file 3/02

McKesson Envirosystems (ID No. 7-34-020) Remedial History

1980: ICC filed a Part A Permit Application for interim status as a hazardous waste storage facility under the Resource Conservation Recovery Act (RCRA).

1987: Revised part A application for closure submitted to NYSDEC. Remediation Consent Order signed 6/10/87.

1988: McKesson Corporation submitted a RCRA closure plan entitled "Verification of Aboveground Storage Tank Decontamination Protocol" to NYSDEC.

1989: RCRA Closure certification is submitted to NYSDEC. Aboveground tanks removed from the site.

1990: Notification from NYSDEC that facility was officially closed and that corrective actions would proceed under the Remediation Consent Order which was amended to include both McKesson Corporation and Safety-Kleen Environsystems Company as Respondents.

The Final Remedial Investigation Report was issued in April 1990. The RI revealed significant soil and groundwater contamination.

1992: A residential Risk Assessment and FS Screening of Alternatives were completed.

1993: A Soil Bioremediation Pilot study was conducted at the site using both in-situ and ex-situ techniques. A Feasibility Study and results of the Pilot Study were completed for OU-1, the Unsaturated Soils.

March 1994: A Record of Decision for Operable Unit No. 1 (OU-1), the Unsaturated Soils, was issued by the NYSDEC. The selected remedy was In-Situ Aerobic Bioremediation.

May 1994: An RD/RA Work Plan was developed and approved and remedial work was initiated for OU-1.

September 1995: The NYSDEC approved the RD/RA Report and declared the remedy for OU-1 complete. An estimated 20,000 cubic yards of contaminated soil were treated.

September 1996: The PRP completed a "Supplemental Saturated Soil and Groundwater Investigation" in anticipation of the FS for OU-2.

December 1996: The NYSDEC approved the FS for OU-2.

March 1997: A Record of Decision for Operable Unit No. 2 (OU-2), the Saturated Soils and Groundwater, was issued by the NYSDEC. The selected remedy was In-Situ Anaerobic Bioremediation.

1997-1998: The remedial program for OU-2, in-situ anaerobic bioremediation of saturated soils and groundwater, was constructed. The system began operating in July 1998.

Background

The McKesson Site is located in the Oil City area of Syracuse. The site is situated along the west bank of the Barge Canal Terminal Channel. There are no drinking water wells in the site vicinity. Soil and groundwater at the site were contaminated by the site's past use as a storage facility for petroleum products and chemical waste streams. Shallow/unsaturated soils at the site (OU-1) were successfully treated via in-situ aerobic bioremediation in 1995 (20,000 cy). To address the deeper saturated soil/groundwater contamination (OU-2), in-situ anaerobic bioremediation was selected. This remedy was constructed/implemented in 1998. A deeper hydrogeologic unit exists and was assessed as an element of the RI. Groundwater in the deeper unit was affected to a much lesser extent. It is monitored under the O&M program, but not subject to treatment. The OU-2 remedy targets the onsite hot spots in the upper hydrogeologic unit, which are subject to continuous biological treatment. The remedies, as well as all O&M activities have been funded by the PRPs.

The elements of the (OU-2) selected remedy were:

1. A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Any uncertainties identified during the RI/FS will be resolved.

2. Installation of an infiltration trench and a withdrawal trench upgradient and downgradient, respectively, of Areas 1, 2 and 3 (ref. Figure 3). These trenches will be installed within the sand unit, but will not penetrate the underlying silt and clay lacustrine deposit. The infiltration trench will be installed in the sand layer to facilitate distribution of the amended groundwater to enhance the naturally occurring anaerobic biodegradation of COCs.

3. Groundwater from the withdrawal trenches will be amended, as necessary, with macro-nutrients (e.g., phosphorous, nitrogen) and Revised Anaerobic Mineral Media (RAMM) micro-nutrients (i.e., sulfate, iron(III)) prior to discharge to the upgradient trench for infiltration back into the shallow hydrogeologic unit.

4. Installation of shallow well points in the silt and clay layer of the impacted areas for the purpose of distributing small quantities of amended groundwater and to provide locations to monitor the effectiveness of the groundwater withdrawal/infiltration system.

5. Since the remedy results in untreated hazardous waste remaining at the site, a process control monitoring program will be instituted which will allow the effectiveness of the selected remedy to be monitored and will be a component of the operation and maintenance for the site. Upon attainment of the remedial action objective for groundwater quality and discontinuation of system operations, estimated to be about five years subsequent to system initiation, a post-remedial monitoring program will be established.

6. Upon completion of the remediation, as demonstrated by the monitoring programs, the site will be considered for delisting from the New York State Registry of Inactive Hazardous Waste Disposal Sites. Once the remedy is in place, the site will be reclassified as a class 4, indicating that the remedial action is in place and only operation and maintenance will be required.

File on eDOCs X Yes _____ No

Site Name McKesson

Site No. 734020

County Onondaga

Town Syracuse

Foilable X Yes _____ No

File Name 2002-03-01a Remedial History

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