



John P. Cahill
Commissioner

1-SSF or PER
2- how long of the
ROD is site
assigned a
PM
3- to Larry?

ROD RECLASS INFORMATION

MEMORANDUM

TO: • **T. Reamon** Investigation Section
• **C. Branagh** Regional Hazardous Waste Remediation Engineer
• G. Rider, O&M Section (As Needed)
• A. Grant, DEE
• A. Carlson, DOH, Bureau of Environmental Exposure Investigation

FROM: Robert Marino, Site Control Section, Division of Environmental Remediation

SUBJECT: Review of Classification Package for Site # **734020**

DATE: **April 20, 2000** **McKesson EnviroSystems**
2 → 4

The attached "Registry Site Investigation Information Form" is included for your information.

If unacceptable, please return with an explanation of your position in a separate memo or letter as soon as possible.

Please keep the supporting documentation for your records.

NOTE: This site is being reclassified by ^{two} Record of Decision (ROD). The ROD ^{were} signed on
_____, 199__.

Attachment(s)

→ **March 18, 1994**
March 19, 1997



SITE INVESTIGATION INFORMATION

1. SITE NAME McKesson Envirosystems		2. SITE NUMBER 734020	3. TOWN/CITY/VILLAGE City of Syracuse	4. COUNTY Onondaga																																						
5. REGION 7	6. CLASSIFICATION CURRENT 2 PROPOSED 4 MODIFY																																									
7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location) a. Quadrangle Syracuse West b. Site Latitude <u>43° 06' 09"</u> Site Longitude <u>77° 42' 28"</u> c. Tax Map Numbers 115.-03-07.0 / 116.-01-09.0 d. Site Street Address 800 / 801 Van Rensselaer Street																																										
8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations) The site is located in the City of Syracuse to the south of Onondaga Lake, adjacent to the west bank of the New York State Barge Canal Terminal channel. The site was formerly used for bulk storage of petroleum products and in later years, as storage for a variety of chemical waste streams. The site is divided into two parcels by Van Rensselaer Street. The parcel north of Van Rensselaer Street is within 150 feet of the Barge Canal. The largest of the former aboveground storage tanks (Tank 7) was located on this portion of the site. The majority of previous material storage and handling took place in the area south of Van Rensselaer Street, where ten former aboveground storage tanks were located. The site is within one-quarter mile of Onondaga Lake, which is a major surface water body in the greater Syracuse area. Land use in the surrounding area is characterized as industrial/light industrial. The site has been divided into two Operable Units. Operable Unit No. 1 (OU-1) refers to the unsaturated soils and OU-2 refers to the saturated soils and groundwater. Remedial programs were initiated in the Spring of 1994 and Summer of 1997 for OU-1 and OU-2, respectively. a. Area <u>8.62</u> acres b. EPA ID Number <u>NYD075806836</u> c. Completed ()Phase I ()Phase II ()PSA (X)RI/FS ()PA/SI (X)Other - RCRA Tank Closure																																										
9. Hazardous Waste Disposed (Include EPA Hazardous Waste Numbers) The primary contaminants detected at this site are those associated with past storage activities. These include various volatile and semi-volatile compounds. The investigations have identified that the contaminants of concern at this site are: methylene chloride, trichloroethene, benzene, toluene, ethyl benzene, xylene, N,N-dimethylaniline, aniline, methanol and acetone. These contaminants were detected in both soil and groundwater.																																										
