



ENVIRONMENTAL
CONSERVATION
Proposed Remedial Action Plan

**Public Meeting
Invitation**



March 8, 2001

To be held at 7:00 p.m.



In Poland Central
High School
74 Cold Brook Street
Poland, New York
(315) 826-7900



The NYS Departments of Environmental Conservation and Health (NYSDEC and NYSDOH) will discuss the Proposed Remedial Action Plan (PRAP) for the Rose Valley Landfill Site. At the meeting, representatives from NYSDEC and NYSDOH will:

- describe results of detailed site investigations;
- explain the Proposed Remedial Action Plan (PRAP) and other alternatives considered;
- answer your questions about the proposed plan;
- receive your spoken or written comments about the proposal.

Public Comment Period

From: February 17, 2001
To: March 20, 2001

FACT SHEET

Rose Valley Landfill Site: 6-22-017

On Rose Valley Road, the Town of Russia

February 15, 2000

NYSDEC Region 6, Herkimer County

Remedial Action Proposed for the Rose Valley Landfill Site * * * Announcement of Public Meeting and Comment Period

New York State Department of Environmental Conservation (NYSDEC), working cooperatively with the New York State Department of Health (NYSDOH), has proposed action to address hazardous contamination at the Rose Valley Landfill Class 2 Inactive Hazardous Waste Site in the Town of Russia, in rural Herkimer County.

The Proposed Action: The proposal is described in the site's "Proposed Remedial Action Plan" (PRAP). The PRAP is based on the findings of:

- a detailed field investigation of contamination at the Rose Valley Landfill;
- an engineering study examining the possible remedial solutions for this site; and
- extensive experience gained from other landfill cleanups.

The PRAP examines different ways to remediate the site, and presents the alternative preferred by NYSDEC and NYSDOH. The preferred alternative is compliant with the Standards, Criteria and Guidance (SCGs) and protective of human health and the environment, while also being cost-effective.

Highlights of the Proposed Remedial Action Plan include:

- A remedial design program to detail the construction, operation and maintenance of the landfill cleanup and closure. During this design, any uncertainties would be investigated, for example, additional areas on the property where illegal dumping of liquid wastes may have occurred.
- Installation of a clean, alternative drinking water well to replace the impacted private well on Rose Valley Road. Also, protection of other private wells by long-term monitoring of the source of the impacted well's low level contamination.
- Treatment of the leachate (which is the contaminated groundwater seeping from the landfill) by natural attenuation in the wetlands. Also, plant and invertebrate sampling to confirm that impacts to wetland wildlife are not significant.
- Installation of a two (2) foot thick, final soil cover over the eight (8) acres of major fill and a six foot high, chain link fence enclosure.
- Excavation and disposal of contaminated surface soils from the older septic disposal pit into the on-site landfill.

More detail on the full PRAP and other information about the site are available for your review at the four document repositories listed below.

Your Opportunities to Comment on the Proposed Remedy: Release of the PRAP begins a process to finalize selection of the cleanup remedy for the Rose Valley Landfill. *Your comments and input about the proposed remedy are important and encouraged. Your understanding and involvement can help ensure a cleanup program that effectively protects public health and the environment. Your spoken or written comments about the PRAP are welcome at the public meeting and also during the entire public comment period which runs from February 17 until March 20, 2001.* Written comments should be addressed to:

Ms. Kathryn Eastman, DEC Project Manager
NYSDEC Division of Environmental Remediation
50 Wolf Road, Albany, New York 12233-7010

What Happens Next: All comments received during the public comment period will be considered as the remedy for the Rose Valley Landfill Site is finalized. Public input will be factored into a Record of Decision (ROD) which will describe the remedy selected and why it was chosen. A Responsiveness Summary will be prepared and distributed to all interested parties in order to provide response to the public comments that are received. After the ROD has been signed by the Commissioner of NYSDEC, then work will continue on the design of the selected remedy.

Document Repositories: The complete PRAP and other site information are available for public review at the following offices:

NYSDEC Central Office
Division of Environmental Remediation
50 Wolf Road; Room 228
Albany, New York 12233-7010
Call: Project Manager, Kathryn Eastman
at (518) 457-5677

Poland Town Library
Main Street; P.O. Box 140
Poland, New York 13431
(315) 826-3112
Hours: Tues /Thurs 1-5pm; 7-8:30pm
Friday 1-5 and Saturday 10:30-2

Oneida-Herkimer Solid Waste Authority
1600 Genesee Street
Utica, New York 13502
(315) 733-1224
Hours: Monday-Friday 8am-5pm

NYS Dept of Health District Office
5665 State Route 5
Herkimer, New York 13350
Call Greg Rys, Public Health
Specialist at (315) 866-6879
Hours: Monday-Friday 8:30-4pm

SITE LOCATION AND DESCRIPTION

The Rose Valley Landfill is located in a sparsely populated area of the Town of Russia in Herkimer County. It is bounded by Rose Valley Road, Bromley Road and Military Road, and includes a segment of an unnamed tributary of Hurricane Creek. The two landfill parcels cover 91 acres and include a 60 foot sand embankment. The major landfill area on the property covers eight (8) acres, is located on the side of a hill, and is vegetated with brush and small trees. Rust-colored leachate flows out of this area into a wetland at the toe of the landfill slope. (See the following site feature map).

