



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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M E M O R A N D U M

May 18, 1984

To: Bill Yake
From: Joe Joy *JJ*
Subject: Eagle Harbor Investigation: Progress Report #1

The purpose of this memo is to keep you abreast of some of the investigative actions taken to date at Eagle Harbor. Also, there have been some changes in planned procedures and schedule of which you should be made aware.

The progress report will follow the format established for the Eagle Harbor project proposal of May 9, 1984. Changes related to the proposal will be noted.

Project Objectives

Objective 1: Subtidal Sediment

Task 1: Sample Collection and Analysis

Approximately 41 subtidal samples were collected by EPA on April 17-19 as planned (Figure 1). Composites of the top three to six inches of surface sediment reached by the VanVeen dredge were made. The presence of black, tarry material which caused an oily sheen on surface waters was noted in a few samples: one taken near the log raft dolphins at WYCOFF (EPA Station No. 28); and two taken mid-channel near NOAA Station D (near EPA Station Nos. 22 and 23). The latter samples were not part of the initial planned sampling run at the EPA stations on April 18, but were taken during a second sweep over the area on April 19 (Figure 1). The tarry material was beneath one to two centimeters of fresher, lighter-colored sediment. The sample condition was in this way similar to that found and described by Dr. Peggy Kraahn of NOAA.

On April 18, some subtidal samples were split with Mr. Chuck Hughes, a process chemist with the WYCOFF company. Mr. Hughes was also given a list of the analyses EPA contract laboratories will perform on the sediment samples. He stated that the WYCOFF samples would be contracted out, and any subsequent data exchange would have to be handled through the WYCOFF company lawyers.

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EPA samples were transported to Manchester for storage. In a change from the initial EPA proposal, samples for organic analysis were split among four laboratories and shipped in groups of ten as follows:

Date Sent	Laboratory
April 25	Pedco, Inc., Cincinnati
April 30	Pedco, Inc., Cincinnati
April 30	Mead, Inc., Chicago
May 2	S-cubed, Inc., San Diego

Evidently, no laboratory could be found with the capacity for fifty samples. Carbazole was dropped from the list of analyses to be performed by the contract laboratories. Evidently, no EPA-approved protocol exists for carbazole.

Samples taken for inorganic analyses was sent to the Rocky Mountain Analytical Laboratory in Arvada, Colorado, on May 11. This date was later than initially planned.

Low detection limits were requested for all analyses. These limits are to be the same as were used during the 1982 EPA Commencement Bay deepwater sediment investigation. Results are to be in dry weight. Percent solids will be given for the inorganic data set only.

No changes have been made in Tasks 2 and 3, quality assurance and data reporting, respectively. Scheduling for these tasks will be discussed below.

Objective 2: Shellfish

Task 1: Sample Collection and Analysis

Art Johnson and I collected a sample of a variety of clams from each of eight sites in or at the mouth of Eagle Harbor on April 17-18, 1984 (Figure 1). A control clam sample was collected approximately 1.7 miles south of Eagle Harbor near Port Blakely. Some clams taken at Station 1 on April 18 were given to Chuck Hughes of WYCOFF for possible analysis. The number of clams per species, total number of clams, and weight of freshly shucked edible meats for each WDOE sample were recorded during preparation at Manchester (Table 1).

Metals analyses on the samples have been completed. Organics analyses have not been completed because EPA/Gas Works Park investigation samples have a higher priority. Eagle Harbor samples are next in priority, and may be analyzed for organics in late May.

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Carbazole analysis will be done on shellfish samples. A carbazole standard was obtained from Dr. Peggy Kraahn of NOAA for our use at Manchester.

The geoduck sample was not collected on May 17 off the WYCOFF facility as planned in the May 9 project proposal. No rescheduling of this collection is planned.

The scope of Tasks 2 through 4 remains as described in the project proposal. Scheduling for these tasks is discussed below.

Objective 3: Intertidal Sediment

Eight intertidal sediment samples were collected during the shellfish sample collection of April 17 and 18, as proposed. No sediment sample was taken at the shellfish control station near Port Blakely.

