling depth of 12.5-13.0 feet. Figure 4-12 shows the results of the confirmation sample taken near or at the excavation. The results show the presence of toluene, xylene, trichloroethylene, and 1,1,1-trichloroethane. The samples depths are not shown. The report should clarify the statement cited above. Also, the legend in Figure 4-11 should describe that the rectangular dashed figure, with B1 in its center, represents the excavation.

If you have any questions, you may call me at (916) 255-3049.

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