DISPOSITION FORM

For use of this form, see AR 340-15, the proponent agency is TAGCEN.

REFERENCE OR OFFICE SYMBOL	SUBJECT
NPPEN-PL-3	BANDON BOAT BASIN Analysis of Reedsport and Bandon Boat Basins

TO Ch, Natural Resources Sec. FROM Ch, Advance Engn. Sec. DATE 12 Dec 79 CMT 1

Moore/6477/lvm

1. It is currently proposed that 6,000 cubic yards of sediments be dredged from the Bandon Boat Basin and 120,000 from the Winchester Bay Boat Basin in two Section 107 studies under review by EN-PL-2. Attached are elutriate analysis results for sediment samples obtained from the proposed dredging sites. Field notes and maps depicting sampling locations are also attached. It is requested that this data be incorporated into the 404/103 notices currently being written on these projects.

2. Winchester Bay sediments ranged in appearance from black silt to greasy, black clay within the boat basin (Stations B, C, D, and E) with sand being obtained from the navigation channel (Station A). The elutriate of boat basin sediments did not contain contaminants at levels significantly exceeding those of the receiving water sample, which was from the ocean disposal site, except in the case of ammonia and volatile solids. Neither of these, however, were present at levels which were of concern in terms of impact potential. Sediment obtained at Stations B and E visually and tactilely had very greasy consistencies. Elutriates of these samples were tested for both oil and grease and hydrocarbons. Surprisingly, neither parameter was detected.

3. Since elutriate analysis data obtained on Winchester Bay sediments from Stations B and E failed to account for their black, greasy natures, grain size and bulk sediment analysis of volatile solids will be performed on the sediments. These tests should indicate whether the "greasy" texture of the sediments are attributable to the nature of the sediments or to organic pollution. If organic pollution is the cause, additional chemical testing or bioassays may be necessary to ascertain the sediments' impact potential upon open water disposal. A bioassay is expected to cost $15,000 to $30,000 and will be undertaken only if response to the public notice is negative.

4. Since the sediments in the Winchester Bay Boat Basin substantially differ from those at the disposal site (sand and rock), benthic organisms characteristic of the ocean disposal site may exhibit poor survivability in the sediments. For this reason, as well as to avoid expenses involved in performing bioassays, we urge that the black, greasy sediments be disposed at an upland site if at all feasible. If not (and provided that sediments are not organically polluted), the sediments should be discharged in the northwest corner of the designated disposal site. If disposal takes place in the depths present at this location, the chances of the greasy black sediments being washed up on beaches are expected to minimal; particularly

12 December 1979

since depth contours near the disposal site run roughly parallel to shore, indicating that long-shore rather than on-shore currents prevail in the area. The State and Federal organizations mentioned in 40 CFR 222.3(c) should be fully appraised of the nature of the sediments via a Public Notice.

5. Sediments dredged from the Winchester Bay Boat Basin in areas other than that from which samples B and E were obtained should be suitable for disposal anywhere within the designated open water disposal site.

6. Bandon sediments were predominantly composed of greyish sand with concrete and stones intermixed. Except for phosphorus, contaminants in the elutriates of the sediment samples were present at either indetectable levels or at levels less than the criteria specified in the EPA's publication "Quality Criteria for Water." Phosphorus levels slightly exceeded the quality criteria. Judging by the elutriate analysis data on Bandon sediments, they are suitable for discharge at the designated open water site.

7. The detection limits used in the elutriate analyses of sediments from both projects for cadmium, mercury, endrin, toxaphene, and PCB's were not at low enough levels to allow comparison of the data to EPA criteria. Since specific concerns in respect to these parameters did not exist at the onset of the study and since levels of parameters tested were below the detection limits, the data is considered adequate for assessing the pollution potential of the sediments.

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EUGENE D. POSPISIL
Chief, Advance Engineering Section

FIELD NOTES

BANDON HARBOR BOAT BASIN

25 JULY 1979

Weather Conditions: Sunny, high wind (small craft warning).

Sampling Personnel: James Reese, Robert Ellard, Pam Moore, John Rennie.

Sampling Station	Sample Description	Comments
A	Grey sand with some concrete debris and stones.	Collected by hand at low tide. Too much rock for core sampling.
B	Same as above.	Ellard sampler was used; five sample composite.
C	Same as above	Collected by hand at low tide. Too much rock for core sampling.
E	Estuarine water.	
Ocean disposal site.	Marine water.	