10. ANALYTICAL DATA AVAILABLE a. ()Air (x)Groundwater (x)Surface Water ()Sediment (x)Soil ()Waste ()Leachate (X)EPTox ()TCLP Confirmatory analysis of soil samples collected during the OU-1 remedial program demonstrated that the unsaturated soils achieved the ROD-specified cleanup objectives. The contaminants listed below were detected during the 1999 groundwater monitoring program. This contamination is being addressed by the ongoing OU-2 remedy. b. Contravention of Standards or Guidance Values: Exceedence of Class GA Groundwater Standards <table border="1"><thead><tr><th>MEDIA</th><th>CLASS</th><th>CONTAMINANT</th><th>SCG (ppb)</th><th>CONCENTRATION RANGE (1999)</th></tr></thead><tbody><tr><td rowspan="10">Groundwater</td><td rowspan="10">VOCs</td><td>Benzene</td><td>1</td><td>ND-37</td></tr><tr><td>Toluene</td><td>5</td><td>ND-240(J)</td></tr><tr><td>Ethylbenzene</td><td>5</td><td>ND-58(J)</td></tr><tr><td>Xylene</td><td>5</td><td>ND-220(J)</td></tr><tr><td>Trichloroethylene</td><td>5</td><td>ND-11,000(J)</td></tr><tr><td>Methylene Chloride</td><td>5</td><td>ND-450,000(D)</td></tr><tr><td>Methanol</td><td>NA</td><td>ND-17,000</td></tr><tr><td>Acetone</td><td>50</td><td>ND-630</td></tr><tr><td rowspan="2">SVOCs</td><td>Aniline</td><td>5</td><td>ND-100,000(D)</td></tr><tr><td>N,N-dimethylaniline</td><td>5</td><td>ND-77,000</td></tr></tbody></table>					MEDIA	CLASS	CONTAMINANT	SCG (ppb)	CONCENTRATION RANGE (1999)	Groundwater	VOCs	Benzene	1	ND-37	Toluene	5	ND-240(J)	Ethylbenzene	5	ND-58(J)	Xylene	5	ND-220(J)	Trichloroethylene	5	ND-11,000(J)	Methylene Chloride	5	ND-450,000(D)	Methanol	NA	ND-17,000	Acetone	50	ND-630	SVOCs	Aniline	5	ND-100,000(D)	N,N-dimethylaniline	5	ND-77,000
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11. CONCLUSION <i>The site's two Operable Units have been subject to remedial programs. The OU-1 remedial program, in-situ aerobic bioremediation of unsaturated soils, was successfully completed in 1995 treating an estimated 20,000 cubic yards of contaminated soil. The remedial program for OU-2, in-situ anaerobic bioremediation of saturated soils and groundwater, was constructed in 1997-1998. The system has been operating since July of 1998. Data supports that conditions within the shallow hydrogeologic unit are conducive to microbial degradation of the COCs. To date, the concentrations of COCs in groundwater have shown limited improvement. Data supports the continued operation, maintenance and monitoring of the system. Final Remedial Reports for OU-1 and OU-2 have been submitted and approved (excerpts attached). A Site O&M Plan (OU-1 and OU-2) was approved in February 2000 and O&M is underway.</i>																																										
12. SITE IMPACT DATA a. Nearest Surface Water: Distance <u>150</u> ft. Direction <u>Northeast</u> Classification <u>D</u> b. Nearest Groundwater: Depth <u>7</u> ft. Flow Direction <u>Northeast</u> ()Sole Source ()Primary ()Principal c. Nearest Water Supply: Distance <u>5</u> mi. Direction <u>Southeast</u> Active (X)Yes ()No d. Nearest Building: Distance <u>0</u> ft. Direction <u>Onsite</u> Use <u>O&M</u> e. In State Economic Development Zone? ()Y (x)N I. Controlled Site Access? (X)Y ()N f. Crops or livestock on site? ()Y (x)N j. Exposed hazardous waste? ()Y (X)N g. Documented fish or wildlife mortality? ()Y (x)N k. HRS Score <u>NA</u> h. Impact on special status fish or wildlife resource? ()Y (x)N l. For Class 2: Priority <u>NA</u>																																										
13. SITE OWNER'S NAME McKesson Corporation		14. ADDRESS One Post Street, San Francisco, CA 94104		15. TELEPHONE NUMBER 415-983-8450																																						
16. PREPARER <u>Michael J. Ryan</u> <u>2/18/00</u> Signature Date Michael J. Ryan, EE2, DER / BWRA Name, Title, Organization		APPROVED <u>information only</u> do NOT sign Signature Date Name, Title, Organization																																								



