FMC Community Connection

Agricultural Products Group, Middleport, New York Issue 20 Spring 2006

Roy-Hart Study Shows No TCE Detected in Classrooms

Low levels of some other VOCs found - typical of background levels

Results from the air samples collected from the Royalton-Hartland Middle School, Administration Building and High School in March 2006 show that TCE contamination from vapor intrusion was not detected in classrooms.

Air sampling was performed by environmental consultants retained by FMC at the Agencies' request to evaluate the potential for vapor intrusion to impact the indoor air of the Middleport Campus buildings. This request was based on the presence of volatile organic compounds (VOC) contamination, in particular trichloroethene (TCE), in groundwater on school property. Groundwater is water below the ground surface.

Sampling of indoor air in student occupied areas, crawlspaces and sub-slab areas was conducted over the weekends of March 18 and March 25 at the three buildings at the District's Middleport campus.

Low levels of other VOCs were detected in all samples collected. Low levels of TCE were found in

What Are Typical Indoor Air "Background" Levels?

Chemicals are part of our everyday life. They are found in items we bring into homes or buildings, such as new furniture, carpet or freshly dry-cleaned clothing, paints, glues, adhesives, and products used for cleaning purposes or personal hygiene use. As such, the presence of some chemicals are expected to be found in indoor air and are not from environmental contamination. Similarly, chemicals are found in outdoor air because of gasoline stations, dry cleaners or other commercial/industrial facilities. Commonly found concentrations of these chemicals in indoor and outdoor air are referred to as "typical background levels."

Agencies' June 7, 2006 letter to the Roy-Hart School District

Inside this issue:

Community Connection

Let us know what you think!
Return reply comment card inside.

is produced to inform the community about issues related to the FMC Middleport plant, the environment and the local community.

Call us at: 735-3761

No TCE Detected in Classrooms

...continued

crawlspace air at the High School, an some trace levels, close to the detection limit, were found in three crawlspaces at the Middle School. This is not unexpected. In general, these low levels are consistent with typical background concentrations for indoor air and do not represent a health concern.

In addition, TCE was found in the indoor air in several locations in the Maintenance Administration building. It was also found in the outdoor air near the building, but not beneath the building, suggesting that the source is not vapor intrusion from groundwater.

The Agencies have recommended resampling some areas of the school buildings during the 2006-2007 heating season to confirm that existing building conditions (e.g. positive pressure heating, ventilation and/or air conditioning systems) continue to be effective in minimizing any vapor intrusion into classroom areas. The Agencies' fact sheet summarizing the results of the study is available online at www.teapothollow.com.

FMC Sample Data Sent to Property Owners

Results from sampling conducted in Fall 2005 in some limited areas in the historic air deposition area and along Tributary One and Culvert 105 were sent to property owners. A letter and an information sheet to explain this program and FMC's ongoing environmental studies were also included in the mailing. A copy of the information sheet is available at www.teapothollow.com.

This additional sampling was requested by the governmental regulatory Agencies as part of the investigative phase of the environmental study being conducted in Middleport.

The results of these sampling programs will provide information that will help determine the extent of elevated arsenic in soil that may be attributable to historic air or surface water releases from past operations at the FMC Middleport plant site. The work plans for these additional sampling programs are available at the FMC document repository at the Middleport Free Library.

FMC Sampled Creeks North of Pearson Road This Spring

At the request of the governmental regulatory Agencies, FMC sampled some adjoining properties and some sections of Tributary One north of Pearson Road and Jeddo and Johnson creeks this April and May. Property owners were contacted in March and asked for permission to sample their properties in areas along the tributary and creeks.

This study is intended to delineate the extent of elevated arsenic in soil and sediment in stretches of Tributary One and Johnson and Jeddo creeks. These areas are downstream from historic discharges from the FMC Middleport facility. It will provide data to help determine other potential contributing source(s), such as orchard and agricultural applications, to any elevated arsenic conditions.

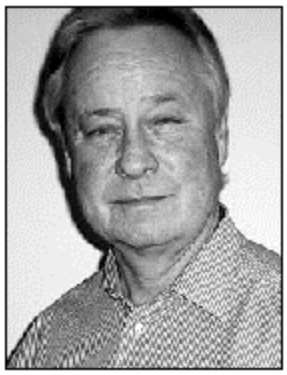
The results from this sampling are expected to be available in two to four months and will be sent to property owners. The technical report will be made public and included in documents available for review in the Middleport library. This report will not identify names or property addresses.

