



ANNUAL REPORT 2001

**102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK**

Prepared For:

Miller Springs Remediation Management, Inc. and Olin Corporation

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102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

Prepared For:

Miller Springs Remediation Management, Inc. and Olin Corporation

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JUNE 2002

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EXECUTIVE SUMMARY

The following report describes the Operation and Maintenance (O&M) activities for 2001 for the 102nd Street Landfill Site (Site) located in Niagara Falls, New York. The Site covers approximately 22.1 acres and consists of two separate properties owned by Occidental Chemical Corporation (OxyChem) (15.6 acres) and Olin Corporation (6.5 acres). Site O&M tasks are currently handled for both OxyChem and Olin by Miller Springs Remediation Management, Inc. (MSRMI), a subsidiary of Glenn Springs Holdings, Inc. (GSHI) and an affiliate of OxyChem.

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1.0 INTRODUCTION

This report describes the Operation and Maintenance (O&M) Activities for 2001 for the 102nd Street Landfill Site (Site) located in Niagara Falls, New York. The Site covers approximately 22.1 acres and consists of two separate properties owned by Occidental Chemical Corporation (15.6 acres) and Olin Corporation (6.5 acres). The Site is bordered by the Niagara River to the south, Buffalo Avenue to the north, Griffon Park to the west, and privately owned land to the east. A perimeter fence restricts Site access. Authorized vehicular traffic access is provided from Buffalo Avenue by fence gates.

The remedial action (RA) system components at the Site that have associated O&M activities are as follows:

- i) a landfill cap;
- ii) a perimeter slurry wall;
- iii) an aqueous phase liquid (APL) collection and discharge system;
- iv) a non-aqueous phase liquid (NAPL) recovery system;
- v) post-RA system performance monitoring;
- vi) a perimeter fence; and
- vii) shallow water environment monitoring.

Remedial construction at the Site was completed in 1999, and groundwater pumping began the same year. Although groundwater pumping was not required to begin until the remedial work was approved by the United States Environmental Protection Agency (USEPA) and the New York State Department of Environmental Conservation (NYSDEC), the owners agreed that dewatering of the Site would be advantageous and began voluntarily pumping from the Wet Wells.

The Final Closeout Report for the Site was issued on August 13, 1999, and comments were received on July 11, 2000. Final responses to the comments were submitted to the Agencies on September 22, 2000.

Final revisions to the O&M Manual were submitted to the Agencies on August 17, 2001, and final approval of the manual was received on October 24, 2001.

The Certificate of Completion for the Site was submitted to the Agencies on January 14, 2002 and was accepted by the Agencies on March 13, 2002, signifying that all remedial

work had been completed and all governmental concerns had been met. As a result, the official O&M activities at the Site began in April 2002.

This report is the first Annual Report for the Site and will cover only APL collection and removal activities, water elevation monitoring activities, and a one-time NAPL removal for 2001. No groundwater sampling or analysis was completed during the year.

2.0 MONITORING AND TESTING

2.1 MONITORING PLAN

2.1.1 WATER LEVEL MONITORING

Water levels in the piezometers and monitoring wells were taken monthly throughout 2001 in accordance with the O&M Plan.

Water level data have been converted to elevations and is listed on the Annual Report Form, which is attached.

Inward gradients toward the landfill were prevalent at well pairs 1, 2, 3, 4, 5, 6, 8, and 9. Well pair 7 generally showed an outward gradient, and well pair 10 showed an inward gradient approximately one half of the time.

Based upon the results of 2001, the owners have decided to redevelop PCM-09 to eliminate the "dry well" conditions that were prevalent during 2001. If this does not rectify the situation the well will be extended 5 feet. The owners have also decided to re-survey all well to ensure that the proper top of casing elevations are being used.

2.1.2 GROUNDWATER QUALITY MONITORING

Because the Certificate of Completion was not approved, this work was not required. No groundwater quality monitoring was completed in 2001.

2.1.3 NAPL PRESENCE MONITORING

After the O&M Plan was approved in October of 2001 the NAPL wells were inspected during the next sampling event (November 10, 2001). All eight wells were checked for NAPL presence and NAPL was removed from NR-1, NR-2, NR-3, and NR-5. Quantities removed are shown on the Annual Report Form.

No additional NAPL was removed in December because the Certificate of Completion had not been submitted and approved and official O&M had not begun.

3.0 OPERATION OF 102ND STREET LANDFILL SYSTEMS

3.1 APL COLLECTION AND DISCHARGE SYSTEM OPERATION

The individual APL pumps in the APL collection wet wells operated throughout 2001 on level control. All well pumps were set to start up at an elevation of 562.6 (1 foot below the average Niagara River water level) and shut down when elevations in the wells reached 562.1.