Division of Environmental Remediation

Record of Decision
McKesson Envirosystems Site
Syracuse (C), Onondaga County
Site Number 7-34-020
Operable Unit No. 2

March 1997

DECLARATION STATEMENT - RECORD OF DECISION

McKesson EnviroSystems Inactive Hazardous Waste Site Operable Unit No. 2 - Saturated Soils and Groundwater Syracuse (C), Onondaga County, New York Site No. 7-34-020

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the McKesson EnviroSystems inactive hazardous waste disposal site, Operable Unit No. 2, which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the McKesson EnviroSystems Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site, if not addressed by implementing the response action selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the McKesson EnviroSystems Site and the criteria identified for evaluation of alternatives, the NYSDEC has selected In-Situ Anaerobic Bioremediation.

The remedy involves installation of an infiltration trench and a withdrawal trench upgradient and downgradient, respectively, of the portions of the site identified as Areas 1, 2 and 3 on Figure 3 (see page 12). Groundwater from the withdrawal trenches will be amended, as necessary, with nutrients prior to discharge to the upgradient infiltration trench. The infiltration trench will facilitate distribution of the amended groundwater to enhance the naturally occurring anaerobic biodegradation of the contaminants of concern (COCs). Shallow well points will also be installed

within each of the impacted areas for the purpose of distributing small quantities of amended groundwater, thus augmenting the system. As a component of the site operation and maintenance (O&M) program, a process control monitoring program will be instituted which will allow the effectiveness of the selected remedy to be monitored. Upon discontinuation of system operations, estimated to be about five years subsequent to system initiation, a post-remedial monitoring program will be established.

New York State Department of Health Acceptance


The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

Date

3/19/97


Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

RECORD OF DECISION

McKesson Envirosystems
Operable Unit No. 2 - Saturated Soils and Groundwater
Syracuse (C), Onondaga County, New York
Site No. 7-34-020
March 1997

SECTION 1: SITE LOCATION AND DESCRIPTION

The McKesson Envirosystems Site is located in the City of Syracuse to the south of Onondaga Lake, adjacent to the west bank of the New York State Barge Canal Terminal channel. The site was formerly used for bulk storage of petroleum products and in later years, as storage for a variety of chemical waste streams. The site is approximately 8.8 acres in size and is separated by Van Rensselaer Street into two parcels (Figure 1). The parcel north of Van Rensselaer Street is within 150 feet of the Barge Canal. The largest of the former aboveground storage tanks (Tank 7) was located on this portion of the site. The majority of previous material storage and handling took place in the area south of Van Rensselaer Street, where ten former aboveground storage tanks were located.

The site is within one-quarter mile of Onondaga Lake, which is a major surface water body in the greater Syracuse area. Land use in the surrounding area is characterized as industrial/light industrial, being on the edge of the "Oil City" area of Syracuse, although there are current plans for significant non-industrial development in this area. Like the surrounding land, the McKesson property is zoned for industrial use.

The site is generally flat with a grass cover. It is fenced and access is restricted to authorized persons only.

Investigations have revealed that past site operations resulted in significant soil and groundwater contamination. Operable Unit No. 2, which is the subject of this PRAP, consists of the saturated soils (soils located below the groundwater table) and the groundwater beneath areas of the site. An Operable Unit represents a portion of the site remedy which for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. Another operable unit, Operable Unit No. 1 (OU-1) - the Unsaturated Soils, was the subject of a 1994 Record of Decision. The remedial work for OU-1 was completed in 1995 (ref. Section 2.2).

