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ARCADIS
6723 Towpath Road
P.O. Box 66
Syracuse
New York 13214-0066
Tel 315.446.9120
Fax 315.449.4111
www.arcadis-us.com

Mr. Anthony Karwiel
Environmental Engineer
Remedial Bureau "C", 11th Floor
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7010

ENVIRONMENTAL

Subject:
New York State Electric & Gas Corporation
Report for 66-Inch Storm Sewer Liner Monitoring
Court Street Site, Binghamton, New York

Date:
September 22, 2009

Contact:
David Cornell

Phone:
315.671.9379

Email:
david.cornell@
arcadis-us.com

Our ref:
B0013041.00009 #5

Dear Mr. Karwiel:

On behalf of NYSEG (New York State Electric & Gas Corporation), please find attached a completed Interim Remedial Measure (IRM) monitoring log for the first of three planned monitoring events for the lined portion of the 66-inch storm sewer at the above-referenced site. As you know, the NYSDEC-approved *Storm Sewer Interim Remedial Measure Monitoring Plan* (BBL, June 2005) calls for annual monitoring of the storm sewer to confirm and document that non-aqueous phase liquid (NAPL) is not infiltrating the 66-inch storm sewer through the liner installed during the Storm Sewer IRM. Because apparent NAPL-infiltration was observed during the 2008 annual monitoring event, the number of monitoring events for 2009 was increased to three. The first inspection event was initially scheduled for June 2009, but due to inclement weather, needed to be postponed and rescheduled three times.

During the July 2009 monitoring event, black staining was observed on the interior of the liner joiner strips at several locations between 155 feet and 170 feet south of manhole MH-2 (Attachment A, Exhibit 1). The stained intervals exhibited a coal-tar like odor, and appeared to be present along the west wall joiner strip from the 9- to 7-o'clock position (facing south/downstream from MH-2). No sheens or NAPL-like material were observed in the water or sediment present in the bottom of the pipe at or downstream of this location. Other discolored areas (lighter in color and not of the same physical consistency as the NAPL-like material) along the inside of the PVC liner pipe were also observed during the inspection, but none exhibited a coal tar-like odor. The black-stained seams described above were generally the same as those observed during the October 2008 monitoring event. A video clip of relevant areas within the pipe are contained on the attached DVD.

The video includes a clip at 160 feet downstream from MH-2 where staining is present. At this location, water which appears to be infiltrating from behind the liner is

trickling down the joiner strip where black staining and sediment is built up along the side wall of the liner. A tar-like odor is observed in this area. The remaining three video clips (250 feet, between 270 and 280 feet downstream from MH-2, and 6 feet upstream from MH-1) were taken at locations along the liner where water infiltration appears to be occurring along the joiner strips. The brown staining which occurs in the sewer is also apparent in these areas. No black staining or odors were observed in these areas.

Additionally, the DVD also contains a video clip of the destructive testing which took place simultaneously with the July 2009 IRM inspection event. The destructive testing included collecting four liner samples between 155 and 170 feet downgradient from MH-2 at various clock positions in the pipe. As discussed in the April 20, 2009 meeting between NYSDEC, NYSEG and ARCADIS, a forthcoming report will present the details of the destructive sampling and present a matrix that evaluates various remedial options to address the apparent NAPL infiltration.

We anticipate the second of three inspection events to take place in September 2009. We will notify NYSDEC two weeks prior to conducting the inspection event, and will inform NYSDEC of the results of that inspection shortly after the work is completed.

Please do not hesitate to contact Tracy Blazicek at 607.762.8787 or me at 315.671.9379 if you have any questions regarding the information contained in this report.

Sincerely,

ARCADIS

David A. Cornell
Geologist

DAC/plf

Attachments:
Attachment A – 2009 IRM Monitoring Log
Attachment B – DVD of July 2009 Inspection and Destructive Testing

Copies:
Tracy Blazicek, CHMM, New York State Electric & Gas Corporation
Keith White, ARCADIS
Margaret Carrillo-Sheridan, ARCADIS

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Attachment A

2009 IRM Monitoring Log

IRM MONITORING LOG
STORM SEWER INTERIM REMEDIAL MEASURE MONITORING PROGRAM

NEW YORK STATE ELECTRIC & GAS CORPORATION
COURT STREET SITE
BINGHAMTON, NEW YORK

Date/Time: July 14, 2009 11:00 AM
Monitoring Personnel: David Cornell, Roger Elliott, Aaron Falzarano
Weather: Partly sunny, 75 degrees

1. NAPL infiltration observed? Yes
2. NAPL staining observed? Yes

If yes to either 1 or 2 above monitoring personnel must complete the required documentation below.

Distance Downstream of Manhole MH-2 (ingress/egress)	The location of the NAPL stain or location of NAPL infiltration with respect to the circumference of the pipe wall (e.g., using clock position[4])	Approximate surface area of the NAPL stain	Description (including approximate dimensions) of the opening or breach in the liner in which NAPL infiltration is observed
From 155 ft to 170 ft downstream (south) of MH-2	At 9 o'clock position (east side of pipe)	Approximately 0.67 ft^2 (4" wide x 24" long)	Black staining apparently related to NAPL appeared to be present along 3 seams from 9 o'clock to 7 o'clock. Stained material exhibited a coal-tar like odor.
From 155 ft to 170 ft downstream (south) of MH-2	At multiple clock positions between 7:30 and 4:30	Along joiner strips	Black staining and faint coal-tar like odor.

Notes:
1. NAPL - non-aqueous phase liquid.
2. Observations shall be measured from manhole MH-2 using a tape measure.
3. Reference to photograph and/or videotape documentation shall be provided as appropriate.
4. Clock position along the pipe circumference (looking downstream/~south) shall refer to the following:
   - 12 o'clock refers to the top of the pipe (overhead)
   - 3 o'clock refers to the midpoint (between the 12 o'clock and 6 o'clock positions) along the right side of the pipe sidewall
   - 6 o'clock refers to the bottom of the pipe
   - 9 o'clock refers to the midpoint (between the 12 o'clock and 6 o'clock positions) along the left side of the pipe sidewall
   - Appropriate clock positions between the above-referenced locations

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Attachment B

DVD of July 2009 Inspection and Destructive Testing