

# ExxonMobil PROGRESS

## Greenpoint Community News

Dear Neighbor:

On behalf of the entire ExxonMobil team working in Greenpoint, I would like to welcome you to the first issue of the *ExxonMobil Greenpoint PROGRESS* newsletter. As the name suggests, information in this and future issues will help our neighbors in the community stay up-to-date on important developments as we continue our efforts on the Greenpoint Remediation Project.

I invite you to take a few minutes to read the pages of this first issue of *PROGRESS*. If you're not already familiar with our remediation project, you might want to start with the Progress Snapshot on page 5. This article underscores ExxonMobil's commitment to safeguarding our neighbors' health and safety in every aspect of our operation. On page 2, you will find good news about issuance of an important water treatment and discharge permit that allows ExxonMobil to continue recovering product using efficient technology. We are planning a series of "Snapshots" in upcoming issues to help give you a complete picture of where we are today and where we are heading.

In addition to providing information about the project, we are also excited to tell you about programs supporting educational initiatives for the Greenpoint community. Be sure to take a look at our Community Spotlight on page 4 featuring the dedicated Auxiliary Police volunteer organization, which ExxonMobil has been privileged to help support for more than 16 years. In our second issue later this year we will report on a grant to help PS 110 upgrade its computer lab—as well as grants to St. Cecilia School and St. Stanislaus Kostka School enabling science and math teachers at both schools to attend conferences for their professional development. The purpose of the conferences is to empower educators with new teaching skills in the area of science and math.

I would also like to take this opportunity to remind you of the other sources of information available from our ExxonMobil Greenpoint office. In addition to printed fact sheets, we are happy to provide on request a new educational video about our product recovery work. You can also find the fact sheets and video on our website at [www.exxonmobil.com/greenpoint](http://www.exxonmobil.com/greenpoint).

*If you have ideas about other articles you would like to see in future issues of ExxonMobil PROGRESS, please call contact us at 718-389-8789. I look forward to hearing from you.*

Sincerely,

*Carolina A. Asirifi*

**Carolina Asirifi**  
Community Liaison

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Here are the faces of just a few of the ExxonMobil team of over 75 people working in Greenpoint to help clean up the underground plume of petroleum products. Shown on the stairs at back (from left to right) are Ray Greenidge, Tom Grindinger, Vito Genova and Brian Cook. Standing in front (from left to right) are Bettina Ben Eleizer, Tracy Bisphan, Mike Smith, Renee Wong and Brian Lapp.



# DID YOU KNOW?

Drinking water in the area above the plume is safe. The use of groundwater beneath Brooklyn for drinking water purposes ended before 1950, and upstate reservoirs supply drinking water to most of New York City, including the Greenpoint community.



*This underground product storage tank is shown as it is placed in the ground during construction of a new product recovery well. It is one of 10 new wells approved by state and local authorities.*

## New Water Treatment and Discharge Permit Means Full Speed Ahead for Product Recovery

In late March, the New York State Department of Environmental Conservation (NYSDEC) issued a new water treatment and discharge permit to ExxonMobil. The permit is referred to as State Pollutant Discharge Elimination System (SPDES) permit and it governs the treatment and discharge of treated ground water. The new permit allows us to continue treating groundwater removed from the ground as a byproduct of operating our petroleum product recovery wells, and safely discharging the treated groundwater into Newtown Creek. The permit replaces “SPDES equivalent discharge authorizations” issued by NYSDEC in 2005 and modified in 2007, as well as earlier SPDES permits.



*Exterior view of water treatment plant.*

This is good news for both our product recovery program and the Greenpoint community. It means we can continue using efficient technology to clean up the underground plume of petroleum products as quickly as possible.

The **dual-pump recovery system** used in almost all of our product recovery wells in Greenpoint operates by depressing the water table to create a “cone of depression” that draws petroleum products along with some groundwater into the wells. This type of system recovers about 10 times more product than is possible using systems that remove oil, but not groundwater. Our typical operation in Greenpoint has been removing about 30,000 gallons of petroleum product a month using dual-pump wells, while pumping and treating 15 million gallons of groundwater each month. To date, we and others remediating here in Greenpoint have recovered more than 9.5 million gallons of product in total from the underground plume. We are completing the installation of 10 new dual-pump recovery wells and system upgrades in 2008 to further enhance our product recovery efforts.

