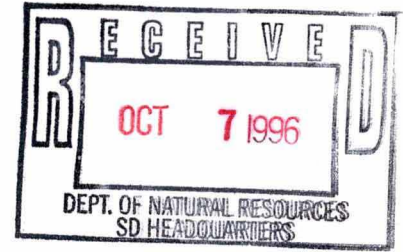


Preliminary Close Out Report  
RIPON FF/NN LANDFILL  
RIPON, WISCONSIN



I. Introduction

This Preliminary Close Out Report documents that the United States Environmental Protection Agency (U.S. EPA) completed all construction activities for Ripon FF/NN Landfill site in accordance with Procedures for Completion and Deletion of National Priorities List (NPL) Sites and Update (OSWER Directive 9320.2-3C). U.S. EPA conducted a final inspection on September 10, 1996, and determined that the Potentially Responsible Parties (PRPs) constructed the remedy in accordance with the Remedial Design (RD) plans and specifications. The PRPs have initiated activities necessary to achieve performance standards and site completion.

II. Summary of Site Conditions

Background

The Ripon FF/NN landfill was listed on the National Priorities List (NPL) by the U.S. EPA in May 1994. The landfill is located in western Fond du Lac County, about two miles northwest of the city of Ripon, WI. More specifically, the site is located at the intersection of Highways FF and NN in the SE 1/4 of the SE 1/4 of Section 7, T16N, R14E. The landfill is 7.3 acres in size and has a volume of approximately 180,000 cubic yards of waste.

Landfilling occurred between 1967 and 1983. Various entities operated the site over the years, although the city of Ripon and the town of Ripon were responsible for operations during much of the life of the landfill. The property is owned by Mrs. Arline Sauer. The landfill accepted commercial, industrial and residential waste, including approximately 3 million gallons of municipal wastewater treatment plant sludge.

Between 1985 and 1992 the site was used to grow hay. Since 1992 the land has been planted in a grass cover. Agricultural crops are still grown on a property just east of the site. The site is fenced, but vehicle access is possible at two locations from County Highway NN into the landfill. Across Highway NN to the west of the site is a sand & gravel quarry.

In 1967, Speed Queen Corporation leased the property for disposal of industrial wastes from its facility in Ripon. In 1968, the City of Ripon leased the property. In 1978, the city and the town of Ripon were signatories to the lease. A license to operate the landfill was issued by Wisconsin Department Natural Resources (WDNR) to the city of Ripon in 1969. The site accepted wastes between 1967 and 1983. The site was capped in 1985 with a clay cap. Vegetation was established to minimize erosion.

A gas venting system (trench with gooseneck vents) was placed in a north-south orientation along the western edge of the landfill.

A private residence is located approximately 350 feet south of the landfill. The water supply well to this home was monitored for VOCs in 1984, and a couple of VOCs were detected, including vinyl chloride. Subsequent sampling of the well by WDNR confirmed the presence of vinyl chloride. A replacement well was drilled for this household. Sampling of the replacement well also confirmed the presence of vinyl chloride. This well was abandoned in 1990. No water supply well exists on the property and nobody is currently living in the home.

In the early 1980's the WDNR began evaluating municipal landfills for possible inclusion on the federal NPL. A hazard assessment was completed by WDNR utilizing the U.S. EPA Hazard Ranking System. The site scored 51.9 and was recommended by WDNR to U.S. EPA for inclusion on the NPL. The site was listed on the NPL on May 31, 1994.

In response to the WDNR recommending the site to U.S. EPA for inclusion on the NPL, several PRPs formed a group to investigate the degree and extent of the environmental problems related to the site. This group of PRPs entered into a contract with WDNR on August 14, 1992, to complete the following.

1. Conduct a remedial investigation (RI) which will adequately characterize the site;
2. Perform a feasibility study (FS) to identify and evaluate potential remedial options for the site;
3. Prepare plans and specifications for a landfill cap, and landfill gas extraction system, as determined necessary by WDNR. These plans and specifications are considered a source control operable unit; and
4. Implement the source control operable unit.