A total of 1,023,151 gallons of APL were removed from the Site and pumped to the Love Canal Treatment Facility. There the APL was treated and released to the City of Niagara Falls Sanitary Sewer System for final handling through the Publicly Owned Treatment Works (POTW).

3.2 NAPL COLLECTION SYSTEM OPERATION

A total of 335 gallons of NAPL was collected during 2001. This NAPL was collected during the sampling event of November 10 and was shipped to the Safety-Kleen Facility in Deer Park, Texas for incineration.

4.0 SITE MAINTENANCE AND INSPECTIONS

4.1 SITE INSPECTIONS

No formal Site inspections were held in 2001.

4.2 SHALLOW WATER ENVIRONMENT MONITORING

An inspection of the Shallow Water Environment was completed on October 3, 2001, and a report was issued indicating that the criterion of 80 percent aerial coverage was met.

A complete report (draft) of the monitoring results for the past 5 years was issued to the Agencies for an informal review on April 11, 2002. USEPA and NYSDEC comments have been received. An additional inspection will be made in 2002 to ensure that all parties agree on the aerial coverage attained.

4.3 MAINTENANCE

Maintenance performed in 2001 included installing lightning protection on the electrical components located in the panels adjacent to each of the Wet Wells (1-4). Due to the proximity to the Niagara River, the Site was experiencing some outages due to lightning strikes.

Other maintenance included pressure grouting around Leak Detection Manholes 8 and 9 to prevent the infiltration of water and eliminating false alarms of the leak detection system.

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2001

INSPECTION AND MAINTENANCE (Not Applicable)

Scheduled inspections performed:

	<i>Date</i>	<i>Inspector</i>
April	_____	_____
October	_____	_____

Was maintenance required?

	<i>Yes</i>	<i>No</i>
April	<input type="checkbox"/>	<input type="checkbox"/>
October	<input type="checkbox"/>	<input type="checkbox"/>

What maintenance was required?

Maintenance Required	Date Performed
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Attach additional sheets as necessary.

Describe any maintenance activity that required an activity-specific work plan and health and safety plan.

Form Completed By:

J C Thornton
NAME

J C Thornton
SIGNATURE

6/17/02
DATE

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE

NIAGARA FALLS, NEW YORK

YEAR: 2001

Send completed copies of this form to the following for review:

George Luxbacher
Glenn Springs Holdings, Inc.
2480 Fortune Drive, Suite 300
Lexington, KY 40509

and

Lorraine Miller
Olin Corporation
P. O. Box 248
1186 Lower River Road
Charleston, TN 37310

and

Mike Bellotti
Olin Corporation
P. O. Box 248
1186 Lower River Road
Charleston, TN 37310

After review is complete, send 5 copies to the following:

Chief-New York Remedial Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency - Region II
290 Broadway, 20th Floor
New York, NY 10007-1866
Attn: 102nd Street Landfill Superfund Site Manager

and

Director, Division of Environmental Remediation
New York State Dept. of Environmental Conservation
625 Broadway
8th Floor
Albany, NY 12233-7252

and

Regional Remediation Engineer
New York State Dept. of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE

NIAGARA FALLS, NEW YORK

YEAR: 2001

MONITORING - Water Level Measurements

Month	Day	Inspector	PCM-01	PZ-01	PCM-02	PZ-02	PCM-03	PZ-03	PCM-04
January	1/10/01	T. Blackmon	566.26	565.21	566.12	563.2	563.42	562.26	563.23
February	2/5/01	T. Blackmon	566.24	564.88	566.13	563.07	562.91	562.69	563.03
March	3/2/01	T. Blackmon	566.97	564.94	566.81	562.79	562.88	562.25	563.07
April	4/6/01	T. Blackmon	566.97	564.68	566.83	562.67	563.52	562.03	563.41
May	5/4/01	T. Blackmon	566.75	564.56	566.48	562.61	563.59	562.03	563.6
June	6/5/01	T. Blackmon	566.57	564.73	566.44	562.62	563.59	562.09	563.73
July	7/6/01	T. Blackmon	566.11	564.44	566.22	562.49	563.78	562	563.94
August	8/2/01	T. Blackmon	565.94	564.79	565.77	562.46	563.88	561.93	564.03
September	9/4/01	T. Blackmon	565.66	564.81	565.49	562.72	563.51	562.25	563.73
October	10/1/01	T. Blackmon	565.64	564.85	565.31	562.57	563.66	561.98	563.86
November	11/1/01	T. Blackmon	560.49	570.84	560.19	562.59	562.82	561.86	562.96
December	12/3/01	T. Blackmon	566.18	564.71	566.03	562.75	563.33	562.28	563.45

