

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 1

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SACRAMENTO, CA 95827-2106



(916) 255-3705

December 4, 1995

Mr. Hubert Chan  
Western Division  
Naval Facilities Engineering Command  
Environmental Compliance  
900 Commodore Drive  
San Bruno, California 94066-2402

STATUS UPDATE, CROWS LANDING NAVAL AUXILIARY LANDING FIELD

Dear Mr. Chan:

This transmittal constitutes the State of California comments on recent activities and correspondence for the Crows Landing Naval Auxiliary Landing Field.

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

Sincerely,

A handwritten signature in black ink that reads 'Kent Strong'.

Kent Strong  
Remedial Project Manager  
Office of Military Facilities

Enclosure



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

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22 November 1995

Mr. Kent Strong  
Department of Toxics Substances Control  
10151 Croydon Way, Suite 3  
Sacramento, CA 95827

***STATUS UPDATE, NAVAL AUXILIARY LANDING FIELD (NALF), CROWS LANDING,  
STANISLAUS COUNTY***

I have reviewed PRC's 4 and 6 (two) October 1995 letters for the installation/restoration program (IRP) and underground storage (UST) sites at the Crows Landing Naval Auxiliary Landing Field. My comments on these letters along with a summary of our site visit on 19 October 1995 are presented below.

**4 October 1995 Letter**

This letter summarizes the issues discussed at the 26 September 1995 remedial project managers meeting. I concur with the summary. As stated in the summary, I requested more time to review the soils data for IRP Sites 13 and 18 to determine if the proposed no further action for these sites is appropriate. Upon further review of the data at IRP Sites 13 and 18, I concur with PRC that no additional investigation is warranted at these sites.

**6 October 1995 Letter to NASA**

This letter requests permission from Ms. Sandy Olliges of the National Aeronautics and Space Administration (NASA) to allow the discharge of approximately 17,500 gallons of ground water from aquifer testing and well installation/development. Apparently, NASA has approved the disposal of this type of waste in the past. The letter proposes to meet the discharge limits of 100 milligrams/liter (mg/l) for total oil and grease or 1.0 mg/l for total toxic organic established for the Cities of Palo Alto and Sunnyvale. PRC proposed these limits because investigation-derived waste (IDW) water at Moffet Field, which NASA also owns, is discharged to either Palo Alto's or Sunnyvale's sewer system.

The above proposal is inappropriate. First of all, the proposed discharge limits are typical limits established for a wastewater treatment plant with secondary treatment works, i.e., it has some type of a biological treatment process after solids removal. Biological treatment can be accomplished via aerated

ponds, activated sludge systems, stabilization ponds, slow-rate sand filters, trickling filters, etc. NALF's sewer system, consisting of an Imhoff tank and a series of percolation ponds for disposal, is only a primary treatment system because it basically provides solids removal only prior to disposal. Secondly, since the system receives only small flows, it does not provide much dilution which could reduce the contaminants in the influent wastewater to concentrations which would not pose a threat to water quality when discharged into the first percolation pond (Due to low flows, the other two ponds may not have received wastewater). Since wastewater discharged into the sewer system is not treated or diluted, it simply flows through the system and could affect water quality once it gets into the percolation pond.

NALF has several options to address the disposal of IDW water. Obviously, if the IDW water has contaminant concentrations which do not exceed the water quality goals applicable for agricultural and drinking water beneficial uses, the IDW water may be discharged into the sewer system or simply onto the ground. If the IDW water contaminant concentrations exceed the beneficial use numbers, NALF may perform a water quality assessment to determine if the discharge will affect water quality; treat the IDW water so that concentrations are at or below the beneficial use numbers; and dispose of the IDW water offsite at the Patterson wastewater treatment plant.

As I have stated above, the discharge of contaminated wastewater to NALF's sewer system would result in the contaminants passing through the system and essentially discharging to land. Due to past maintenance activities at the facility, the common practice of discharging wastes such as solvents into sewer systems, and the presence of chlorinated hydrocarbons in the ground water, NALF should investigate if the sewer system is a source of contamination.