A RI was conducted by the PRPs beginning in 1993 and was completed on August 26, 1994. A FS was then completed on December 30, 1994. Contaminants found in groundwater at the site included ten VOCs of which vinyl chloride, cis 1-2 dichloroethene, benzene, trichloroethene and tetrachloroethene exceeded the WDNR ch. NR140 Preventive Action Limits (PALs).

#### Remedial Construction Activities

A Record of Decision (ROD) was signed by WNDNR on February 26, 1996, and a letter of concurrence by U.S. EPA was signed on March 27, 1996.



The RA specified in the ROD is:

1. Construction of a composite landfill cover (i.e. a landfill cap made with both a plastic membrane and soil materials) over the entire landfill;
2. Installation of a passive landfill gas venting system as part of the composite cap to effectively vent landfill gas from the waste;
3. Monitoring of the groundwater quality to determine the effectiveness of the landfill cap towards improving groundwater quality;
4. Monitoring the landfill gas probes around the landfill to make sure that landfill gas is not migrating away from the site in an uncontrolled manner;
5. Maintenance of the landfill cap to repair erosion that may develop;
6. A deed restriction prohibiting disturbing the landfill cap except for maintenance purposes; and
7. Fencing of the landfill perimeter to restrict access.

The remedy is designed to reduce the amount of contamination entering the groundwater and achieve compliance with standards found in Wisconsin Administrative Code, Chapter NR 140. Volatile organics, vinyl chloride and cis 1,2 dichloroethene were found in monitoring wells at levels of 440 ppb and 1100 ppb well above NR 140 Preventive Action Limits of 6 ppb and 10 ppb, respectively.

The PRPs agreed to perform the RD/RA under WDNR enforcement authority. The RD was conducted in conformance with the approved ROD. The RA was initiated in May 1996. The contractor conducted remedial activities as planned and no additional areas of contamination were identified. U.S. EPA conducted a final inspection on September 10, 1996. U.S. EPA determined that the following RA activities were completed according to the ROD design specifications:

1. A composite landfill cap was constructed over the entire landfill;
2. A passive landfill gas venting system was installed at the site;
3. A fence was installed at the landfill;
4. Deed restrictions will be implemented within 2 months prohibiting disturbing the landfill cap; and

5. As part of Operations & Maintenance (O&M) at the site the cap will be maintained and the landfill gas and groundwater will be monitored.

III. Demonstration of Cleanup Activity-Quality Assurance and Quality Control

Activities at the site were consistent with the ROD, and consistent with all work plans issued to contractors for design and construction of the RA, including sampling and analysis. The RD Report, including a Quality Assurance Project Plan, incorporated all U.S. EPA and State quality assurance and quality control (QA/QC) procedures and protocol. U.S. EPA analytical methods were used for all validation and monitoring samples during RA activities. Sampling of soil, sediments and water followed the U.S. EPA protocol found in Test Methods for Evaluation Solid Wastes, Physical/Chemical Methods.

The QA/QC program used throughout the RA was rigorous in conformance with the U.S. EPA and State standards; therefore, U.S. EPA determined that all analytical results are accurate to the degree needed to assure satisfactory execution of the RA and are consistent with the ROD and the RD plans and specifications.

IV. Activities and Schedule for Site Completion

The following activity will be completed according to the following schedule:

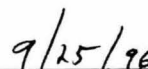
Tasks	Estimated Completion	Responsible Organization
Implement O&M Plan	30 Years	Contractor/State

Five Year Review

Hazardous substances may remain at the site above health-based levels after the completion of the remedial action. This will prohibit unlimited use of and unrestricted exposure to the site. Pursuant to CERCLA section 121 (c) and as provided in OSWER Directive 9355.7-02, Structure and Components of Five-Year Reviews, May 23, 1991, and OSWER Directive 9355.702A, Supplemental Five Year Review Guidance, July 26, 1994, U.S. EPA must conduct a statutory five-year review. The Five-Year Review will be initiated prior to June 2001 and will completed prior to August 2001 (five years after the RA construction start).



William E. Muno, Director  
Superfund Division



Date