



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, Ca. 94105-3901

September 9, 1993

Raymond E. Ramos  
Base Closure Team  
Western Division  
Naval Facilities Engineering Command  
900 Commodore Dr.  
San Bruno, CA 94066-2402

Dear Mr. Ramos:

The U.S. Environmental Protection Agency has reviewed the Work Plan for Recycling Sand-Blasting Grit into Asphalt Concrete, Hunters Point Annex, prepared by Battelle for the Naval Civil Engineering Laboratory, dated July 19, 1993. Comments prepared by our consultant, Bechtel Environmental Inc., are enclosed. Please call me if you have any questions regarding these comments, at (415) 744-2385.

Sincerely,

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

Roberta Blank  
Remedial Project Manager

Enclosure (1)

cc: Jim Sullivan, NSTI  
Dave Song, WestDiv  
Cyrus Shabahari, DTSC  
Barbara Smith, RWQCB  
Jeffrey Means, Battelle  
Jeffrey Heath, NCEL  
Amy Brownell, SFPHD

# **Bechtel**

50 Beale Street  
San Francisco, CA 94105-1895

Mailing address: P.O. Box 193965  
San Francisco, CA 94119-3965

005 00803

September 8, 1993

Ms. Roberta Blank H-9-2  
U. S. EPA Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Subject: ARCSWEST Program Contract No. 68-W9-0060  
Hunters Point Annex Work Assignment 60-05-9PP3  
Review of the Navy's Work Plan for Recycling Sandblasting  
Grit into Asphalt Concrete

Dear Ms. Blank:

As you requested, the Bechtel Project Team (Richard Draper and Kevin Bricknell) has reviewed the Navy's Work Plan for Recycling Sandblasting Grit into Asphalt Concrete. Our comments on this work plan are attached and your copy of the work plan is enclosed.

Please contact me if you have any comments or questions.

Sincerely,



Richard Draper, Ph.D.  
Project Manager  
(415) 768-3282

RD/cab  
Attachment

cc: Matt Mitguard, EPA  
Christine Beach, EPA



**Bechtel Environmental, Inc.**

## **Comments on the Navy's Work Plan for Recycling Sandblasting Grit into Asphalt Concrete**

### General Comments

1. The long-term test data indicate that the asphalt containing recycled sandblast grit does not have physical properties consistent CALTRANS specifications.
2. The Work Plan highlights several outstanding issues that indicate additional testing is required before full-scale recycling of sandblasting grit can proceed. The outstanding issues include waste characterization testing for volatile organics (Section 1.2.2.1), asbestos analysis (Section 2.6), repeat physical and chemical analysis (Section 4.1.2), asphalt test strip core testing (Section 4.1.3), and obtaining permits and variances (Sections 5.2 and 8.5).
3. The Department of Health Service's proposed standards for the use of recyclable materials in asphalt concrete and concrete includes a requirement that recyclable materials must be "free of Se , Be, Cd, Hg and asbestos in quantities exceeding the concentrations set forth in Section 66699, Title 22, California Code Regulations." No test data are provided for these metals or asbestos. The sandblast grit is also supposed to be free of organics, other than hydrocarbons, or the sandblast grit must have at least 95% by weight non-hazardous constituents. Only the priority pollutant analysis tests were performed. Is there any reasonable possibility of other organics in the waste that could cause the sandblast grit to fail this criteria, and that could be detected by a more comprehensive testing program? If so, a more comprehensive test program should be proposed.
4. The Work Plan should be clarified by including a process flow chart showing the various process stages and mass balances of the sandblast grit and asphaltic concrete in each stage, an organization chart showing the roles of the various companies in each process stage, and a bar-chart schedule showing the sequence of the stages.

### Specific Comments

1. Table 1-5, Sieve-Size Analysis: The sieve sizes presented in this table do not correspond to the standard nomenclature for sieves used in ASTM standards and CALTRANS specifications. It is difficult to compare the information presented on this table to the CALTRANS standards for aggregate. A cross reference should be provided.
2. Table 1-3, TCLP and EP TOX results: The table indicates both of these tests, but only one set of data is provided. Both sets of data should be provided.
3. Table 1-4, Butyl Tin Analysis: The results indicate concentrations in micrograms/gram for TCLP extracts. Is this the correct unit?

4. **Table 1-6, Physical Properties: Cohesimeter and % Voids criteria are listed, but no test results are provided for the 7% mix. A footnote should be added to this table to account for the missing data.**
5. **Section 5.5 & 6.4: The Work Plan indicates a sampling frequency of 1 sample 4000 cy of asphalt and indicates that a statistical analysis will be performed on the analytical data. The Navy should provide a statistical rationale to this sampling frequency.**
6. **Section 5.7: Why will asphalt containing recycled sandblast grit, that fails CALTRANS criteria be allowed to remain in place? The Navy should specify the criteria for determining asphalt of extremely poor quality.**
7. **Figure 9-1, Map to Hospital: The map should show the work site and the hospital or route to the hospital.**
8. **Figure 5-1: Will equipment and personnel decontamination facilities be constructed. If so, specify where.**

## ENCLOSURE 1

WORK PLAN FOR RECYCLING SAND-BLASTING  
GRIT INTO ASPHALT CONCRETE

COMMENTS ON THE WORK PLAN FOR  
RECYCLING SAND-BLASTING GRIT INTO  
ASPHALT CONCRETE

THE ABOVE IDENTIFIED ENCLOSURE IS NOT  
AVAILABLE.

EXTENSIVE RESEARCH WAS PERFORMED BY  
SOUTHWEST DIVISION TO LOCATE THIS  
ENCLOSURE. THIS PAGE HAS BEEN INSERTED  
AS A PLACEHOLDER AND WILL BE REPLACED  
SHOULD THE MISSING ITEM BE LOCATED.

QUESTIONS MAY BE DIRECTED TO:

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

**TELEPHONE: (619) 532-3676**