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GLENN SPRINGS HOLDINGS, INC.

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January 19, 2001

Steve Scharf, P.E.
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-3501

Dear Mr. Scharf:

Re: Proposed Remedial Action Plan
Northrop/Navy Operable Unit No. 2
Groundwater Remedy

Glenn Springs Holdings, Inc. (GSHI) has reviewed the document entitled "Proposed Remedial Action Plan, Operable Unit No. 2; Groundwater Remedy" dated October 2000 for the Northrop Grumman Bethpage facility (Northrop Site) and the Naval Weapons Industrial Reserve Plant (Navy Site) and has the following comments.

1. Page 6, First Partial Paragraph: The PRAP states that the waste waters from the Hooker/Ruco Site have contributed to the contamination of the Bethpage regional aquifer upgradient and beneath the Northrop, Navy and Grumman-Steel Los facilities. The Hooker/Ruco Site waste waters have not contributed to the contamination beneath the Grumman-Steel Los site. Section 3.2, Appendix J of the Hooker/RUCO Site OU-3 RI Report states that the areal extent of the VCM subplume is the maximum extent to which chemicals potentially attributable to the Hooker/Ruco Site could have migrated. The southern (downgradient) extent of the VCM subplume is approximately 1,000 feet upgradient of the Grumman-Steel Los facility and, as of 1995, has migrated approximately 1,400 feet southward from the southern boundary of the Hooker/Ruco Site. Given that VCM production started in 1956, it has taken approximately 40 years to migrate 1,400 feet. Thus, it is likely that at least another 20 years will be needed for the downgradient edge of the VCM plume to migrate the additional 1,000 feet to reach the northern edge of the Grumman-Steel Los facility.

2. Page 7, Last Paragraph: The regulatory history presented in the PRAP for the Hooker/Ruco Site is outdated and incomplete. The following information should be included:

   i) the OU-2 remedy has been completed;
   ii) the ROD for OU-3 was issued September 29, 2000; and

iii) the groundwater component of OU-1 is to be addressed by the OU-3 remedy.

3. Page 8, Section 4, Second Paragraph: This paragraph reads "The RCRA program is addressing the contaminated soils beneath the building". It is not clear which building is being referred to.

4. Page 16, Section D: The PRAP states:
i) that VCM could reach the ONCT system as early as 10 years; and
ii) the existing ONCT system was not designed to treat VCM.

With respect to the first point (i), well GP-1 would be the first well to which VCM would migrate. GP-1 is located approximately 1,400 feet upgradient of the closest ONCT well, ONCT-1D.

Modeling simulations presented in Section 6.0 of the Hooker/Ruco Site OU-3 RI Report show that VCM from the VCM subplume may reach GP-1 in approximately 20 years using the 1995 concentrations and areal extent. Thus, the estimate of 10 years to reach the ONCT system is believed to be ultra conservative. Furthermore, a VCM concentration of 8.3 µg/L was calculated to be required in the groundwater extracted by GP-1 before supplemental treatment of the GP-1 air stripper air discharge for VCM is needed. This is modeled to occur in approximately 44 years.

With respect to the second point(ii), air stripping is a very effective technology to remove VCM from groundwater but only if the treatment system is designed/constructed to handle VCM. VCM could exceed the allowable discharge limits in the air discharge from the air stripper(s) in operation today unless other treatment technologies were employed. The GP-1 and ONCT air stream treatment systems, currently in operation, use granular activated carbon (GAC) to remove the VOCs from the air discharge. GAC is not very effective in removing VCM from the air and could lead to a significant increase in the cost of operating the existing treatment systems unless modifications took place. As a result, other treatment technologies would better address the VCM presence in the air stream. This should be clarified for the public as modifications to the air stripping technology will prevent air discharges above allowable discharge limits.

5. Page 21, Fifth Full Paragraph: This paragraph states that the existing treatment systems for the IRM wells were not designed to treat VCM and could result in air effluent concentrations of VCM that exceed state air discharge requirements.

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6. Table 1: VCM concentrations should read ND-6,400. There is an extra zero shown (i.e., 6,4000).

Please contact me at (859) 543-2151 or email at steve_whyte@oxy.com if you have any questions or comments.

Sincerely yours,

Klaus Schmidtke

for Steve Whyte
Project Manager

KDS/ja/6883/4
Encl.

c.c.: S. Quadri (USEPA)
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