UMPQUA RESEARCH COMPANY

Water and Air Technology

P. O. Box 791 ◆ Telephone (503) 863-5201

626 N.E. Division Street Myrtle Creek, Oregon 97457

Gerald V. Colombo

David F. Putnam

TEST RESULTS

NAME U.S.Army Corps of Engineers ATTN Jim Reese DATE 7-26-79

Planning Branch, NPPEN-PL-2

ADDRESS P.O.Box 2946, Portland, OR 97208 DATE REPORTED 9-19-79

TEST	SOURCE	Bandon	Bandon	Bandon	Bandon
	DATE TESTED	Ocean	Ocean	Ocean	Ocean
	SAMPLE # / UNITS	Ocean	A	B	C
pH	pH Units	8.1	7.8	7.2	8.0
SPECIFIC CONDUCTIVITY	μ mho/cm	42,000	42,000	42,000	42,000
ARSENIC	mg/liter	<0.01	<0.01	0.01	0.01
CADMIUM	mg/liter	<0.001	<0.001	<0.001	<0.001
CHROMIUM	mg/liter	<0.02	<0.02	<0.02	<0.02
COPPER	mg/liter	<0.05	<0.05	<0.05	<0.05
LEAD	mg/liter	<0.01	<0.01	<0.01	<0.01
ZINC	mg/liter	0.07	0.07	0.11	0.08
MERCURY	mg/liter	<0.001	<0.001	<0.001	<0.001
AMMONIA, NITROGEN	mg/liter	0.11	0.36	0.47	0.52
OIL & GREASE	mg/liter	<1	<1	<1	<1
*HYDROCARBONS - GC	mg/liter	<0.5	<0.5	<0.5	<0.5
TOTAL PHOSPHORUS	mg/liter	0.13	0.13	0.30	0.15
VOLATILE SOLIDS	mg/liter	3,620	2,946	4,516	4,700
TOTAL SOLIDS	mg/liter	35,246	34,150	36,334	35,914
ENDRIN	mg/liter	<0.00001	<0.00003	<0.00001	<0.00001
LINDANE	mg/liter	<0.00003	<0.00002	<0.00001	<0.00001
TOXAPHENE	mg/liter	<0.0001	<0.0002	<0.0001	<0.0001
METHOXYCHLOR	mg/liter	<0.00002	<0.00004	<0.00001	<0.00001
2, 4 - D	mg/liter	<0.001	<0.001	<0.002	<0.006
2, 4, 5 - TP SILVEX	mg/liter	<0.0003	<0.0003	<0.0006	<0.0003
PCB	ppb	<1	<1	<1	<1

* Gasoline thru diesel.

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626 N.E. Division Street Myrtle Creek, Oregon 97457

Gerald V. Colombo

David F. Putnam

TEST RESULTS

NAME Port of Bandon ATTN Alex Linke DATE 7-26-79

ADDRESS 1st Street, Bandon, OR 97411 DATE REPORTED 9-19-79

TEST	SOURCE	Bandon	Bandon	Bandon	Bandon
	DATE TESTED	Est.	Est.	Est.	Est.
	SAMPLE # / UNITS	Est.	A	B	C
pH	pH Units	7.8	7.7	8.3	8.6
SPECIFIC CONDUCTIVITY	μ mho/cm	44,000	39,000	44,000	42,000
ARSENIC	mg/liter	0.01	0.01	0.01	0.01
CADMIUM	mg/liter	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM	mg/liter	< 0.02	< 0.02	< 0.02	< 0.02
COPPER	mg/liter	< 0.05	< 0.05	< 0.05	< 0.05
LEAD	mg/liter	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	mg/liter	0.07	0.08	0.11	0.07
MERCURY	mg/liter	< 0.001	< 0.001	< 0.001	0.001
AMMONIA, NITROGEN	mg/liter	0.32	0.57	0.46	0.12
OIL & GREASE	mg/liter	< 1	< 1	< 1	< 1
*HYDROCARBONS - GC	mg/liter	< 0.5	< 0.5	< 0.5	< 0.5
TOTAL PHOSPHORUS	mg/liter	0.10	0.11	0.20	0.12
VOLATILE SOLIDS	mg/liter	4,138	4,414	4,090	4,662
TOTAL SOLIDS	mg/liter	35,126	31,492	36,460	35,654
ENDRIN	mg/liter	<0.00001	<0.00002	<0.00001	<0.00001
LINDANE	mg/liter	< 0.00001	<0.00001	<0.00001	<0.00001
TOXAPHENE	mg/liter	<0.0001	<0.0001	<0.0001	<0.0001
METHOXYCHLOR	mg/liter	< 0.00002	<0.00002	<0.00002	<0.00002
2, 4 - D	mg/liter	<0.001	<0.001	<0.001	<0.002
2, 4, 5 -TP SILVEX	mg/liter	<0.0003	<0.0003	<0.0003	<0.0006
PCB	ppb	< 1	< 1	< 1	< 1