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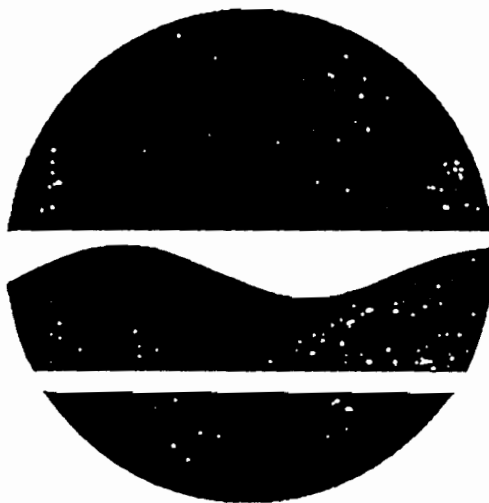
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McKESSON ENVIROSYSTEMS Inactive Hazardous Waste Site Operable Unit No. 1

**Syracuse (C), Onondaga County, New York
Site No. 07-34-020**

RECORD OF DECISION

March 1994



Prepared by:

**New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation**

DECLARATION STATEMENT - RECORD OF DECISION

**McKesson EnviroSystems Inactive Hazardous Waste Site
Operable Unit No. 1 - Unsaturated Soils
Syracuse, Onondaga County, New York
Site No. 7-34-020**

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the McKesson EnviroSystems Inactive Hazardous Waste Disposal Site, Operable Unit No. 1, which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the McKesson EnviroSystems Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site, if not addressed by implementing the response action selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the McKesson EnviroSystems site and the criteria identified for evaluation of alternatives, the NYSDEC has selected Biological Treatment Using In-Situ Soil Blending as the remedy for Operable Unit No. 1, the Unsaturated Soils. The components of the remedy are as follows:

- o 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. Uncertainties identified during the RI/FS would be resolved.
- o In-situ bioremediation of all areas of the site where the contaminants of concern are greater than 5 ppm.

- o Attainment of technology-based cleanup levels and performance of bioremediation for a minimum 60 days as measured by a performance standard to be developed during the design phase of remediation and accepted by the Department. Should technology-based levels not be achieved in 60 days bioremediation would continue to a minimum 90 days duration and continue thereafter until the cleanup levels are achieved.
- o Final contouring with a minimum of 12 inches of clean soil, grading and seeding of the site to promote surface water runoff and limit the infiltration of rain and surface water into the remediated areas.
- o Installation of additional monitoring well(s) to supplement the existing site perimeter groundwater monitoring network.
- o Conducting a program of groundwater sampling and analysis to verify that contamination has not migrated off the site.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this Operable Unit as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 18, 1994
Date

Ann Hill DeBarbieri
Ann Hill DeBarbieri
Deputy Commissioner

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SECTION 1: SITE LOCATION AND DESCRIPTION

The McKesson EnviroSystems (Inland Site) is located in the city of Syracuse to the south of Onondaga Lake. The site is approximately 8.2 acres in size and is separated by Van Rensselaer Street into two parcels (Figure 1). The parcel north of Van Rensselaer Street is within 150 feet of the New York State Barge Canal Terminal channel, most of which is well-vegetated with grasses, shrubs, and some trees. The largest of the former aboveground storage tanks (Tank 7) was located on this portion of the site.

The bulk of previous material storage and handling took place in the area south of Van Rensselaer Street, where ten former aboveground storage tanks were located. A paved parking area and buildings account for approximately ten percent of this southern parcel. The remainder supports vegetation consisting of weeds, grasses and the primary vegetation on the south parcel, wetland-associated species. The wetland plants are confined to areas near the locations of the former aboveground storage areas. Berms surround the site as well as the former tank areas, resulting in standing water which is present within the berms for significant periods of time. However, no NYSDEC-designated wetlands are located on site. These berms preclude surface water runoff to the Barge Canal, as evidenced by the standing water within the berms. The site is also within one-quarter mile of Onondaga Lake, which is a major surface water body in the greater Syracuse area.