The samples were sent with the subtidal sediment samples to three EPA contract laboratories for organics analyses in the following manner:

<u>Sample</u>	<u>Date</u>	<u>Laboratory</u>
#1	April 25	Pedco, Inc.
#11, 13, 15 32, 41	May 2	S-cubed, Inc.
#7	May 7	West Coast Analytical Services

Through a misunderstanding, intertidal sediment samples for inorganic analyses were not collected on April 17 or 18, except for Station 1. Samples for inorganic analyses were collected from the seven intertidal stations on May 7. These samples were stored with the other intertidal samples at Manchester and shipped to the Rocky Mountain Analytical Laboratory on May 11.

Detection limits and analyses are to be the same as for the subtidal sediment.

The scope of Tasks 2 through 4 remains as described in the initial project proposal. Scheduling of these tasks is discussed below.

Objective 4: Current Commercial Operations

Task 1: Facilities Tour

WYCOFF company and Washington State Ferries maintenance facilities tours were made on April 12. Art Johnson and I were accompanied by Dave Wright and Craig Baker of the WDOE Northwest Regional Office. The tour around the WYCOFF plant was conducted by Mr. Mark Walker

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(Eagle Harbor plant foreman) and Mr. Chuck Stoddard and Mr. Don Johnson of the WYCOFF-Seattle head offices. Plant processes were explained to us and historical environmental problems were discussed.

The ferry maintenance facilities tour was conducted by Mr. Gene Nelson. Current and historical operations at the site were discussed.

A visit to the Standard Oil Sales site was made. Dave Wright and Craig Baker recounted the spill event that had occurred at that site in 1975.

Everything is expected to go as planned for Tasks 2 through 4. Scheduling for these tasks is discussed below.

Schedule of Tasks and Reporting

The task completion scheme will probably closely follow the "non-ideal situation" schedule described in the May 9 project proposal; i.e., an initial report of shellfish and facilities findings and a later modified report including sediment data (Figure 2). Sample collection tasks, except for the additional geoduck sample collection, have been completed. Projected completion date for shellfish analyses remains in late May. An optimistic projected completion date for sediment analyses and QA/QC for these data will fall in the later end of the initial projected date; i.e., mid to late-July. Reference data collection has started, and a literature search for shellfish and sediment topics shall begin soon. Dan Tangarone of EPA has begun transfer of field notes and figures into a draft report format.

The initial facilities tours have been made. Document review is now underway and will continue into mid- or late-May.

The first report containing the shellfish results and facilities tour and review findings should be ready by late June, as planned in the May 9 proposal (Figure 2). However, unforeseen delays in analyses of the shellfish samples at Manchester could still modify completion of this report.

You will be kept informed of the project's progress.

JJ:cp

cc: Lynn Singleton
Dick Cunningham
Joan Thomas
Dave Wright
John Littler
Dan Tangarone, U.S. EPA
Don Miles, Kitsap Co. Health Dept.

Table 1. Data on shellfish taken from Eagle Harbor on April 17 and 18, 1984.

Station Number	Description	Collection Date	Total Shucked Sample Weight (grams)	Number Clams	Butter	Clam Species*		
						Native Littleneck	Japanese Littleneck	Horse
0	Control/Port Blakely	4/18/84	552.69	24	14	10	0	0
1	WYCOFF/East Shore	4/18/84	504.41	13	8	5	0	0
7	Wing Pt. Spit	4/17/84	516.82	29	5	24	0	0
11	Wing Pt. Lagoon/ Opposite WYCOFF	4/17/84	504.41	13	8	5	0	0
13	East of Hanson Residence/North Beach	4/17/84	527.30	11	9	2	0	0
25	West of Hanson Residence/Toward Ferry	4/17/84	433.26	15	13	2	0	0
32	West WYCOFF Log Dump/ South Beach	4/17/84	184.03	22	1	7	3	11
34	North Beach Condos Between Ferry Facilities	4/17/84	409.57	15	9	5	1	0
41	Winslow City Park	4/17/84	298.74	58	2	56	0	0

*Butter clam = Saxidomus giganteus
 Native littleneck = Protothaca staminea
 Japanese littleneck = Venerupis japonica
 Horse clam = Tresus capax

