Community Update

WLPSG

WHITMOYER LABORATORIES
PRIVATE STUDY GROUP

Fall 1996 Issue Number 6

OU-Two Remediation Activities Now Complete

Over the past three years, residents of the Myerstown area have experienced a gradual change in the skyline as clean-up work at the Whitmoyer site has steadily progressed.

In the summer of 1995, the large grain silo, which had long loomed over the Borough of Myerstown, finally came down. Following that, the rest of the buildings slated for demolition were quickly and safely leveled.

"During the demolition process, materials from the buildings were carefully separated into hazardous and nonhazardous categories. Nonhazardous materials such as metals, brick and stone, glass, wood, and miscellaneous debris," explains Jennifer Bryson, ENVIRON project

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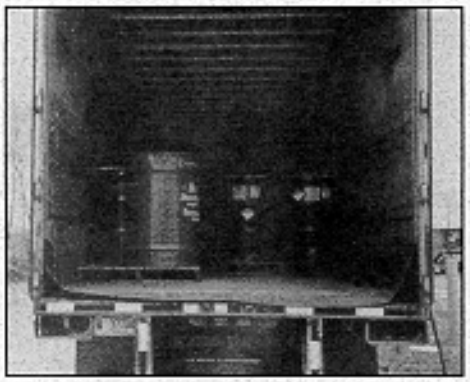

Trucks are loaded with drums, for transport off site to a variety of permanent disposal facilities.

Work at Whitmoyer Lab site continues

All activities at the Whitmoyer site are in accordance with a special document called the Record of Decision (ROD) issued by the United States Environmental Protection Agency (USEPA) in December 1990.

However, as new technologies become available or more is known about the site, the USEPA issues an Explanation of Significant Differences (ESD) to change the ROD.

"We were aware of the local public and the Pennsylvania Department of Environmental Protection's opposition to on-site incineration," explains Chris Corbett, USEPA remedial project manager. "We were pleased that many of the materials could now be sent off-site for treatment and disposal."

Public Meeting to be held November 12

The United States Environmental Protection Agency (EPA) will hold a public information meeting at 7:30 PM on November 12, in the Conference Room at the Jackson Township Municipal Building. The purpose of the meeting is to describe the progress of remediation at the Whitmoyer Laboratories site.

"We like to have regular progress meetings at all of our sites, "explains Lisa Brown, EPA community involvement facilitator. "The meeting will enable the community to see first hand the progress at the site."

Chris Corbett, EPA remedial project manager for the Whitmoyer site, will present a video of the recent work which has been completed. "We will also explain the next phase of remediation activity and the work that will be underway this fall and winter," says Corbett. Project Manager Jennifer Bryson of ENVIRON will also be there to explain the next phase of clean-up activities.

The meeting will last about an hour. The public is invited to attend and encouraged to ask questions.

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OU-2 Remediation Activities

manager, "were either recycled or disposed."

"Hazardous materials, such as discarded products and contaminated building materials, were sampled and sent off-site for treatment and disposal."

There were a number of underground storage tanks on site, too. These were emptied and cleaned, and will be removed as part of the OU-3, soil clean-up activities.

