

1813 ~~18~~ sh.a

Admin Record 1813 SC 5

N60211_000034
CROWS LANDING
SSIC NO. 5090.3.A

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
CENTRAL VALLEY REGION

3443 ROUTIER ROAD, SUITE A
SACRAMENTO, CA 95827-3098
PHONE: (916) 361-5600
FAX: (916) 361-5686



15 July 1991

Mr. Paul Ko
Western Division
Naval Facilities Engineering Command
Code 1813 PK
P.O. Box 727
San Bruno, CA 94066-0720

SITE INVESTIGATION, FIELD WORK PLAN, CROWS LANDING NAVAL AUXILIARY LANDING
FIELD (NALF), STANISLAUS COUNTY

We have completed our review of the field work plan for the site investigation at NALF Crows Landing. We will be unable to approve the proposed Work Plan until the following comments are addressed:

General Comments

1. When referring to test analysis methods and to reporting or detection limits the actual EPA analysis test method number and numerical quantitation or detection limits, must be provided.
2. The following are our analytical methods of choice and maximum detection/quantitation limits for these types of site investigations.

Water Analyses:

<u>Constituents</u>	<u>Method No.</u>	<u>Method Detection Limits</u>
Purgeable Halocarbons	EPA 601	Lowest PQRL ¹ achievable
Purgeable Aromatics	PA 602	Lowest PQRL ¹ achievable
Pesticides/PCBs	EPA 608	Lowest PQRL ¹ achievable
Metals	ICP ²	Lowest PQRL ¹ achievable
Metals	AA ³	Lowest PQRL ¹ achievable
TPH		
- Gasoline	EPA Modified 8015	50 ppb
- Kerosene	EPA Modified 8015	50 ppb
- Diesel	EPA Modified 8015	50 ppb
BTEX	EPA 602	0.5 ppb
Oils & Grease	Standard Methods 5520 D&F	5,000 ppb

¹ Practical Quantitation Reporting Limits (PQRL)
² Inductively Coupled Argon Plasma Atomic Omission Spectroscopy
³ Atomic Absorption Spectroscopy (AA) - to be used for Arsenic, Cadmium, Mercury, Selenium and Lead testing procedures.

34

R/N 1

Soil Analyses:

<u>Constituents</u>	<u>Method No.</u>	<u>Method Detection Limits</u>
Purgeable Halocarbons	EPA 8010	Lowest PQRL Achievable
Purgeable Aromatics	EPA 8020	Lowest PQRL Achievable
Pesticides/PCBs	EPA 8080	Lowest PQRL Achievable
Metals*	ICAP	Lowest PQRL Achievable
TPH		
- Gasoline	EPA Modified 8015	1.0 ppm
- Kerosene	EPA Modified 8015	1.0 ppm
- Diesel	EPA Modified 8015	1.0 ppm
BTEX	EPA 8020	0.005 ppm
Oils & Grease	Standard Methods 5520 C&F	50.0 ppm

2* Metals analyses in soils are total concentrations; if any of the metals total concentrations are less than the Title 22's Total Threshold Limit Concentration (TTL) but greater than 10 times the Title 22 Soluble Threshold Limit Concentrations (STLC), then a soluble metals analyses must be determined using the Title 22 Waste Extraction Test (WET) procedures. However, the extractant can be de-ionized water instead of the Citrate Buffer solution called for in the WET method.

3. Although the NALF Site 11 Landfill does not appear in the Solid Waste Assessment Test (SWAT) Ranking List at this time we will be recommending it be placed on the listing for the next listing update. Therefore, to eliminate the potential for having to remobilize and to perform additional field investigations we recommend that the SWAT requirements be satisfied at this time for the Site 11 Landfill. We have attached a copy of the latest SWAT investigation and reporting guidance document.

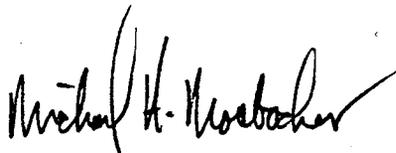
Your current Work Plan appears to cover a large portion of the SWAT investigation requirements. The major deficiency appears to lie in the ground water monitoring requirements for the site.

Specific Comments

1. Figure 4 - Site 12 Auto Maintenance Shop Area Layout Map: Where do the floor drains in the concrete slab go? If the floor drains are connected to sewer lines or drainage ditch or leach field, are they being investigated as well?
2. Tables 2, 3 and 4 - Sampling and Analysis Programs for Sites 11, 12, 13, and 16: The test methods for the work must be more specific. The CLP SOW methods are not specific enough, actual EPA Test methods must be provided. For example, the Soils Volatile Organics would be EPA Method 8010, Semi-volatiles would be EPA Method 8020 or 8240, etc. For metals recommend the totals be calculated using an Inductively coupled Argon Plasma method (ICP).

3. Section 3.5.5 - Well Construction: In the third paragraph, the actual construction materials are specified. Without a sieve analysis of the formation materials adjacent the screened zone, it's premature to specify the filter pack materials and screen slot size openings. At least one sieve analyses must be performed per site where wells are going to be installed. Also, to monitor a site at least 3 wells will be needed; one upgradient and two downgradient.
4. Section 3.5.10 - Well Survey: The top of casing (TOC) elevation must be surveyed vertically to the closest hundredth of a foot (0.01'), especially since the gradients are so flat in the area, i.e., 0.0028 to 0.0047 as reported in Section 2.3.4 of the work plan.
5. Table 5 - Proposed Quantitation Limits: What are the actual Quantitation Limits for the water and soils analysis methods? The workplan refers to a contract required quantitation or detection limit. Without a copy of the contract or statement of work with the specific numbers, we cannot evaluate whether the analysis limits are sufficient to determine when impacts to the ground water have occurred or have the potential for occurring.

Please address the above comments for our review and approval prior to implementing this Work Plan. If you have any comments or questions, please call me at (916) 361-5742.



MICHAEL H. MOSBACHER, P.E.
Project Engineer

cc: Mr. Jim Pinasco, Department of Health Services, Toxic Substances Control
Division, Sacramento
Mr. Emir Utush, PRC Environmental Management Incorporated, San Francisco
Mr. Robert Fourt, Stanislaus County Department of Environmental
Resources, Modesto