

National Aeronautics and  
Space Administration  
**Ames Research Center**  
Moffett Field, CA 94035-1000

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MOFFETT FIELD  
SSIC NO. 5090.3



Reply to Attn of:

DQH:218-1

AUG 13 1997

Mr. Stephen Chao  
Department of the Navy  
EFA West  
900 Commodore Way, Building 210  
San Bruno, California 94066-0720

Dear Mr. Chao:

The National Aeronautics and Space Administration attended the *West-Side Aquifer Treatment System Preconstruction Meeting and the East-Side Aquifer Treatment System Preconstruction Meeting* on July 17, 1997 at Moffett Field, California and would like to provide the following comments.

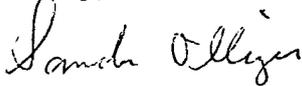
1. The West-Side Aquifer Treatment System (WATS) Definitive Design states that the system will be discharging the effluent into the storm system at NASA-Ames Research Center under NASA's current General Stormwater Permit (#CAS000001). This discharge is estimated to be 70 gallons per minute (gpm) with a designed maximum capacity of 120 gpm for possible future system expansion and greater-than-expected well yields. The effluent will be discharged into the catch basin located north of Building 45 on Cummins Avenue. This catch basin discharges to the NASA Settling Basin, a flow through system, located in the northern portion of the base. Overflow from the NASA Settling Basin spills onto the wetland area (Eastern Diked Marsh) and flows to the Perimeter Road outfall structure on an overland flow basis. Three 48-inch storm drain pipes run beneath Perimeter Road to allow drainage of the wetland area into the NASA Storm Water Retention Pond (SWRP). NASA has 2 concerns about this additional flow:
  - 1) The pumps previously located between the SWRP and Stevens Creek were relocated to Gate 14A and Gate 14B to assist with the additional flow along North Patrol Road Channel to Building 191. Without pumps at the SWRP and Stevens Creek location there is no way to regulate water in the SWRP. Flooding has occurred on NASA property during heavy rainstorms in this location.
  - 2) NASA is concerned about the potential impact of the additional fresh water from the WATS on the remnant salt marsh vegetation near storm water retention ponds.
2. The East-Side Aquifer Treatment System (EATS) Definitive Design states that the system will be discharging the effluent into the storm system under NASA's current General Stormwater Permit (#CAS000001). This discharge is estimated to be 30 gpm with a designed maximum capacity of 50 gpm for possible future system expansion and greater-than-expected well yields. The effluent

will be discharged into the catch basin located south of the Marriage Road Ditch. This catch basin discharges to the Building 191 pump station and the effluent flows out the Northern Channel to the Guadalupe Slough. The capacity of the Northern Channel was nearly reached during the rainy season of 1996 - 1997 requiring the installation of the pumps from the outlet between Stevens Creek and the SWRP. Please describe what measures the Navy will take to ensure that the capacity of the northern channel is not exceeded due to the increased flow from the EATS.

3. The additional discharge of water into NASA's storm sewer system increases the possibility of flooding on both the east side of the property and the west side of the property. NASA requests that the Navy provides NASA with 2 portable pumps, the size to be determined by NASA, to meet the additional discharge from the Navy's remediation projects. These pumps will be used to help regulate the additional flow at Building 191 and between the SWRP and Stevens Creek.
4. The additional increase of effluent flow to the storm drain system will necessitate an increase in maintenance of the system and its components, i.e. the pumps, sewer lines, settling basin, etc. This increase in maintenance will result in an increase in NASA's operating costs. How will the additional costs be addressed?

Thank you for the opportunity to comment on the *West-Side Aquifer Treatment System Preconstruction Meeting and the East-Side Aquifer Treatment System Preconstruction Meeting*. If you have any questions or comments, please feel free to call me at (650) 604-3355 or Tina Pelley at (650) 604-1315.

Sincerely,



Sandra Olliges, Branch Chief (Acting)  
Safety, Health and Environmental Services Office

cc: Loren Henning, U.S. EPA  
Michael Gill, U.S. EPA  
Joseph Chou, DTSC  
Derek Whitworth, DTSC  
Patricia Velez, CA Dept. Fish and Game  
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Peter Strauss, MHB