OU-2 Nonhazardous materials sent to landfills

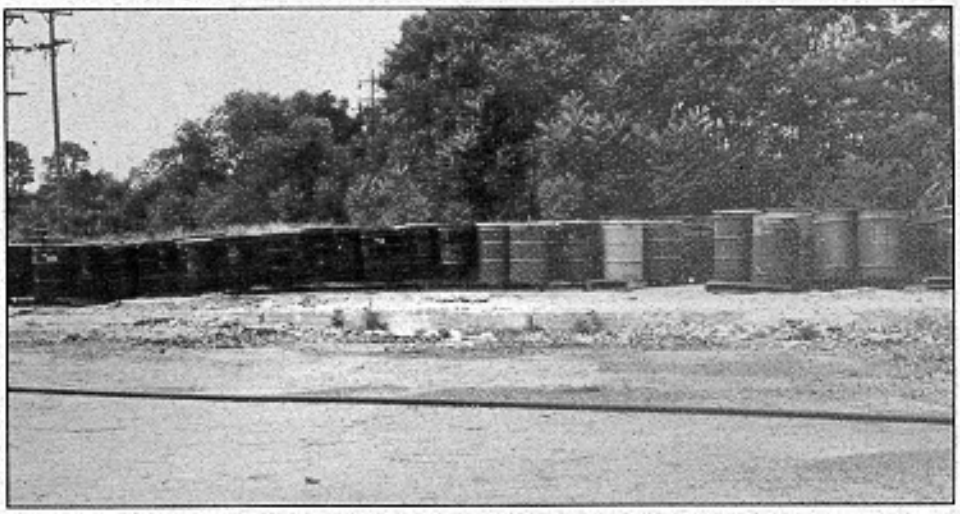
From September 1993 through July 1995, nonhazardous wood and debris from buildings, such as the original vault roof, an old farm house, and other structures on site were disposed of at various landfills. To the extent possible, metals and other materials which could be recycled, were (see chart).

Complex treatment for hazardous materials

"The remediation of the hazardous material from the site involved determining the most effective and efficient method of permanent disposal," explains Bryson. "The materials are sent to the unique facility licensed and equipped to dispose of each particular waste type."

Hazardous demolition debris, liquids which were pumped from underground storage tanks, and a variety of other hazardous wastes were transported via truck and treated at USEPA licensed treatment facilities.

Materials were treated in the most efficient method including biologic and chemical treatments, fixation or incineration (see chart).



Drummed miscellaneous materials and debris are staged prior to shipment to off-site facilities for treatment and disposal. The chart below indicates the variety of materials and permanent disposal sites used during clean-up of Operable Unit –2.

OU-2 Nonhazardous Waste

Waste Type	Volume/Weight	Technology	Facility
Vault Roof	4.2 tons	Landfill	Lanchester Landfill Lanchester, PA
Farmhouse, Vault Roof, & Miscellaneous Debris	1,168 tons	Landfill	Pottstown Landfill Pottstown, PA
Nonhazardous Asbestos	74 tons	Wet, Double Bag Landfill	
Metal Debris	780 tons	Power Wash & Recycle	S. D. Richman Sons, Inc. Philadelphia, PA
12 Drained PCB-free Transformers	3.6 tons	Recycle	
Personal Protective Equipment	208 cubic yards	Landfill	Chemical Waste Management Emelle, AL
Rust Residuals and Debris	approx. 7 tons		
Miscellaneous Products & Feedstocks	36.6 tons	Landfill	G.R.O.W.S. Landfill Morrisville, PA
Adhesives	1.38 tons	Incineration	Rollins Incinerator Bridgeport, NJ
Debris	0.7 tons		
PCB-free Transformer Oil	1 ton		

OU-2 Hazardous Waste

Waste Type	Volume/Weight	Technology	Facility
Liquids	224,010 gallons	Biologic and Chemical Treatment	Dupont Deepwater, NJ
Hazardous Debris	885 cubic yards	Fixation and Microencapsulation	Chemical Waste Management Emelle, AL
Miscellaneous Feedstocks and Debris	23 tons	Chemical Fixation and Micro/macro Encapsulation	
Light Ballasts, Electrical Boxes, and Transformers	8.9 tons	Incineration	Aptus/Rollins Incinerator Coffeyville, KS
24 lead/acid batteries	300 lbs.	Reclamation	Exide Facility Reading, PA
54 Lab Packs of Small Containers	.8 tons	Incineration	Aptus/Rollins Incinerator Deer Park, TX
Liquid Product Residuals, Floor Sweepings	63 tons	Incineration	Rollins Incinerator Bridgeport, NJ
Liquid Product Residuals	18.9 tons	Incineration	Aptus/Rollins Incinerator Aragonite, UT
Tank & Drain Residuals	1 ton		
Decon Pad Residuals	25 tons		
Gas Cylinders	.4 tons	Incineration or Chemical Treatment	Laidlaw/BDT Clarence, NY
Lab Packs	20 lbs.	Fixation	Highway 36 Landfill Deer Trail, CO