SITE HISTORY

The Rose Valley Landfill is an inactive, privately-owned, unlined dump on the side of a hill in a remote part of Herkimer County. It was open in 1963 and operated until 1984. It served as a municipal landfill for the Villages of Poland and Cold Brook, and also, starting in 1972, the Towns of Coxsackie, Newport, Herkimer, and Manheim. Residential, commercial, industrial and septic tank (scavenger) type wastes were accepted.

The last landfill owner/operator (Mr. Gerald Crouch) was frequently cited by State Inspectors for DEC permit violations. Leachate outbreaks were commonly noted and refuse was often left uncovered and uncompacted. The most notable violation was in 1979, when a State Inspector witnessed chlorinated solvents being brought to this landfill and burned. Improper disposal of solvents has resulted in groundwater contamination in excess of applicable class GA drinking water standards. This plume impacted a residential well adjacent to the landfill entrance. on Rose Valley Road which was sampled in 1991 and found to be contaminated with 1,1,1-trichloroethane and 1,1-dichloroethane.

In 1982, Mr. Crouch, entered into a consent order with NYSDEC. The consent order required a hydrogeologic study of the site and an engineering plan to upgrade the landfill to comply with NYSDEC landfill regulations. NYSDEC did not accept the engineering plan submitted by Mr. Crouch. In 1982, Mr. Crouch agreed to close the landfill, and in 1984, a landfill closure plan, in accordance with State regulations, was submitted to and accepted by NYSDEC. By order, the closure plan was to be completed in 1985, however the plan was never implemented. An inadequate, partial cover was constructed which eroded over time and was left in disrepair. Mr. Crouch abandoned the landfill, moved out of state, and in 1986, a portion of the landfill property was deeded over to Joyce Miller.

In 1988, a preliminary assessment of the landfill was performed for the U. S. Environmental Protection Agency (EPA). The site assessment referred to uncontrolled leachate seeps discharging to surface water bodies at the base of the landfill. The EPA's final site assessment, concluded in August, 1995, determined that the landfill did not present a great enough human or environmental risk to warrant a cleanup under the Federal Superfund Program.

The New York State Department of Health (NYSDOH) collected two well samples in 1981 and three samples from nearby residential wells and the Newport Village water supply in 1986. The NYSDOH has continued to monitor private drinking water wells in the neighborhood of the landfill (in 1986, 1989, 1991, 1992, 1993, 1994, 1996, 1999, and 2000). All of the analyzed drinking water samples were considered satisfactory with the exception, in 1991, of one drinking water well. The residential well immediately adjacent to the landfill entrance on Rose Valley Road was found to contain low levels of chlorinated hydrocarbons exceeding drinking water standards. Bottled water delivery was initiated for this residence; and in October, 1993, NYSDEC installed a granular activated carbon filter (GAC) to remove the contaminants from the impacted well water.

In 1989, NYSDOH also collected and analyzed four leachate/sediment samples from the base of the major fill area. The results indicated the presence of a variety of contaminants at relatively low levels which is indicative of mixed municipal/industrial refuse. In 1990 and 1991, a site contamination assessment of the landfill was completed for the NYSDEC Division of Solid Waste. As a result of the study's findings, on March 24, 1992, the Rose Valley Landfill was added to the New York State Registry of Inactive Hazardous Waste Sites as a Class 2 Site having significant (but not immediate) threat to human health and the environment.

DETAILED SITE INVESTIGATION

In 1998, the Rose Valley Landfill site was referred to the State Superfund Program for funding and action (see following section on enforcement status). Subsequently, a Remedial Investigation/ Feasibility Study was initiated. The remedial investigation involved extensive sampling and laboratory analyses of water, soil and air and also evaluations of possible exposures to hazardous waste by the public and the environment.

The Remedial Investigation for Rose Valley included the following activities:

- Survey to locate the physical extent of the primary fill area.
- Soil gas survey with 102 sampling points to identify areas of potential contamination.
- Collection and analysis of 29 groundwater sampling points at geoprobe locations.
- Installation of 14 piezometers and 14 new monitoring wells to estimate the speed and direction of groundwater flow.
- Two (2) rounds of sampling and analysis of the groundwater in the network of 19 monitoring wells to determine the extent and concentration of groundwater contamination on the landfill property.
- Surface water and sediment sampling at seventeen (17) locations to determine the effects of the landfill on the stream and the wetland.
- Qualitative human health risk evaluation.
- Fish and Wildlife Impact Analysis.

ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. For a landfill, this may include past or present owners and operators, waste generators, and haulers. The two Potential Responsible Parties (PRPs) for the Rose Valley Landfill Site identified to date include: Joyce Miller and the estate of Gerald Crouch. These PRPs did not respond to NYSDEC's written request to undertake a Remedial Investigation and Feasibility Study on the property. Therefore the site was freed for funding under the State Superfund Program.

After the remedy is finally selected, PRPs will again be contacted and asked to assume financial responsibility for the remedial program. If agreement is not reached with the PRPs, the NYSDEC will evaluate the site for further action under the State Superfund Program. Financially-capable PRPs may be subject to legal actions by the State for recovery of all response costs the State has incurred.

NATURE AND EXTENT OF CONTAMINATION AT THE ROSE VALLEY SITE

The main categories of contaminants of potential concern are volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and inorganic compounds (metals). The VOC contaminants are: dichloroethane (DCA), dichloroethene (DCE) and trichloroethane (TCA). The SVOC contaminants are; dichlorobenzene, chloroaniline, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene and phenol.

Volatile contaminants are found in two groundwater plumes on-site. The western area of contaminated groundwater is a low level plume containing TCA and DCA, in the shallow aquifer. This plume exists in a small area and impacts one private drinking water well. The eastern, wetland plume contains very low levels of DCE and DCA. The source of wetland contamination is the leachate seeping from the landfill into the wetland. This plume is also of limited extent; it does not migrate over the property boundary and impacts no private wells.

The SVOC contaminants are found in the three surface soil samples collected from the older septic disposal pit. Inorganic contaminants are found in the surface water and sediments in an area of the wetland at the base of the landfill. They are typical of a mixed use commercial, residential and industrial landfill.

The major fill area covers eight acres.

PREFERRED REMEDIAL ALTERNATIVE AT THE ROSE VALLEY LANDFILL SITE

This preferred remedy is based on the evaluation of remedial alternatives in the Feasibility Study developed for the site. Following are the major elements and rationale of the recommended cleanup program:

- In the western portion of the site, the impacted residential well would be replaced with a clean drinking water well. The physical extent of the plume would be monitored over a long period of time. The new well would permanently eliminate the risk of future exposures to contaminated drinking water at this residence. Long term monitoring of the plume is recommended over active treatment of the plume because treatment is not likely to reduce the present low levels of contamination within a reasonable time period, and the additional estimated \$584,000 in costs to install and operate does not justify the small additional reduction in risks.
- Contaminated groundwater in the wetland plume continue to be treated by natural attenuation. The mechanisms through which wetland sediments decontaminate groundwater have been well documented, and the present removal of contaminants demonstrates the effectiveness of this treatment process in this wetland. Wetland biota likely to be impacted by the low levels of volatile and inorganic compounds present would be sampled and analyzed to confirm the lack of significant impacts from contamination. The existence of satisfactory treatment of the wetland plume by natural attenuation would be monitored over a thirty year period. This alternative is preferred because it would provide long term, permanent and cost-effective treatment of the leachate and wetland plume without the short term disturbances that would be caused by the construction of an active leachate collection and treatment system in the wetland.
- The eight acres of fill would be pulled back from the edge of the wetland and capped with a two-foot thick soil cover which would reduce the volume of contaminated leachate generation. This type of cover is justified for an older landfill with low levels of contamination, and would comply with State regulations for closing landfills. The minor benefits of a more impermeable cap would not justify the additional 1.2 million dollars of construction and maintenance.
- Contaminated surface soils would be excavated and disposed of in the on-site landfill. This action would eliminate the risk of exposure to humans and wildlife and would comply with all environmental standards and guidance.

COST OF THE PROPOSED REMEDIAL ACTION PROGRAM

The total estimated present worth cost to implement the proposed remedy would be \$920,300. The cost to construct the remedy is estimated to be \$656,700 and the estimated average annual operation and maintenance cost for 30 years is \$16,500.

For More Information: Call or write the following staff for more information about:

Meeting/Comment Period/PRAP:

Kathryn Eastman, Project Manager
NYSDEC, Division of Hazardous Waste Remediation
50 Wolf Road, Albany, NY 12233-7010
(518) 457-1741 and (800) 342-9296

Health-Related Concerns:

Mr. Gregory Rys, Public Health Specialist 3
NYSDOH - District Office
5665 State Route 5
Herkimer, New York 13350
(315) 866-6879

Mark Van Deusen, Outreach Specialist
NYS Department of Health
547 River Street
Troy, New York 12180
(800) 458-1158 and (518) 402-7530

22-000000 0007 00 21 00-00011
FIG 1 (Scale: 1:24,000)



SOURCE: USGS Newport Quadrangle New York, 7.5 Minute Series 1982.
USGS Middleville Quadrangle New York, 7.5 Minute Series 1986.

