

**Settlement Agreement and Consent Order**  
**3M and MPCA, May 22, 2007**

**QUARTERLY PROGRESS REPORT #21**

April 1 – June 30, 2012

On May 22, 2007, 3M and the Minnesota Pollution Control Agency (MPCA) entered into a Settlement Agreement and Consent Order (Settlement Agreement) for the investigation and assessment of perfluorochemicals (PFCs) at sites in Washington County and for the execution of certain other related matters. This report is provided to fulfill the requirement outlined in Part XIII.A of the Settlement Agreement.

**REPORTING PERIOD:** April 1 – June 30, 2012

**ACTIVITIES COMPLETED:**

Response Action Plan and Response Action Implementation (Part VIII)

**Cottage Grove**

Planning activities continued relative to the East Cove restoration. A meeting was conducted at the site on April 26, 2012 involving 3M, the Minnesota Department of Natural Resources and the U.S. Army Corps of Engineers to discuss restoration objectives and options. Subsequently, after reviewing several proposals from restoration contractors, 3M chose *Prairie Restoration* to begin field work on the project in August.

The system and piping designs for the new groundwater treatment facility at the site were finalized. Contracts were awarded to two contractors – one who will be responsible for building the treatment building and related process equipment and the other who will install the related piping. Construction commenced on both aspects of the project.

In correspondence dated May 4, 2012, a site-wide PFC monitoring plan was submitted to the MPCA for review and approval.

In correspondence dated June 15, 2012, a *Construction Completion Report* for the East Cove remedial response action was submitted to the MPCA for review and approval.

**Oakdale**

The second quarter groundwater and surface water samples were collected during the week of June 10, 2012. These were collected in accordance with the previously approved monitoring plan for the site.

## **Woodbury**

The groundwater monitoring program continued at a monthly sampling frequency to confirm groundwater capture and evaluate trends in constituent concentrations. Results continued to be shared with MPCA and MDH staff.

As part of efforts to keep MPCA and MDH abreast of investigatory and response actions being taken at the site, status update meetings were conducted with agency personnel on March 15 and May 29, 2012.

In correspondence dated April 24, 2012, 3M submitted a work plan to collect additional hydrogeological information at the Site. Actions outlined in the plan included: 1) rehabilitation and reconstruction of monitor wells MW-B and MW-G; 2) installation of an additional shallow monitor well in the uppermost water-bearing zone near monitor well MW-G; and 3) installation of an additional well couplet to evaluate conditions between B-2 and sentinel wells S02DR/PC/JS. These activities were reviewed in the aforementioned May 29, 2012 meeting with agency staff and were discussed further in a conference call on June 4, 2012. 3M's understandings concerning these items were documented in a June 5, 2012 letter from Ms. Katie Winogrodzki, 3M, to Mr. Gary Krueger, MPCA (A confirmatory approval e-mail was received by 3M from the MPCA on July 6, 2012).

Annual maintenance of the Site barrier wells was performed over the Memorial Day weekend. The MPCA was notified of this activity in correspondence dated May 8, 2012.

On June 28, 2012, 3M provided an update to the cities of Cottage Grove and Woodbury and their respective consulting engineers concerning recent monitoring results and planned future actions. Details concerning the recently developed three-dimensional geologic model of the site were shared with the group.

## Health and Toxicological Studies (Part XIII.C)

3M continued to cooperate with the Minnesota Department of Health (MDH) in providing health and toxicological information relative to PFCs. The process established in May-June of 2007 to share specific updates on various studies as they are underway has continued with 3M providing monthly written summaries to the MDH. For informational purposes, copies of these updates are also provided to the MPCA.

## Recovery of Expenses (Part XXIII)

In a letter dated March 30, 2012, the MPCA requested reimbursement for oversight costs related to the three Sites under the Settlement Agreement. 3M submitted payment in the requested amount (\$472,336.05) via correspondence dated May 22, 2012.

## **ACTIVITIES UNDERWAY &/OR PLANNED FOR JULY - SEPTEMBER 2012:**

### Response Action Plan and Response Action Implementation (Part VIII)

#### **Cottage Grove**

Execution of the restoration plan for the East Cove area will continue. Removal of certain invasive species will commence in August and be followed by the installation of new plantings to augment the vegetation that has already been re-established.

Construction of the new groundwater treatment facility will continue. Relative to operation of this system, scheduled to commence by early 2013, a monitoring plan for PFCs and other constituents will be prepared and submitted for MPCA and MDH review and approval.

#### **Oakdale**

Routine operation and maintenance activities will continue at the site. These include, but are not limited to, operation of the groundwater treatment system and execution of scheduled monitoring activities.

#### **Woodbury**

The groundwater monitoring program will continue in order to confirm groundwater capture and evaluate trends in constituent concentrations. Results will continue to be shared with MPCA and MDH staff as soon as final reports are available.

A quarterly status report will be submitted to the MPCA to summarize investigatory and response actions taken.

Per the work plan submitted by 3M on April 24, 2012 and approved by the MPCA on July 6, 2012 to collect additional hydrogeological information, the following actions will be taken: 1) monitor wells MW-B and MW-G will be rehabilitated and reconstructed; 2) an additional shallow monitor well in the uppermost water-bearing zone near monitor well MW-G will be installed; and 3) an additional well couplet will be installed to evaluate conditions between B-2 and sentinel wells S02DR/PC/JS.

As significant new and/or additional information becomes available, the three-dimensional geologic model developed of the site will be refined.

Regular update meetings, conversations and correspondence will continue with MPCA staff.

Health and Toxicological Studies (Part XIII.C)

3M will continue to share health and toxicological information on perfluorochemicals with MDH as it becomes available. Monthly summary reports as previously described will continue to be provided.