A sampling team collects soil and sediment samples along sections of Tributary One, Jeddo and Johnson creeks. The samples will be analyzed for arsenic levels.

A work plan for this program is available in the FMC document repository at the Middleport Free Library at 9 Vernon Street. An information sheet that was sent to property owners is also available online at www.teapothollow.com.

Bioavailability of Middleport Soil

by Dr. Martin Reape, Director, FMC Health Sciences



Assessing the bioavailability of arsenic in soil is a complex process that is influenced by soil type, arsenic concentration and different absorption factors between children and adults. In soil, arsenic can form very stable compounds that are not "released" from the soil when the soil gets on human skin or if the soil is ingested. Arsenic that remains attached to the soil does not get absorbed into the body, and therefore, does not cause toxicity.

In order to understand how much of the arsenic in Middleport soils might be absorbed or interact with the body's metabolism after exposure, FMC has hired Exponent, a nationally regarded engineering and scientific consulting firm. Exponent designed and is overseeing studies aimed at understanding the bioavailability of arsenic from Middleport soils relative to soluble arsenic.

Some Middleport Soils Being Used

Exponent is working with two university research scientists who are conducting separate studies on soil arsenic bioavailability. Soil from three locations within Middleport environmental study areas is among the soil being used in the studies.

Dr. Stephen Roberts, Director of the Center for Environmental and Human Toxicology at the University of Florida, conducted an "in vivo" (inside a living organism) oral bioavailability study using monkeys and an "in vitro" (in a test tube) study.

Dr. Ronald Wester, a dermatoxicologist at the University of California at San Francisco, conducted a dermal (on the skin) absorption study using Rhesus monkeys.

in vitro - in an artificial environment outside a living organism.

Study Results

The study findings, expected to be available by year's end, will be shared with the Agencies and with the public.

The article Bioavailability of Metals in Contaminated Soils and Dust, has been reviewed and approved for publication on the USEPA's Web site. While it may not necessarily reflect official Agency policy it states, "Often, very high percentages (near 100%) of total metals are assumed bioavailable" and "The resulting risk calculations may overestimate the true risk of exposure to site media." (*See http://cfpub.epa.gov/si/osp_sciencedisplay.cfm?dirEntryID=81451.*) Additionally, the USEPA is using bioavailability studies in conjunction with environmental investigations throughout the country. (*See http://pacific.bizjournals.com/pacific/stories/2006/04/03/story2.html.*)

FMC believes that the studies being conducted by Exponent at the University of Florida will provide information specific to Middleport soils that the Agencies may take into consideration.

Bioavailability - the extent to which a substance can readily be absorbed by an organism or is ready to interact in an organism's metabolism.

(NYS DEC Glossary of Environmental Terms, www.dec.state.ny.us/website/reg8/der/glossA_F.html)

Animal Care During the Study

All of this research is conducted under the oversight of a quality assurance officer who is responsible for ensuring the humane treatment and health of the study animals, including housing, diet preparation, feeding, dose preparation and delivery, and urine sample collection.

No invasive procedures are used, and the animals are assessed daily, according to Yvette Lowney and Mike Ruby of Exponent.

The monkeys are provided toys and can watch videotapes on a VCR. Additionally, cages are set up in such a manner that the monkeys can see each other. Time in the metabolism cages is minimized before the animals are returned to their normal housing.

FMC Community Connection

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To review documents related to environmental activities at the plant, visit the FMC repository at the Middleport Free Library 9 Vernon Street Middleport, NY 14105 (716) 735-3281

Postal Customer

FMC Pitches in to Support Roy-Hart Youth Baseball

FMC is proud to be a sponsor of the Royalton-Hartland Youth Baseball League with an annual $150 donation for the 2006 baseball and softball season. League sponsors help cover the cost of uniforms, equipment and officials for more than 300 local girls and boys participating in the league.

FMC PLANT OPEN HOUSE

Saturday, October 21
11 a.m. - 2 p.m.

Call 735-3761, Ext. 289
for more information

Appreciation Awards Motivate Employees

Over 40 employee appreciation awards were given out in March and April as part of the FMC Middleport Appreciation Program. This program involves peer-to-peer recognition of employees for an excellent job or for "going the extra mile." Each month a drawing is held to select one or more of the appreciation recipients who will receive a gift card as an additional award.