SCALE 1:24,000
1/4
1 Mile
0 5 1
Kilometer

Figure 1

SITE LOCATION MAP
ROSE VALLEY LANDFILL SITE
HERKIMER COUNTY, NEW YORK

© 2001 Ecology and Environment, Inc.



Site Feature Locations

Rose Valley Landfill
 Town of Russia
 New York

- Site Property Boundary
- Roads
- Topographic Contour Lines
- Direction of Stream Flow
- Pooled Water Area
- Site Feature Border



Former Structures
 and Equipment
 Storage Areas

Neighboring
 Residences

Scrap Metal
 Areas

New
 Septage
 Pit

Old Septage
 Pit
 (Approximate Size
 and Location)

North Slopes
 Fill-Area

Upper
 Main
 Landfill
 Area

Lower
 Main
 Landfill
 Area

Approximate Area
 of Wetland #1

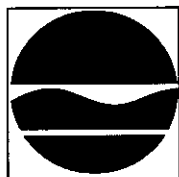
Approximate Area
 of Wetland #2

Trailer #2

Bromley Road

Rose Valley Park

NEW YORK STATE DEPARTMENT OF



ENVIRONMENTAL CONSERVATION Fact Sheet

Rose Valley Landfill Site: 6-22-017 On Rose Valley Road, the Town of Russia

February 15, 2000

File 4840 Rose Valley L.F. Herk. Co.

Public Comment Period

From: February 17, 2001 To: March 20, 2001

Public Meeting Invitation

Announcement

To be held at 7:00 p.m.

New York State Department of Environmental Conservation (NYSDEC), working cooperatively with the New York State Department of Health (NYSDOH), has proposed action to address hazardous contamination at the Rose Valley Landfill Site...

74 Cold Brook Street Poland, New York

The proposed action: The proposal is described in the site's "Proposed Remedial Action Plan" (PRAP). The PRAP is based on the findings of: (315) 826-7900

- a detailed field investigation of contamination at the Rose Valley Landfill; an engineering study examining the possible remedial solutions for this site; and extensive experience gained from other landfill cleanups.

The NYS Departments of Environmental Conservation and Health (NYSDEC and NYSDOH) will discuss the Proposed Remedial Action Plan (PRAP) for the Rose Valley Landfill Site. At the meeting, representatives from NYSDOH and NYSDOH will:

Highlights of the Proposed Remedial Action Plan include:

- describe results of detailed site investigation; a remedial design program to detail the construction, operation and maintenance of the landfill cleanup and closure. During this design, any uncertainties would be investigated, for example, additional areas on the property where illegal dumping of liquid wastes may have occurred.
explain the Proposed Remedial Action Plan (PRAP) and other alternatives considered; installation of a clean, alternative drinking water well to replace the impacted private well on Rose Valley Road. Also, protection of other private wells by long-term monitoring of the source of the impacted well's low level contamination.
answer your questions about the proposed plan; Treatment of the leachate (which is the contaminated groundwater seeping from the landfill) by natural attenuation in the wetlands. Also, plant and invertebrate sampling to confirm that impacts to wetland wildlife are not significant.
receive your spoken or written comments about the proposal.
Installation of a two (2) foot thick, final soil cover over the eight (8) acres of major fill and a six foot high, chain link fence enclosure.
Excavation and disposal of contaminated surface soils from the older septic disposal pit into the on-site landfill.

Remedial Action Proposed for the Rose Valley Landfill Site

* * *

Announcement of Public Meeting and Comment Period

More detail on the full PRAP and other information about the site are available for your review at the four document repositories listed below.

Your Opportunities to Comment on the Proposed Remedy: Release of the PRAP begins a process to finalize selection of the cleanup remedy for the Rose Valley Landfill . *Your comments and input about the proposed remedy are important and encouraged. Your understanding and involvement can help ensure a cleanup program that effectively protects public health and the environment. Your spoken or written comments about the PRAP are welcome at the public meeting and also during the entire public comment period which runs from February 17 until March 20, 2001.* Written comments should be addressed to:

Ms. Kathryn Eastman, DEC Project Manager
NYSDEC Division of Environmental Remediation
50 Wolf Road, Albany, New York 12233-7010

What Happens Next: All comments received during the public comment period will be considered as the remedy for the Rose Valley Landfill Site is finalized. Public input will be factored into a Record of Decision (ROD) which will describe the remedy selected and why it was chosen. A Responsiveness Summary will be prepared and distributed to all interested parties in order to provide response to the public comments that are received. After the ROD has been signed by the Commissioner of NYSDEC, then work will continue on the design of the selected remedy.

