# Department of Toxic Substances Control

Alan C Lloyd, Ph.D
Agency Secretary
Cal/EPA

5796 Corporate Avenue
Cypress, California 90630

Arnold Schwarzenegger
Governor

July 29, 2005

Ms. Pei-Fen Tamashiro
Naval Weapons Station, Seal Beach
800 Seal Beach Boulevard
Seal Beach, California 90740-5000

REVIEW OF TECHNICAL MEMORANDUM, SITE 22 (BREITBURN'S OIL ISLAND) NAVAL WEAPONS STATION, SEAL BEACH, DATED JANUARY 11, 2005

Dear Ms.Tamashiro:

The Department of Toxic Substances Control (DTSC) has reviewed the subject technical memorandum prepared by Waterstone Environmental, Inc., for Breitburn Oil Company. Upon review, DTSC has the following comments.

1. DTSC checked the reference to a Preliminary Ecological Risk Assessment (PERA) performed as part of the Remedial Investigation Report for Sites 1, 7,19 and 22, dated December, 1995 prepared by CH2MHill (Technical Memorandum, page 1, second paragraph). The 1995 PERA does address potential ecological hazard to terrestrial vertebrate and aquatic receptors in a qualitative manner. Evaluation of groundwater exposures, as outlined in the original 2003 document, completes the evaluation of contaminated media (i.e., soils, sediment, surface water and groundwater). Given the methodology used, dose estimates in terms of intake rates were not made for the vertebrate receptors evaluated. Total dose over all exposure pathways cannot easily be estimated using the information available. However, the on-going actions taken to reduce exposure to pooled surface waters and on-site vegetation (Technical Memorandum, page 3, fourth paragraph) make estimates of intake moot as all significant exposure pathways for vertebrate receptors are currently incomplete.

2. DTSC agrees that the on-going site actions eliminate, or greatly reduce, exposures at Site 22 except for exposure to surfacing groundwater (Technical Memorandum, page 4, last paragraph). The on-going site actions consist of re-injection of accumulated pond water from rain events and removal from the property of all vegetation from the ponds and other parts of the island (Technical Memorandum, page 3, fourth paragraph). These actions should be made permanent requirements until a detailed Ecological Risk Assessment (ERA) of all pathways is completed in

the future. Administrative mechanisms should be put in place to ensure continuation of these on-site activities until a complete ERA is completed. Notice in the Base Master Plan or an environmental analysis document, has been sufficient at other operating Department of Defense (DoD) facilities in California.

In summary, a qualitative ERA has been performed for terrestrial vertebrate receptors. The current activities including removal of terrestrial vegetation and re-injection of accumulated pond surface waters are based on the terrestrial ERA. The mitigating measures should be monitored and reported by Breit Burn Energy Company on a regular basis until a more standardized ERA is completed. DTSC has also concluded that the groundwater ERA indicates little or no ecological hazard for aquatic receptors due to exposure to groundwater.

If you have any questions, please call Ms. Katherine Leibel at (714) 484-5446.

Sincerely,

Shelia Lowe

Shelia Lowe, Unit Chief
Federal Facilities Unit "B"
Office of Military Facilities
Southern California Operations Branch

cc: Mr. Si Le
Remedial Project Manager
SWDIV Naval Facilities Engineering Command
1220 Pacific Coast Highway
San Diego, California 92132-5190

Ms. Patricia Hannon
Santa Ana Region
California Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, California 92501-3339