Land use in the surrounding area may be characterized as industrial/light industrial, being on the edge of the "Oil City" area of Syracuse, although there are current plans for significant non-industrial development in this area. The McKesson property also has an industrial zoning classification. The former storage areas of the site are secured against trespass with chain link fence and barbed wire. A soil berm is also present along most of the site perimeter, and berms surround the former tank areas.

Operable Unit No. 1, which is the subject of this Record of Decision (ROD), consists of the unsaturated soils at the site.

An Operable Unit represents a discrete portion of the remedy for a site which for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the contamination present at a site. The remaining operable unit for this site will address the saturated soils and the groundwater, which will be the second operable unit at this site. Any remediation necessary to address this remaining contamination will be the subject of a future ROD.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

1920's: Occupied by various salt companies.

1928-1969: Petroleum Storage Facility (ARCO), Tanks 1-6 (South Parcel)

- 1951: Tank 7 installed (North Parcel)
- 1969- 1973: Petroleum Storage Facility BP Oil Company (BP)
- 1973: Inland Chemical Corporation (ICC) purchases site from BP Oil Company for storage of waste streams including: methanol, methylene chloride and other solvents destined for recycling at other ICC facilities..
- 1982: ICC operations discontinued.

2.2: 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 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 EnviroSystems Company as Respondents.
- The Final Remedial Investigation Report was issued in April 1990. A PAH Distribution Report was issued at the same time.
- 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.

SECTION 3: CURRENT STATUS

In response to a determination that the presence of hazardous waste at the Site presents a significant threat to human health and/or the environment, the McKesson Corporation has recently completed a Remedial Investigation/Feasibility Study (RI/FS).

3.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site.

The RI was conducted in 1988 and 1989. A report entitled *Final Remedial Investigation Report, April 1990*, has been prepared describing the field activities and findings of the RI in detail. A summary of the RI follows:

The RI activities consisted of the following:

- Installation of 136 soil borings
- 13 piezometer clusters
- 22 monitoring wells and related groundwater sampling
- 159 soil samples

The analytical data obtained from the RI was compared to environmental Standards, Criteria, and Guidance (SCGs). Groundwater, drinking water and surface water SCGs identified for the McKesson Corporation site were based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of NYS Sanitary Code. Soil and sediment analytical results were evaluated against NYSDEC soil cleanup guidelines for the protection of groundwater, background conditions, and risk-based remediation criteria were evaluated in order to develop remediation goals for soil.

Soil cleanup values were obtained by evaluating the technology based limits of bioremediation and evaluating these limits during an on-site treatability study. The site specific conditions were taken into account during this evaluation, in particular the nature of the groundwater.

Based upon the results of the remedial investigation in comparison to the SCGs and potential public health and environmental exposure routes, certain areas and media of the site require remediation. These findings are summarized below. More complete information can be found in the RI Report.

Chemical concentrations are reported in parts per billion (ppb) and parts per million (ppm). For comparison purposes, where applicable, SCGs are given for each medium.

Soils

The unsaturated soils to be addressed by this operable unit at this site are those approximately four feet in depth which lie above the groundwater elevation, which corresponds to an elevation of 365 feet. Unsaturated soils above 365 feet will be addressed by the remedy, unless field conditions support that a greater depth (i.e. lower elevation) would be appropriate. These soils have been contaminated with materials previously stored in tanks at the site. The following 14 chemicals have been observed at the site during the RI: benzene, toluene, ethylbenzene, xylenes, tetrachloroethene, trichloroethene, trans-1,2-dichloroethene, methylene chloride, vinyl chloride, aniline, N,N-dimethylaniline, acetone, methanol, and chlorobenzene and represent the Chemicals of Concern (COCs). For evaluation purposes, the Chemicals of Concern were grouped into four classes based on similar chemical characteristics and are identified