Document Repositories: The complete PRAP and other site information are available for public review at the following offices:

NYSDEC Central Office
Division of Environmental Remediation
50 Wolf Road; Room 228
Albany, New York 12233-7010

Poland Town Library
Main Street; P.O. Box 140
Poland, New York 13431
(315) 826-3112

Call 30pm
at (518) 457-5677

Friday 1-5 and Saturday 10:30-2

P
Oneida-Herkimer Solid Waste Authority
1600 Genesee Street
Utica, New York 13502
(315) 738-1224
Hours: Monday-Friday 8am-5pm

NYS Dept of Health District Office
5665 State Route 5
Herkimer, New York 13350
Call Greg Rys, Public Health
Specialist at (315) 866-6879
Hours: Monday-Friday 8:30-4pm

t
M
a
n

SITE LOCATION AND DESCRIPTION

The Rose Valley Landfill is located in a sparsely populated area of the Town of Russia in Herkimer County. It is bounded by Rose Valley Road, Bromley Road and Military Road, and includes a segment of an unnamed tributary of Hurricane Creek. The two landfill parcels cover 91 acres and include a 60 foot sand embankment. The major landfill area on the property covers eight (8) acres, is located on the side of a hill, and is vegetated with brush and small trees. Rust-colored leachate flows out of this area into a wetland at the toe of the landfill slope. (See the following site feature map).

a
t
h

SITE HISTORY

The Rose Valley Landfill is an inactive, privately-owned, unlined dump on the side of a hill in a remote part of Herkimer County. It was open in 1963 and operated until 1984. It served as a municipal landfill for the Villages of Poland and Cold Brook, and also, starting in 1972, the Towns of Coxsackie, Newport, Herkimer, and Manheim. Residential, commercial, industrial and septic tank (scavenger) type wastes were accepted.

a

The last landfill owner/operator (Mr. Gerald Crouch) was frequently cited by State Inspectors for DEC permit violations. Leachate outbreaks were commonly noted and refuse was often left uncovered and uncompacted. The most notable violation was in 1979, when a State Inspector witnessed chlorinated solvents being brought to this landfill and burned. Improper disposal of solvents has resulted in groundwater contamination in excess of applicable class GA drinking water standards. This plume impacted a residential well adjacent to the landfill entrance, on Rose Valley Road which was sampled in 1991 and found to be contaminated with 1,1,1-trichloroethane and 1,1-dichloroethane.

o

In 1982, Mr. Crouch, entered into a consent order with NYSDEC. The consent order required a hydrogeologic study of the site and an engineering plan to upgrade the landfill to comply with NYSDEC landfill regulations. NYSDEC did not accept the engineering plan submitted by Mr. Crouch. In 1982, Mr. Crouch agreed to close the landfill, and in 1984, a landfill closure plan, in accordance with State regulations, was submitted to and accepted by NYSDEC. By order, the closure plan was to be completed in 1985, however the plan was never implemented. An inadequate, partial cover was constructed which eroded over time and was left in disrepair. Mr. Crouch abandoned the landfill, moved out of state, and in 1986, a portion of the landfill property was deeded over to Joyce Miller.

s

In 1988, a preliminary assessment of the landfill was performed for the U. S. Environmental Protection Agency (EPA). The site assessment referred to uncontrolled leachate seeps discharging to surface water bodies at the base of the landfill. The EPA's final site assessment, concluded in August, 1995, determined that the landfill did not present a great enough human or environmental risk to warrant a cleanup under the Federal Superfund Program.

r
s
1-
5
p
m
;
7-
8
:

The New York State Department of Health (NYSDOH) collected two well samples in 1981 and three samples from nearby residential wells and the Newport Village water supply in 1986. The NYSDOH has continued to monitor private drinking water wells in the neighborhood of the landfill (in 1986, 1989, 1991, 1992, 1993, 1994, 1996, 1999, and 2000). All of the analyzed drinking water samples were considered satisfactory with the exception, in 1991, of one drinking water well. The residential well immediately adjacent to the landfill entrance on Rose Valley Road was found to contain low levels of chlorinated hydrocarbons exceeding drinking water standards. Bottled water delivery was initiated for this residence; and in October, 1993, NYSDEC installed a granular activated carbon filter (GAC) to remove the contaminants from the impacted well water.

In 1989, NYSDOH also collected and analyzed four leachate/sediment samples from the base of the major fill area. The results indicated the presence of a variety of contaminants at relatively low levels which is indicative of mixed municipal/industrial refuse. In 1990 and 1991, a site contamination assessment of the landfill was completed for the NYSDEC Division of Solid Waste. As a result of the study's findings, on March 24, 1992, the Rose Valley Landfill was added to the New York State Registry of Inactive Hazardous Waste Sites as a Class 2 Site having significant (but not immediate) threat to human health and the environment.

DETAILED SITE INVESTIGATION

In 1998, the Rose Valley Landfill site was referred to the State Superfund Program for funding and action (see following section on enforcement status). Subsequently, a Remedial Investigation/ Feasibility Study was initiated. The remedial investigation involved extensive sampling and laboratory analyses of water, soil and air and also evaluations of possible exposures to hazardous waste by the public and the environment.