After separating the water from the petroleum products, each dual-pump system sends product to recovery tanks. The petroleum product recovered in each well is stored in product storage tanks for transportation off-site and recycling. The water, in the meantime, is pumped to one of our treatment facilities. There the water is treated per our permit and is discharged into Newtown Creek.

*Process piping and controls inside one of our two water treatment plants are shown above. Groundwater removed during operation of our recovery wells is treated at these facilities to meet permit standards before discharge.*

# DID YOU KNOW?

More than nine and a half million gallons of product have been recovered by all the parties cleaning up the plume, and we are adding 10 new recovery wells to accelerate recovery.



*Piping shown here is being installed for another new product recovery well. This piping will house the groundwater and product pumps, sensors and controls for the well.*

## **Community participation in our application process**

ExxonMobil engineers were on hand at a well-attended community meeting held this past November 15 to explain this technology one-on-one to residents. Widely publicized in English, Polish and Spanish newspapers, as well as on posters displayed throughout Greenpoint, the purpose of the meeting was to seek community input regarding our water treatment and discharge application.

Our community meeting was organized to encourage personal discussion, and featured four talking stations dedicated to key parts of the product recovery and groundwater treatment and discharge processes. In addition to technology stations, other stations answered residents' questions about safeguards and compliance with discharge requirements.

## **Monitoring for safety and reliability**

Precise procedures for monitoring our water treatment and discharge operation also continue in place under the new SPDES permit. As required by the permit, independent laboratories are used to analyze samples of treated groundwater and the results are submitted to the NYSDEC each month. ExxonMobil is also required to submit quarterly and annual reports including supplemental information about system operation, maintenance and upgrade activities.



# *In the Community....*

## Spotlight on Police Force Volunteers

Recognized as the nation's leading volunteer crime prevention program for almost 60 years, the NYPD Auxiliary Police functions as extra "eyes and ears" for the Police Department. A visible presence on streets throughout the five boroughs, uniformed Auxiliary Police provide an invaluable service to our communities as they patrol, observe and reach out to residents to assist our police force in deterring crime.

ExxonMobil is proud to support the important work of this dedicated volunteer organization. Since 1991, annual donations have been made to support the Auxiliary Police who provide service to Greenpoint and neighboring communities in north Brooklyn. We are grateful to New York Assemblyman Vito Lopez (53rd district) for bringing us together with the Auxiliary Police so many years ago and for his continuing support of this productive partnership.

ExxonMobil's ongoing financial commitment to the Auxiliary Police benefits the organization's members and programs in four precincts. Over the years, ExxonMobil has donated over \$200,000 that has enabled the Auxiliary Police to purchase uniforms and much-needed equipment, including walkie talkies, bicycles and dispatch cases that help contribute to members' safety and effectiveness in their street patrols.

We look forward to the opportunity each year to meet Auxiliary volunteers, as well as family and friends, including many Greenpoint neighbors, at the annual dinner held in their honor at the Ridgewood Bushwick Senior Citizens Center. A highlight of our ongoing program, the dinner also gives us the opportunity to personally present the ExxonMobil donation for the year.

Knowing those donations are making a difference gives a lot of satisfaction to all of us on the ExxonMobil Greenpoint team. *"I would like to thank ExxonMobil for their donations. The Auxiliary unit of the New York City Police Department is a crucial component of our community. ExxonMobil's commitment has been instrumental in supporting the vital work these dedicated volunteers do to make Bushwick, Williamsburg and Greenpoint communities a better and safer place to live,"* said Assemblyman Lopez.