#### **6 October 1995 Letter to the Stanislaus County Environmental Health Department**

This letter describes the amount of drill cuttings from previous, current, and future investigations. The letter also proposes to segregate contaminated and uncontaminated drill cuttings based on visual and olfactory observations and photoionization detector (PID) readings (over 100 parts per million readings will indicate contamination); spread clean soil around or near the borehole when drilling is completed at each location; treat contaminated soils onsite at a designated treatment area; treat total petroleum hydrocarbons to 100 mg/kg or lower and carbon tetrachloride-contaminated soils to below the U.S. EPA's preliminary remediation goal (PRG) of 0.92 mg/kg; and cover all soil piles during rain to prevent runoff.

I concur with the proposal to segregate contaminated and uncontaminated drill cuttings. However, instead of immediately spreading the observed uncontaminated soils around each borehole where they came from, the Navy should collect all of them and take composite samples prior to disposal. Once the results come back clean, then the Navy can proceed with the disposal onsite. This approach will provide the data that the soils are uncontaminated and a check on the screening tests. Based on approximately 60 cubic yards (cy) of clean soil to be generated, two composite samples, with each composite sample being composed of four discrete samples, will suffice. This requirement is based on the fact that most counties require a composite sample per 50 cy of excavated soils during underground tank investigations and cleanup.

Regarding cleanup levels, the proposed cleanup level of 100 mg/kg for TPH is appropriate. However, the use of US EPA's PRG of 0.92 mg/kg as cleanup level for carbon tetrachloride is not because this number is not protective of water quality. The water quality goal for carbon tetrachloride is 0.23 micrograms per liter ( $\mu\text{g}/\text{l}$ ) based on California EPA's Cancer Potency Factor as a water quality criterion. Using the Designated Level Methodology with a 100-fold environmental attenuation factor, the resulting Total Designated Level for carbon tetrachloride is 230  $\mu\text{g}/\text{kg}$  which is less than the proposed US EPA's PRG of 920  $\mu\text{g}/\text{kg}$ .

### 19 October 1995 Onsite Visit

We visited the site on 19 October 1995 to observe monitoring well (MW) installation procedures and clarify issues regarding the lead agency for UST sites and disposal of IDW. When we arrived at the facility, drilling at two of the three MW locations at IRP Site 11 had been completed. Placement of filter pack at one location was interrupted by sand bridging. At the other location, the fines were being allowed to settle prior to installation of the well casing. According to PRC, this minimizes the fines in the filter pack and ensures complete hydrolysis of the bentonite seal.

Messrs. Hubert Chan of the Navy and Keith Reamer of PRC showed locations of the former sump at IRP Site 17, the completed soil boring and proposed MW locations at the different IRP and UST sites, and the sewer system. At the conclusion of the meeting, the participants agreed on the following items:

1. I would talk to the Stanislaus County Environmental Health Department and clarify as to which agency has the lead on underground tank issues. On 26 October 1995, I discussed this issue with Mr. Jim Simpson of the Stanislaus County Environmental Health Department. Mr. Simpson and I agreed that the County will still be the lead on tank installations, closures, and other actions requiring County permits while the Board will be lead on investigations and cleanups. I will be sending the County a letter to confirm these agreements.
2. I would send Mr. Keith Reamer a copy of the Board's water quality objectives for fuel and other constituents. On 24 October 1995, I faxed the Board's water quality objectives for fuel constituents. I will regularly send PRC the Board's water quality objectives for other constituents as they become available.
3. The Navy would discuss with PRC the need to investigate the sewer system as a potential source of contamination. During our conference call on 16 November 1995, Mr. Chan stated that the National Aeronautics and Space Administration (NASA) should handle this issue since NASA is the current owner of the facility and the sewer system is still being used. Based on the Board's experience at other sites, sewer lines are usually a source of contamination. Therefore, the Navy or NASA should investigate the sewer system at NALF. A schedule of the investigation should be submitted to us.
4. The Navy would get back to us regarding the proposed public meeting at Crows. On 7 November 1995, you faxed me a 20 October 1995 schedule indicating tentative dates of 30 November 1995 for a dry run of the public meeting and either 6 or 7 December 1995 for the actual meeting. On 21 November 1995, you confirmed the 30 November 1995 and 6 December 1995 meeting dates.

5. You reminded the Navy to look at the baseline environmental report (BER) again and determine which of the potential sites described in the report need further investigation and which sites need no further action. On 16 November 1995, Mr. Chan said that PRC will be submitting a report on its review of the BER. I received the report on 21 November 1995.

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

  
PHILIP S. ISORENA  
Associate Engineer

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