The Remedial Investigation for Rose Valley included the following activities:

- Survey to locate the physical extent of the primary fill area.
- Soil gas survey with 102 sampling points to identify areas of potential contamination.
- Collection and analysis of 29 groundwater sampling points at geoprobe locations.
- Installation of 14 piezometers and 14 new monitoring wells to estimate the speed and direction of groundwater flow.
- Two (2) rounds of sampling and analysis of the groundwater in the network of 19 monitoring wells to determine the extent and concentration of groundwater contamination on the landfill property.
- Surface water and sediment sampling at seventeen (17) locations to determine the effects of the landfill on the stream and the wetland.
- Qualitative human health risk evaluation.

- are those who may be legally liable for contamination at a site. For a landfill, this may include past or present owners and operators, waste generators, and haulers. The two Potential Responsible Parties (PRPs) for the Rose Valley Landfill Site identified to date include: Joyce Miller and the estate of Gerald Crouch. These PRPs did not respond to NYSDEC's written request to undertake a Remedial Investigation and Feasibility Study on the property. Therefore the site was freed for funding under the State Superfund Program.

F
i
s
h
a
n
d
W
i
l
d
l
i
f
e
l
m
p
a
c
t
A
n
a
l
y
s
i
s

After the remedy is finally selected, PRPs will again be contacted and asked to assume financial responsibility for the remedial program. If agreement is not reached with the PRPs, the NYSDEC will evaluate the site for further action under the State Superfund Program. Financially-capable PRPs may be subject to legal actions by the State for recovery of all response costs the State has incurred.

EN
FO
RC
EM
EN
T
ST
AT
US

Pot
enti
ally
Res
pon
sibl
e
Part
ies
(PR
Ps)

nts of potential concern are volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and inorganic compounds (metals). The VOC contaminants are: dichloroethane (DCA), dichloroethene (DCE) and trichloroethane (TCA). The SVOC contaminants are; dichlorobenzene, chloroaniline, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene and phenol.

Volatile contaminants are found in two groundwater plumes on-site. The western area of contaminated groundwater is a low level plume containing TCA and DCA, in the shallow aquifer. This plume exists in a small area and impacts one private drinking water well. The eastern, wetland plume contains very low levels of DCE and DCA. The source of wetland contamination is the leachate seeping from the landfill into the wetland. This plume is also of limited extent; it does not migrate over the property boundary and impacts no private wells.

The SVOC contaminants are found in the three surface soil samples collected from the older septic disposal pit. Inorganic contaminants are found in the surface water and sediments in an area of the wetland at the base of the landfill. They are typical of a mixed use commercial, residential and industrial landfill.

The major fill area covers eight acres.

PREFERRED REMEDIAL ALTERNATIVE AT THE ROSE VALLEY LANDFILL SITE

This preferred remedy is based on the evaluation of remedial alternatives in the Feasibility Study developed for the site. Following are the major elements and rationale of the recommended cleanup program:

- In the western portion of the site, the impacted residential well would be replaced with a clean drinking water well. The physical extent of the plume would be monitored over a long period of time. The new well would permanently eliminate the risk of future exposures to contaminated drinking water at this residence. Long term monitoring of the plume is recommended over active treatment of the plume because treatment is not likely to reduce the present low levels of contamination within a reasonable time period, and the additional estimated \$584,000 in costs to install and operate does not justify the small additional reduction in risks.
- Contaminated groundwater in the wetland plume continue to be treated by natural attenuation. The mechanisms through which wetland sediments decontaminate groundwater have been well documented, and the present removal of contaminants demonstrates the effectiveness of this treatment process in this wetland. Wetland biota likely to be impacted by the low levels of volatile and inorganic compounds present would be sampled and analyzed to confirm the lack of significant impacts from contamination. The existence of satisfactory treatment of the wetland plume by natural attenuation would be monitored over a thirty year period. This alternative is preferred because it would provide long term, permanent and cost-effective treatment of the leachate and wetland plume without the short term disturbances that would be caused by the construction of an active leachate collection and treatment system in the wetland.
- The eight acres of fill would be pulled back from the edge of the wetland and capped with a two-foot thick soil cover which would reduce the volume of

N
A
T
U
R
E
A
N
D
E
X
T
E
N
T
O
F
C
O
N
T
A
M
I
N
A
T
I
O
N
A
T
H
E
R
O
S
E
V
A
L
L
E
Y
S
I
T
E

The
mai
n
cate
gori
es
of
con
tam
ina

c
o
n
t
a
m
i
n
a
t
e
d
l
e
a
c
h
a
t
e
g
e
n
e
r
a
t
i
o
n
.
T
h
i
s
t
y
p
e
o
f
c
o
v
e
r
i
s
j
u
s
t
i
f
i
e

d for an older landfill with low levels of contamination, and would comply with State regulations for closing landfills. The minor benefits of a more impermeable cap would not justify the additional 1.2 million dollars of construction and maintenance.