* Gasoline thru diesal

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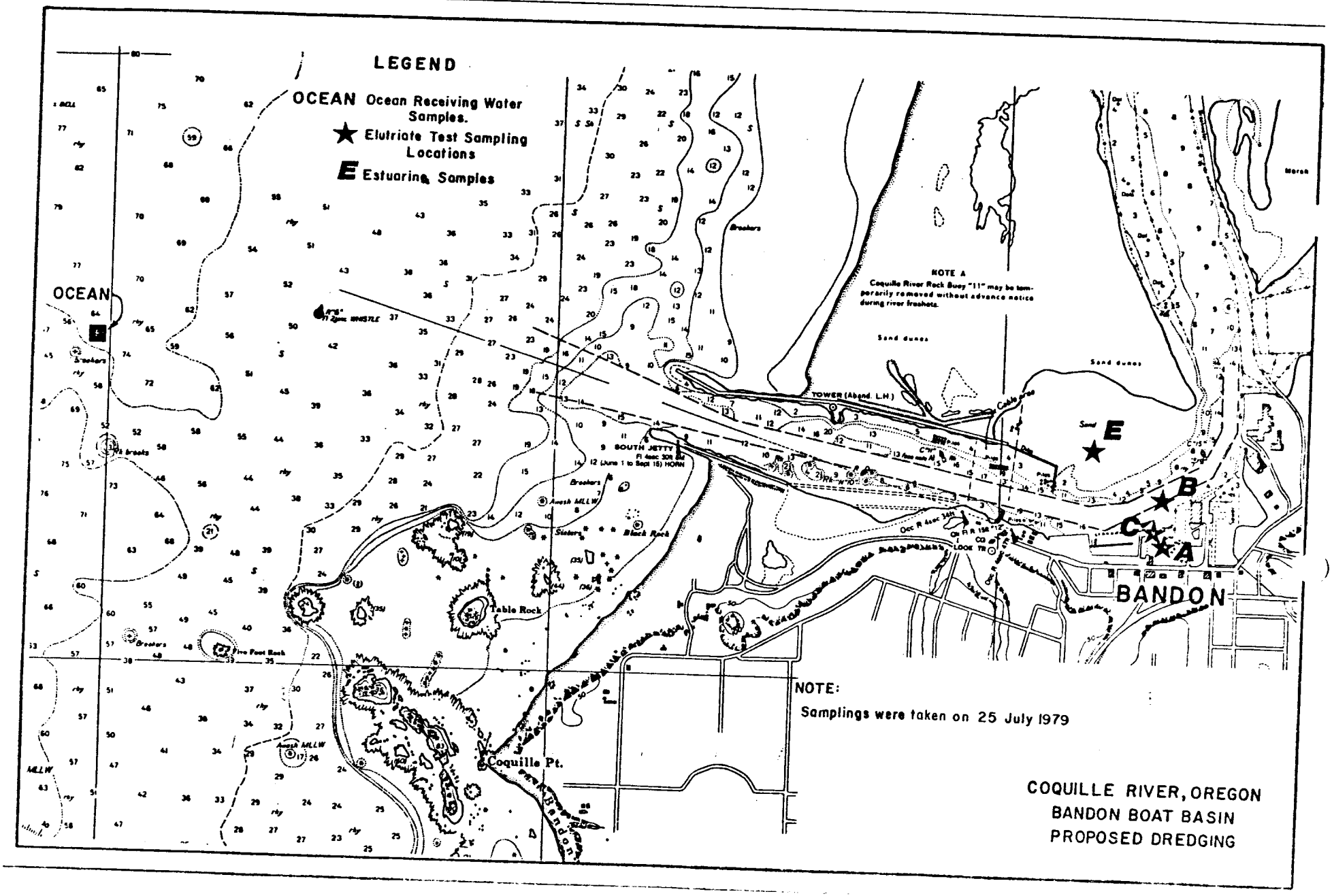

COQUILLE RIVER, OREGON
BANDON BOAT BASIN
PROPOSED DREDGING