(From left to right) Harold Scribner, Bill Yantz and Ed Doran recommend a co-worker for a Middleport Appreciation Award. The program was instituted by John Burinsky, (far right) Manufacturing Team Leader, to recognize a job well done, random acts of kindness and/or proper safety awareness.

Property Price Protection Program

Update Shared with CAP, MRAG

Sharrie Wartell of Community Interaction Consulting, the firm contracted to administer FMC's Property Price Protection Program in Middleport, presented a review of the program at the April meeting of the Middleport Community Advisory Panel (CAP) and to the Middleport Remediation Advisory Group (MRAG) on April 11.

FMC developed this program to provide assurance to Middleport residential property owners in areas that are subject to environmental remediation or investigation programs that their property values will not be adversely affected by these activities. The program was initially offered to the owners of fourteen properties that were remediated in 2003, and has subsequently been expanded to include additional areas identified by the environmental Agencies for investigation.

MRAG members toured one of the properties in which FMC has invested to make improvements that helped the property attract a buyer.

According to Wartell, the 2005 Multiple Listing Statistics (MLS) indicate the average list price of all Middleport Village properties has risen yearly since 2003, and on average, properties are selling at 96% of their list price. This is comparable to list price ratios around the country. She also noted the trend toward an increased number of residential home sale listings over the past year in Middleport, as well as in the neighboring communities of Lockport, and Medina.

We want to hear what you think!
Please return this card to us with your thoughts.

NAME: _____

ADDRESS: _____

CITY: _____ STATE: ____ ZIP: _____

PHONE: _____

E-MAIL ADDRESS: _____

- ☐ I would like to receive a copy of the article about Middleport's bio-monitoring study published in the Environmental Health Perspectives journal.
- ☐ I would like to receive further information about FMC's Middleport plant.
- ☐ I am interested in a tour of the FMC Middleport plant.

My specific question or comment is:

_____

_____

_____

_____

I would be interested in a workshop to learn about:

- ☐ RCRA Process - the Resource Conservation and Recovery Act
- ☐ Corrective Measures Study (CMS) process
- ☐ Risk Management

My topic(s) of interest are/is:

_____

_____

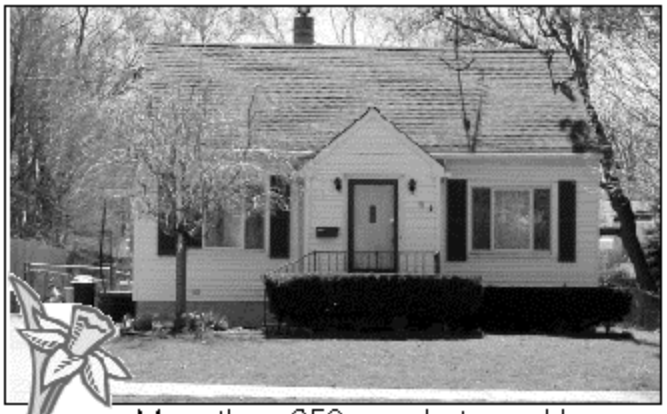
I would be interested in:

- ☐ Attending a workshop
- ☐ Receiving written materials
- ☐ I have all the information I need

- ☐ It is okay for FMC to share my comments with the NYS Departments of Environmental Conservation and Health and the US Environmental Protection Agency.

THANK YOU!

Spring Home Tour Held



More than 250 people toured homes at the Spring Fling Progressive Open House on Saturday, May 6. Homes for sale in FMC's Property Price Protection Program were shown by local real estate agents. Visitors entered to win door prizes at each home. A $250 grand prize was drawn at the end of the day. For more information contact Sharrie Wartell at 735-9769 or stop into the office at 15 Main Street in Middleport.

Please take a moment to share your thoughts on the enclosed comment card.

Each returned comment receives a personalized follow-up response.

FMC Community Connection

Comments are shared with elected officials and FMC staff. Topics from comment cards have covered:

THE ENVIRONMENT

HEALTH AND SAFETY

THE FUTURE OF FMC

PLANT OPERATIONS

PRESENTATION/TOUR REQUESTS

FMC Community Connection

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