- Contaminated surface soils would be excavated and disposed of in the on-site landfill. This action would eliminate the risk of exposure to humans and wildlife and would comply with all environmental standards and guidance.

COST OF THE PROPOSED REMEDIAL ACTION PROGRAM

The total estimated present worth cost to implement the proposed remedy would be \$920,300. The cost to construct the remedy is estimated to be \$656,700 and the estimated average annual operation and maintenance cost for 30 years is \$16,500.

For More Information: Call or write the following staff for more information about:

Meeting/Comment Period/PRAP:

Kathryn Eastman, Project Manager
NYSDEC, Division of Hazardous Waste Remediation
50 Wolf Road, Albany, NY 12233-7010
(518) 457-1741 and (800) 342-9296

Health-Related Concerns:

Mr. Gregory Rys, Public Health Specialist 3
NYSDOH - District Office
5665 State Route 5
Herkimer, New York 13350
(315) 866-6879

Mark Van Deusen, Outreach Specialist
NYS Department of Health
547 River Street
Troy, New York 12180
(800) 458-1158 and (518) 402-7530



Division of Environmental Remediation

Fact Sheet Record of Decision (ROD)

The Department of Environmental Conservation (DEC), along with the Departments of Health (DOH) and Law (DOL), is responsible for ensuring the cleanup of inactive hazardous waste disposal sites across the state. Under New York's Inactive Hazardous Waste Disposal Site Remedial Program, the process begins with the discovery of a potential hazardous waste site and follows a path of thorough investigation, remedy selection, design, construction and monitoring. This fact sheet highlights one stage in the comprehensive process, the Record of Decision (ROD).

The ROD contains results of the remedial investigation and remedy selection process.

The Record of Decision (ROD) presents the remedial action plan for an inactive hazardous waste disposal site and documents the information and rationale used to arrive at the decision.

The ROD is the culmination of extensive investigations and a remedy selection that identifies a solution to remove the significant threat to the public health and the environment. (For more on this, see fact sheet *Remedial Investigation/Feasibility Study*.) It serves as the definitive record of the remedy selection process for the site and as a convenient reference to other documents that were developed during the remedy selection process.

DEC gives the final approval to the ROD.

The final ROD is approved by the Department following public comment and review of the proposed remedial action plan. The project then moves on to remedial design and construction.

ROD Contents

The ROD summarizes information used to select the remedial action.

Each ROD produced for an inactive hazardous waste disposal site contains information about the site that identifies the problem and describes the remedial solution. In addition, the decision-making process that yielded the remedial action plan is documented to demonstrate that the appropriate solution was selected. The ROD contains:

- *Site location, description and history:* provides valuable insight into the previous use of the site and identifies vulnerable areas in the surrounding environment, such as residential areas and protected wetlands, groundwater, etc.
- *Problem identification:* describes the nature and extent of contamination and the pathways through which contaminants move in the environment.
- *Status of enforcement actions:* provides the enforcement history and current status for the site.

- *Goals for remedial action:* describes the overall goal of remediation, protection of public health and the environment, and remedial goals specific to each site - for example, preventing contaminated groundwater migration.
- *Discussion of remedial alternatives:* presents each potential remedial action, including a "no action" alternative, to show that technical, legal, environmental and public concerns are met.
- *The selected remedial action:* describes the planned remedy.
- *Responsiveness Summary:* documents public comments about the selected remedy. Modifications to the remedial action plan based on public comment are identified in the summary.
- *Administrative Record:* references reports and other documents developed during investigation and remedy selection.

Amendments to the ROD

Amended remedial decisions require additional review and public input.

Changes to the final remedial action plan may occur in two cases:

1. if the ROD specifically provides for later addition of documents and reserves a portion of the decision to a later time; or,
2. if new and significant information is received or generated after the ROD is finalized.

An amended ROD must go through additional review and public comment periods.

For more information

- about the Record of Decision, remedy selection process, or citizen participation activities, call DEC's 24-hour toll-free environmental remediation information line at 1 (800) 342-9296.
- about the health impacts of a hazardous waste site, contact the Department of Health's Outreach Program at 1 (800) 458-1158.

Fact Sheets produced by the
New York State Department of Environmental Conservation
in cooperation with the
New York State Departments of Health and Law



Division of Environmental Remediation

Fact Sheet
Remedial Investigation/Feasibility Study (RI/FS)

The Department of Environmental Conservation (DEC), along with the Departments of Health (DOH) and Law (DOL), is responsible for ensuring the cleanup of inactive hazardous waste disposal sites across the state. Under New York's Inactive Hazardous Waste Disposal Site Remedial Program, the process begins with the discovery of a potential hazardous waste site and follows a path of thorough investigation, remedy selection, design, construction and monitoring. This fact sheet highlights one stage in the comprehensive process, the Remedial Investigation/Feasibility Study (RI/FS).