Month	Day	Inspector	PZ-04	PCM-05	PZ-05	PCM-06	PZ-06	PCM-07	PZ-07
January	1/10/01	T. Blackmon	563.91	564.07	561.77	568.19	565.94	565.5	566.62
February	2/5/01	T. Blackmon	564.08	558.75	562.28	567.81	566.06	565.46	566.85
March	3/2/01	T. Blackmon	563.98	565.06	561.93	567.9	565.92	565.59	566.53
April	4/6/01	T. Blackmon	563.7	565.38	562	567.88	565.86	dry	566.36
May	5/4/01	T. Blackmon	563.71	564.79	561.9	567.84	565.8	566.04	566.49
June	6/5/01	T. Blackmon	563.51	564.95	561.87	567.96	565.81	566.02	566.55
July	7/6/01	T. Blackmon	563.45	563.87	561.77	568.14	565.66	565.89	566.59
August	8/2/01	T. Blackmon	563.38	563.47	561.77	568.32	565.73	565.07	566.58
September	9/4/01	T. Blackmon	563.48	563.03	561.9	568.43	565.71	565.32	566.62
October	10/1/01	T. Blackmon	563.36	563.08	561.82	568.25	565.74	565.2	566.25
November	11/1/01	T. Blackmon	563.34	563.54	561.73	568	565.71	565.44	566.33
December	12/3/01	T. Blackmon	563.34	563.92	561.98	567.84	565.68	565.6	566.34

Month	Day	Inspector	PCM-08	PZ-08	PCM-09	PZ-09	PCM-10	PZ-10
January	1/10/01	T. Blackmon	568.92	567.04	dry	566.95	566.25	566.64
February	2/5/01	T. Blackmon	569.48	566.94	dry	566.9	566.52	566.43
March	3/2/01	T. Blackmon	565.42	571.29	dry	567.02	567.1	566.47
April	4/6/01	T. Blackmon	570.08	566.84	569.11	567.06	567.15	566.33
May	5/4/01	T. Blackmon	568.3	566.99	569.13	566.98	566.86	566.35
June	6/5/01	T. Blackmon	569.6	566.94	dry	566.95	566.71	566.35
July	7/6/01	T. Blackmon	563.1	566.89	dry	566.91	566.2	566.28
August	8/2/01	T. Blackmon	565.18	569.64	dry	566.87	565.9	566.4
September	9/4/01	T. Blackmon	569.86	566.89	dry	566.89	565.6	566.34
October	10/1/01	T. Blackmon	570.15	566.84	dry	566.87	565.5	566.3
November	11/1/01	T. Blackmon	569.84	566.54	568.62	566.82	566.1	566.36
December	12/3/01	T. Blackmon	569.64	566.73	dry	566.67	566.5	566.29

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2001

GROUNDWATER - Quality Monitoring

Quarter	Date Sample Taken	Inspector	Comments
1st	NA		
2nd	NA		
3rd	NA		
4th	NA		

Results of analyses are attached.

NAPL PRESENCE - Monitoring

	Date	Inspector	NR-01		NR-02		NR-03	
			Depth of NAPL	Gallons Removed	Depth of NAPL	Gallons Removed	Depth of NAPL	Gallons Removed
1st Month	11/10/01	T. Blackmon	3.73 ft	55	3.99 ft	200	1.1 ft	40
2nd Month								
3rd Month								
2nd Quarter								
3rd Quarter								
4th Quarter								

	Date	Inspector	NR-04		NR-05		NR-07	
			Depth of NAPL	Gallons Removed	Depth of NAPL	Gallons Removed	Depth of NAPL	Gallons Removed
1st Month	11/10/01	T. Blackmon	0 ft	0	3.87 ft	40	0	0
2nd Month								
3rd Month								
2nd Quarter								
3rd Quarter								
4th Quarter								

	Date	Inspector	NR-08		NR-10	
			Depth of NAPL	Gallons Removed	Depth of NAPL	Gallons Removed
1st Month	11/10/01	T. Blackmon	0 ft	0	0	0
2nd Month						
3rd Month						
2nd Quarter						
3rd Quarter						
4th Quarter						

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
 NIAGARA FALLS, NEW YORK

YEAR: 2001

OPERATION

APL COLLECTION AND DISCHARGE SYSTEM

<i>APL Flow for Previous Year (gallons)</i>	<i>APL Flow for Current Year (gallons)</i>
1,729,598	1,023,151

NAPL REMOVAL SYSTEM

	<i>NAPL Removed for Previous Year (gallons)</i>	<i>NAPL Removed for Current Year (gallons)</i>
NR-01	0	55
NR-02	0	200
NR-03	0	40
NR-04	0	0
NR-05	0	40
NR-07	0	0
NR-08	0	0
NR-10	0	0
Total	0	335

Where was NAPL treated/disposed?

Facility <u>Safety-Kleen Deer Park, Texas</u>	Date <u>12/17/01</u>
Facility _____	Date _____
Facility _____	Date _____
Facility _____	Date _____

FORM 1