



GOBIERNO DE PUERTO RICO/OFICINA DEL GOBERNADOR

Junta de Calidad Ambiental 07.01-10/26/98-0066

RETURN RECEIPT REQUESTED

October 26, 1998

MR D L DUREN
LIEUTENANT COMMANDER CEC
U S NAVAL STATION
ROOSEVELT ROADS
PSC 1008 BOX 3001
FPO AA 34051-0001

SUBJECT: CLEAN OX PILOT PROJECT

Dear Mr. Duren:

Reference is made to the summary submitted to the Water Quality Area (WQA) of the Environmental Quality Board (EQB) with regard to the meeting held on September 17, 1998, for the Clean Ox Pilot Project. We evaluated the information received and have the following comments:

The summary indicated changes in methods of analysis for groundwater and soil for several parameters. The changes are as follows:

- Groundwater

<u>Parameter</u>	<u>EQB Method</u>	<u>Navy Proposal</u>
pH	150.1	9040A
Iron	236.2	6010
Benzene	624	8260
Toluene	624	8260
Ethylbenzene	624	8260
Xylenes	624	8260
Lead	239.2	7421

- Soils:

<u>Parameter</u>	<u>EQB Method</u>	<u>Navy Proposal</u>
Iron	7380	6010
Benzene	8020	8260
Toluene	8020	8260
Ethylbenzene	8020	8260
Xylenes	8020	8260
Alkalinity	9040 o 9045	Cited method is for water
Specific Conductance		Cited method is for waters

After evaluating these changes we are willing to agree upon them as long as the detection limits of the methods proposed by the Navy reach the following levels for each specific parameter.

- Groundwater:

<u>Parameter</u>	<u>Detection Limit should be less than</u>
Iron	300 ug/l
Benzene	5 ug/l
Toluene	5 ug/l
Ethylbenzene	50 ug/l
Xylene	50 ug/l

- Soil

<u>Parameter</u>	<u>Detection Limit should be less than</u>
Benzene	5 ug/l

If the methods that the Navy proposes cannot reach the levels indicated above, then for the analysis of those parameters shall be used the method requested by EQB in its letter dated August 19, 1998. Also, your summary has an error regarding the method for hardness in grounwater. The correct method is 130.2 instead of 310.2.

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1. The Navy proposed to monitor the groundwater sample for all the parameters requested by EQB at one up gradient well, one down gradient well and the two (2) injection (application) wells. For the new site of the pilot project the following wells shall be sampled for all the parameters requested by EQB.
 - The five (5) new monitoring wells that will be established in the pilot project, that will be located inside the project area.
 - Monitoring well UGW-14 located down gradient of the project area.
 - Monitoring well UGW-3 located inside the pilot project area.
 - Monitoring well UGW-25 located up gradient of the project area.
 - The two (2) injection (application) wells described as AW-1 and AW-2 on the pilot project. In the case of the injection wells we will only require the baseline sampling and a sampling 120 days after the application of the Clean Ox reagents.

Also, we will like you to inform us why the five (5) new monitoring wells included for this site appear to be upgradient of the recovery well RW-1.

With regard to the other information included in the summary we have no further comments.

If you have any question concerning this matter, please contact Mrs. Denise T. Laabes Vera, Chief of the Underground Injection Control Program at (787) 751-1891.

Cordially,


Roberto Ayala Prado
Director
Water Quality Area

cc: Christopher T. Penny
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