FOCUSED GROUND-WATER FEASIBILITY STUDY

FOR THE

570 MAIN STREET MANUFACTURING FACILITY WESTBURY, NEW YORK NYSDEC SITE CODE #130043A

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GW #5: In-Situ Oxidation (hydrogen peroxide injection) and Intrinsic Remediation of the Plume Downgradient from Area 2 – Compliance for GW #5 is the same as for GW #2 and GW #3.

5.7 Overall Protectiveness of Human Health and the Environment

GW #1: No Action – While various analyses described within this report indicate that a No Action alternative is protective of human health and the environment under current conditions, potential changes in future use (i.e., installation of new wells) could make the alternative non-protective. Until concentrations attenuate with time, human health risk to future ground-water users will remain static.

GW #2: Ground-Water Extraction with Air Stripping Treatment and Discharge to the POTW and Intrinsic Remediation of the Plume Downgradient from Area 2 –This alternative offers good overall protection of human health and the environment by reducing current contaminant concentrations to Site-specific cleanup levels. No adverse impacts to the community, Site workers or environmental receptors will result from implementation of this alternative.

GW #3: Ground-Water Extraction with Liquid-Phase Carbon Treatment and Discharge to the POTW and Intrinsic Remediation of the Plume Downgradient from Area 2 – This alternative will provide the same overall protection of human health and the environment as GW #2.

GW #5: In-Situ Oxidation (hydrogen peroxide injection) and Intrinsic Remediation of the Plume Downgradient from Area 2 – This alternative will provide similar overall protection of human health and the environment as GW #2. GW #5 is likely to attain Site-specific cleanup levels more quickly than GW #2 or GW #3.

5.8 Identification of Preferred Alternative

GW #2, GW #3 and GW #5 are similar with respect to long-term effectiveness, reduction of toxicity, mobility or volume, implementability, compliance with ARARs and overall protectiveness of human health and the environment. GW #5 has the following elements that are preferable to GW #2 and GW #3:

1. GW #5 is likely to attain Site-specific cleanup levels more quickly than GW #2 or GW #3, particularly if DNAPL is present beneath Area 2 (i.e., in-situ oxidation can destroy DNAPL whereas ground-water extraction relies on relatively slow dissolution of DNAPL);

2. GW #5 is expected to have lower capital and long-term O&M costs than GW #2 or GW #3; and

3. as active procedures for GW #5 (e.g., reagent injection) are likely to be completed more quickly than for GW #2 and GW #3, there will be less interference with ongoing business activities at the Site.

For the above reasons, GW #5 is identified as the preferred alternative for addressing ground-water contamination at the Site.

6.0 REFERENCES

A variety of technical documents and publications were referred to during the course of this project. Some of the references consulted are presented below. Referenced documents and publications may or may not have been reviewed in their entirety. The guidelines and procedures presented in the referenced documents and publications have not been strictly adhered to unless otherwise stated.

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Personal Communications

Personal communication between Joe Jones, New York State Dept. of Environmental Conservation and W. Lance Turley of Hull & Associates, Inc., August 1998.