



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105-3901

July 22, 1992

Stephen Chao
Department of the Navy
Western Division
Naval Facilities Engineering Command
900 Commodore Way, Bldg. 101
San Bruno, CA 94066-0720

Dear Mr. Chao:

The U.S. Environmental Protection Agency has reviewed the following report for the NAS Moffett Field NPL site: Site 14 South, Ground Water Extraction and Treatment Source Control Measure, Field Work Plan, Revision 1. The enclosed comments were prepared for EPA by our representative, SAIC. If you have any questions regarding these comments, please call me at (415) 744-2385. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Roberta Blank".

Roberta Blank
Remedial Project Manager

Enclosures (3)

cc: Cyrus Shabahari, DTSC
Elizabeth Adams, RWQCB
Jim Haas, NASMF

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Science Applications International Corporation

An Employee-Owned Company

Technology Services Company

July 17, 1992

DCN: T24-C09015-RN-M13466

Ms. Roberta Blank (H-9-2)
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

Ref: EPA Contract No. 68-W9-0008; EPA Work Assignment No. C09015
SAIC/TSC Project No. 06-0794-03-0630
Site 14 South, Ground Water Extraction and Treatment Source Control
Measure, Field Work Plan, Revision 1

Dear Roberta:

Enclosed is SAIC/TSC's review comments for the subject document. The review was performed by Ilknur Erbas-White, P.E., an engineer in SAIC's Santa Ana office. Attached to the review comments is an Errata Sheet. While the comments found on the Errata Sheet should not affect implementation of the subject work plan, these items were noted during the review and are, therefore, included in order to make the review more complete.

If there are any questions concerning the comments or the format in which they were presented, please contact me at (415) 399-0140. If you wish to talk with Ms. White about her comments, she can be reached at (714) 542-9411.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
Technology Services Company

A handwritten signature in cursive script that reads "Fred Molloy". The signature is written in black ink and is positioned above the typed name and title.

Fred Molloy
Work Assignment Manager

Enclosure

DCN: TZ4-C09015-RN-M13466

TECHNICAL REVIEW OF
SITE 14 SOUTH
GROUND WATER EXTRACTION AND TREATMENT
SOURCE CONTROL MEASURE
FIELD WORK PLAN
REVISION 1

JULY 17, 1992

Submitted to:

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 HAWTHORNE STREET
SAN FRANCISCO, CALIFORNIA 94105

Submitted by:

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
TECHNOLOGY SERVICES COMPANY
20 CALIFORNIA STREET, SUITE 400
SAN FRANCISCO, CALIFORNIA 94111

EPA CONTRACT NO. 68-W9-0008
EPA WORK ASSIGNMENT NO. C09015
SAIC/TSC PROJECT NO. 06-0794-03-0630

TECHNICAL REVIEW OF
SITE 14 SOUTH
GROUND WATER EXTRACTION AND TREATMENT
SOURCE CONTROL MEASURE

FIELD WORK PLAN
REVISION 1

GENERAL COMMENTS

1. The text states that Well W14-12 (the existing well in the A1 aquifer) will be used for groundwater extraction. (a) How much of the plume will be intercepted using this well? (b) What criteria were used to choose Well W14-12? (c) Why is the A2 aquifer not included in this interim measure? (d) How was 2 gallons per minute (gpm) chosen as the optimum pumping rate?

SPECIFIC COMMENTS

1. Page 1, Third Paragraph, Second Sentence

The word "cost" should be changed to read "total cost," which includes both the capital and the operational costs, which is more accurate.

2. Page 1, Fourth Paragraph, First Sentence

The text states that "extraction and treatment of the ground water was selected as the source control measure at Site 14 South because it provides a timely method for preventing contaminant migration from the site." It is unclear how this goal can be achieved by pumping an existing well at 2 gpm for one year; this needs clarification.

3. Page 2, Second Paragraph, First Sentence

This is only an interim measure. Long-term operation, as is stated here, implies more than one year of operation. The word "long-term" should be corrected to read "one year."

4. Page 2, Second Paragraph, Third Sentence

The word "long-term" should be changed in accordance with the change recommended in Comment No. 3.

5. Page 2, Second Paragraph, Last Sentence

If the "long-term" referred to here is the same as that previously mentioned, then it should also be corrected to reflect a one-year system. If "long-term," as it is used here, refers to the system to be implemented after this interim measure is completed, then a proper distinction should be made in the text.

6. Figure 2

(a) Figure 2 is a drawing that should be included with the specifications. It is not appropriate to include the facility overlays in this picture since none of the remediation facilities are included as a part of the text. The source control system has not yet been discussed.

(b) Notes 1, 2 and 5 are not "General Notes" as indicated. The portion of the drawing they are related to should be explained.

7. Page 7, Section 3.4

The term "soil contamination" is usually applied to the unsaturated zone. The text states, however, that the soil contamination was found at the "15- to 25-foot interval in the A1 zone." The previous section (Section 3.3) stated that "saturated soils occur from 12 to 21 feet below land surface (BLS)." Does this mean that the sample results are referring to saturated soils? A distinction should be made between unsaturated and saturated soils. Saturated soils will be remediated in conjunction with the groundwater pump and treat system, whereas unsaturated soils can be treated separately from the groundwater.

8. Page 12, Table 2

Inorganic compounds are usually included with treatments goals. Why are they not included here? Also, the term "maximum concentration" should be corrected to "allowable maximum for discharge to the POTW." It would be helpful to include all the chemicals of concern from Table 1 and to add all the total toxic organics (TTO) compounds to allow for direct comparisons.

9. Page 13 Section 5.1

It would be easier to follow this section if a figure describing the pump setup were included.

10. Page 16

There are a lot of details about the piping and hookup to the pump; however, no details are provided for the unit itself. What are the dimensions of the unit? What are the design assumptions and where are the calculations? What happens when the system experiences a breakthrough (i.e., how is the column regenerated and how often)?

11. Page 19

Based upon the breakthrough rate, how good is monthly monitoring after the first month? What if the column experiences a breakthrough before the end of that month? Are there any contingency measures? Sampling or monitoring more frequently as the system approaches breakthrough is recommended.

12. Page 44, Sections 6.11 through 6.13

A reference related to the data validation procedures should be included.

ENCLOSURE 2

COMMENTS ON THE SITE 14 SOUTH
GROUNDWATER EXTRACTION AND TREATMENT
SOURCE CONTROL MEASURE

THIS ENCLOSURE WAS NOT SUBMITTED TO THE
ADMINISTRATIVE RECORD FILE.

QUESTIONS MAY BE DIRECTED TO:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
NAVAL FACILITIES ENGINEERING COMMAND
SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676

ENCLOSURE 3

COMMENTS ON THE SITE 14 SOUTH
GROUNDWATER EXTRACTION AND TREATMENT
SOURCE CONTROL MEASURE

THIS ENCLOSURE WAS NOT SUBMITTED TO THE
ADMINISTRATIVE RECORD FILE.

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SOUTHWEST
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SAN DIEGO, CA 92132

TELEPHONE: (619) 532-3676