KEY

- ⊙ EPA sediment station*
- △ WDDE shellfish & EPA intertidal sediment sta.
- # April 19th EPA sophtidal samples
- ◇ NOAA sediment station

* Planned locations, not post-survey plotted locations

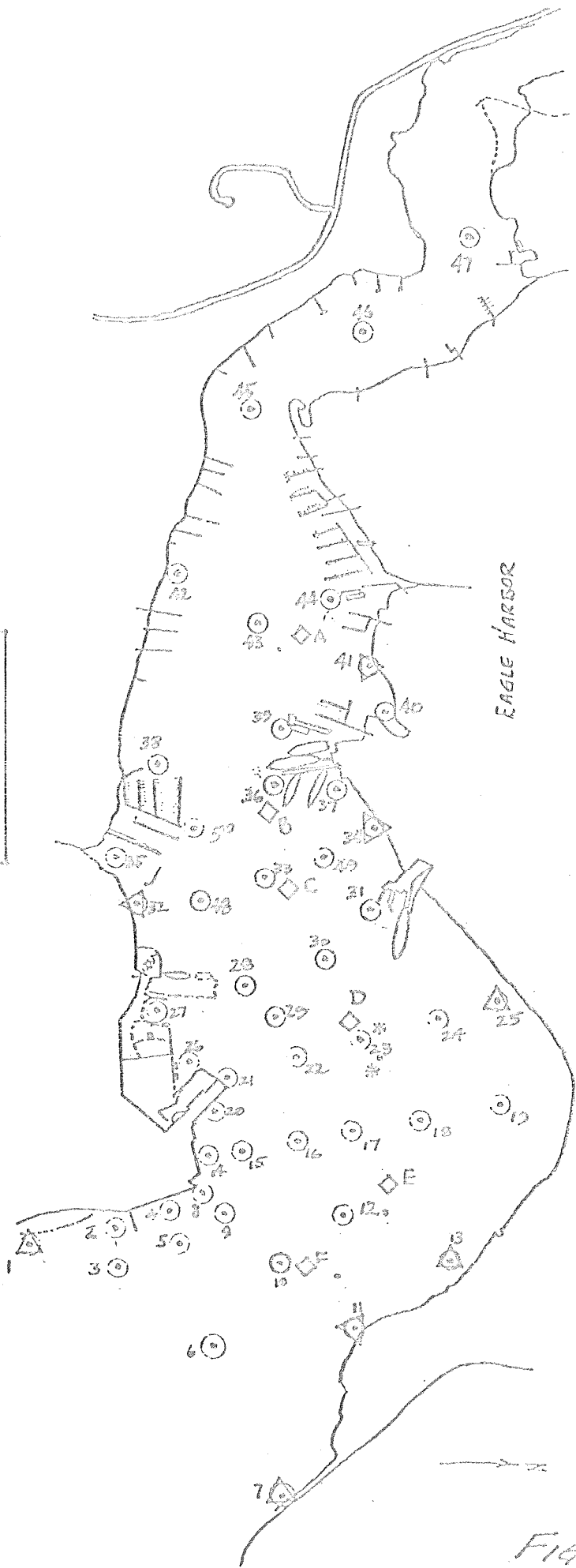


FIGURE 1

HARRISON PROJECT

_____ Projected schedule
 - - - - - Alternate schedule
 [Hatched Box] Task or portion of task completed

QA, QC of samples
 - - - - - Possible analysis and QA, QC of samples
 not writing (EPA)

A, RA, RC at Hemenester
 writing for shellfish only (WDOE)
 - - - - - Possible 2nd report or chapter to include sediment (WDOE)
 allocation (Cancelled)
 WDOE (Cancelled)

QA, QC of samples
 - - - - - Possible analyses and QA, QC of samples
 WDOE and EPA reporting
 - - - - - Possible EPA reporting or 2nd report or chapter by WDOE
 in tour documents
 report materials included in report with shellfish

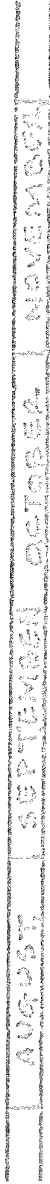


FIGURE 2