RI/FS begins when hazardous waste contamination is confirmed.

The RI/FS follows preliminary site investigations by DEC and DOH that verify hazardous wastes are present and that the wastes pose a significant threat to public health and the environment.

DEC and DOH gather detailed site information to work toward an effective remedial action.

DEC's Division of Environmental Remediation or the responsible party under an enforceable consent order carries out a Remedial Investigation (RI) to determine the nature and extent of contamination. DEC, along with DOH, uses the RI information to then perform a Feasibility Study (FS) that evaluates possible remedies. The FS becomes the basis for selection of a remedy that effectively eliminates the threat posed by contaminants at the site. The RI/FS results in a Record of Decision (ROD) describing the cleanup that will be carried out and documents the decisions that led to the chosen remedy.

The state initiates a variety of activities to inform and involve the public during the remedial process.

Throughout the remedial process, the state encourages public involvement. The public plays a key role in the RI/FS to help shape the remedy selection process. Public meetings, newsletters, fact sheets, and project documents contribute to the exchange of information and provide opportunity for comment.

The state achieves successful hazardous waste remediation with the cooperation of many groups.

State engineers, geologists, chemists, and health specialists work with consultants, contractors, municipalities, potentially responsible parties, and citizens to investigate the contamination and select an appropriate remedy. The RI/FS process requires a detailed examination of a site to fully understand its impact on public health and the environment before deciding on a remedy. The process can take up to two years to complete.

Remedial Investigation (RI)

The RI defines the threat to public health and the environment.

The responsible party or DEC performs an RI at each Class 2 inactive hazardous waste disposal site after preliminary investigations have shown that contaminants pose a significant threat to public health or the environment. Through extensive sampling and laboratory analyses, the RI identifies the length, depth and width of contamination, defines the pathways of migration and measures the degree of contamination in surface water, groundwater, soils, air, plants, and animals. Information gathered during the RI fully describes the hazardous waste problem at the site so that the appropriate remedy can be selected.

DOH evaluates ways people may be exposed to hazardous waste.

DOH reviews and recommends activities that will be performed during the RI to ensure that a complete picture of potential health impacts is understood. Such activities include identifying the ways contamination can reach people, either through direct contact, eating, drinking, or breathing.

Feasibility Study (FS)

Remedial action choices are developed during the FS.

The Feasibility Study uses RI information to develop alternative remedies that will eliminate the threat to public health or the environment posed by the site. Wherever feasible, the state selects a remedy that permanently reduces or eliminates the contamination.

The state evaluates the remedial alternatives to reach a balanced decision that protects people and the environment.

The responsible party and DEC screen each alternative to make sure the remedy is technically suitable for the site. Following the initial screening, DEC and DOH weigh the remaining alternatives against a number of other conditions, including:

- overall protection of public health and the environment;
- reduction in toxicity, mobility and volume of hazardous waste (e.g., by thermal destruction, biological or chemical treatments or containment wall construction);
- long-term effectiveness and performance;
- short-term effectiveness and potential impacts during remediation;
- implementation and technical reliability;
- compliance with statutory requirements;
- community acceptance; and
- cost.

DEC prepares the proposed remedial action plan for public comment.

The outcome of the selection process is the recommendation of a remedy that best satisfies a combination of these conditions. The remedy becomes part of a proposal that is presented to the public for comment.

Proposed Remedial Action Plan and Public Comment

The state presents the proposed remedial action plan to the public.

After the RI/FS is completed, DEC and DOH hold a public meeting to propose the remedial solution. The Proposed Remedial Action Plan (PRAP) summarizes the decision that led to the recommended remedial action by discussing each alternative and the reasons for choosing or rejecting it.

Public comment can make a difference in the remedial action plan.

The public is encouraged to review the PRAP and make comments either at the meeting or during the comment period that follows. The comments are reviewed and compiled in a Responsiveness Summary and modifications to the proposed remedial action plan may be made. Additional public notice is required if a modified remedial action plan differs significantly from the earlier selection.

The final remedial decision is documented in the record of decision.

DEC drafts a Record of Decision (ROD) which includes the selected remedial action, the Responsiveness Summary and a bibliography of documents that were used to reach the remedial decision. DOH and DOL have an opportunity to comment on the draft ROD before final DEC approval. When the ROD is finalized, remedial design and construction can now begin.

For a full explanation of the ROD, see the companion fact sheet, "Record of Decision".

For more information

- about the RI/FS, remedy selection process, or citizen participation activities, call DEC's 24-hour toll-free environmental remediation information line at **1 (800) 342-9296**.
- about the health impacts of a hazardous waste site, contact the Department of Health's Outreach Program at **1 (800) 458-1158**.

Fact Sheets produced by the
New York State Department of Environmental Conservation
in cooperation with the
New York State Departments of Health and Law