*Elena Zullo (third from left), Assistant Executive Director of the Ridgewood Bushwick Senior Citizens Council, accepts a check on behalf of the NYPD Auxiliary Police from ExxonMobil Community Liaison Carolina Asirifi for our 2008 contribution to the organization. New York Assemblyman Vito Lopez and ExxonMobil State Government Relations Manager Don Clarke (holding the mic) also participated in the presentation.*





# Progress Snapshot

## Focus on Community Health and Safety... Our Highest Priority

To safeguard your health and safety, we installed and maintain more than 240 monitoring wells to help us accurately identify the location and depth of the underground plume of petroleum products. We regularly check soil vapor monitoring points at approximately 100 locations throughout the area above the plume to monitor the soil and air for any signs of contamination. In addition to bi-annual soil and air vapor testing at all of those monitoring points, we also test air vapors in street utility manholes every month.

You may not be aware that our routine precautions include monitoring both ongoing and planned construction in the area. We then proactively contact parties responsible for construction to help ensure that proper, safe procedures for digging and excavating are followed.

### Results that give confidence

This ongoing monitoring gives us a wealth of data which we use to optimize recovery efforts. We know that the plume underneath

residential sections of Greenpoint generally lies at a depth of 30 to 40 feet below the surface. In the industrial area, where the plume lies generally at a depth of 15 to 30 feet below the surface, monitoring has detected some soil vapors at approximately three feet below street level, near the intersection of Bridgewater, Apollo and Norman. A new soil vapor extraction system is being installed to extract and safely dispose of those soil vapors.

Air vapor testing by ExxonMobil has yielded consistent results showing no sign of any contaminants from the plume. And residents can take an extra measure of confidence from the results of air vapor tests on 52 homes conducted by the NY State Department of Health (NYSDOH) from January to March 2007. In that study, air samples taken underneath foundation slabs were compared with basement and first-floor samples, as well as outdoor samples. Again the results were consistent—**no petroleum air vapors were found in the tested homes that could be linked in any way to the plume.** The report on the NYSDOH study is available at [www.dec.ny.gov/docs/remediation\\_hudson\\_pdf/s224087r1.pdf](http://www.dec.ny.gov/docs/remediation_hudson_pdf/s224087r1.pdf).



**■ = PLUME 1978**

shows the approximate size of the plume under Greenpoint according to a 1978 study conducted by the consulting firm of Geraghty & Miller for the United States Coast Guard.

**■ = PLUME 2007**

shows the reduced size of the plume as of 2007.

Source NYSDEC September 2006

**■ = Managed by BP**

**■ = Managed by Chevron**

*Monitoring wells located above the area of the plume allow us to determine accurately where the plume is located. ExxonMobil and other parties remediating in Greenpoint have significantly reduced the size of the plume. More than 9.5 million gallons of petroleum products have been recovered since it was discovered in 1978.*

# West Point Comes to Greenpoint



**West Point Cadets visiting our Greenpoint Facility** included (from left to right): Russ Raines, Paul Loboschefskey, Nate Curley, and Trevor Shirk.

**ExxonMobil**



*Standing outside one of our water treatment facilities, ExxonMobil project team members explain its operation to West Point cadets (from left to right) Pam Rusinko, Trevor Shirk, Paul Loboschefskey, and Nate Curley.*



*Visiting cadets study a display of system controls and recovery tank levels for the groundwater pump, product pump, product tank and sensors in a product recovery well.*

On March 27, seven cadets from the United States Military Academy at West Point, accompanied by two of their teachers, spent several hours touring ExxonMobil's remediation facilities in Greenpoint. The cadets are environmental engineering majors in the Department of Geography and Environmental Engineering at the Academy, where they are taking a course called Solid and Hazardous Waste Treatment and Remediation. Our project staff showed the cadets our full operation, including both onsite and offsite recovery wells and water treatment facilities. We also drove by some of the new wells that are currently being installed as we expand our product recovery program. The New York State Department of Environmental Conservation, which arranged the tour, gave a presentation as well.

Noting that the cadets are studying processes used at ExxonMobil's site during their course, Colonel Jason Lynch, said, *"This was an excellent opportunity for our students to not only see these processes in use, but also to speak with and learn from practitioners. Your staff made these systems come to life as they shared their lessons learned."*

**DID YOU KNOW?** Over 75 individuals are working hard every day on ExxonMobil's Greenpoint Remediation Project.