PADEP Project Manager Noreen Wagner Keeps Watchful Eye on Progress at the Whitmoyer Site

If clean-up activities at all of Noreen Wagner's Superfund sites went as smoothly as at the Whitmoyer Laboratories site, life for Noreen would be a breeze.

Not that she shows favorites, but as the Pennsylvania Department of Environmental Protection (PADEP) project manager for the Whitmoyer site and two other sites, Noreen has been pleased with recent progress in Myerstown.

Noreen's chief responsibility is to see that all state environmental requirements are met. Noreen says she visits Whitmoyer at least once per month, more often in the spring and during heavier construction times.

"At Whitmoyer, the Whitmoyer Laboratories Private Study Group (WLPSG) has been taking the lead and doing a lot of things on their own. When the Responsible Parties start clean-up, the PADEP is responsible for overseeing how they are doing the work. I review all the plans to make sure everything is on schedule and all criteria are met.

"I oversee progress at the site, but am not active in day-to-day activities. If there are any changes that need to be made from the original plans, we work with the EPA and the Responsible Parties to develop an acceptable solution."

At the Whitmoyer site, things are moving along smoothly and rapidly, according to Noreen. "There are few sites where the Potentially Responsible Parties come in and do a good job on their own," she said.

"(At Whitmoyer), they are not fighting us. WLPSG is moving through the clean-up very quickly. For me, the site is less difficult than a Hazardous Site Clean-up Act funded clean-up. Under a funded clean-up we conduct the clean-up with Department contractors and much more oversight is involved." She coordinates the schedules for clean-up and attends the public meetings at each site. "One of the biggest things I try to do is find ways to cut costs," Noreen said.

"If there is a process I haven't seen before, I always try to get out to see it," she added. "For me, with a background in engineering, being a project manager is very interesting. I like to get involved in every aspect of a project, like getting out to meet the people and setting the schedules. By being more involved, I get a better view of what's going on at the site."

Noreen started with the Pennsylvania Department of Environmental Resources in June 1988, fresh out of Lafayette College with a bachelor's degree in Environmental Engineering.

Three years into the job, she encountered a fringe benefit she hadn't anticipated. In 1991, she attended a Christmas party where representatives from both the Harrisburg Regional Office and the Lancaster District Office were present.

It just so happened that a certain Lancaster employee named Tim Wagner also attended the party that night. The two met and hit it off quite well. Three years later, in October 1994, they were married.

"I guess you could say that meeting my husband was the most significant event that I have encountered through my job," Noreen said.

Noreen Wagner, Pennsylvania Department of Environmental Protection project manager, is responsible for oversight at the Whitmoyer site. When on site, she must wear protective gear, (below) here in Level D, which requires hard hat, glasses, gloves, hard toed shoes, and over boots.

When not checking out Superfund sites, Noreen spends time working on the house that she and her husband recently purchased. She also enjoys working out at the gym about three times a week.

The Wagners have no children, but do have a dog named Nittany, named after Penn State's Nittany Lions. The black lab was appropriately designated. She became part of the family the day before the Rose Bowl. And, yes, Penn State won that game.

OU-Four Vault Wastes Disposed of Off Site

In September, 1995 the United States Environmental Protection Agency (USEPA) made a favorable decision regarding a change in the disposal and treatment of hazardous materials from the Whitmoyer Laboratories site.

The USEPA approved adjustments to the Record of Decision (ROD), the official document which details how the site must be cleaned up.

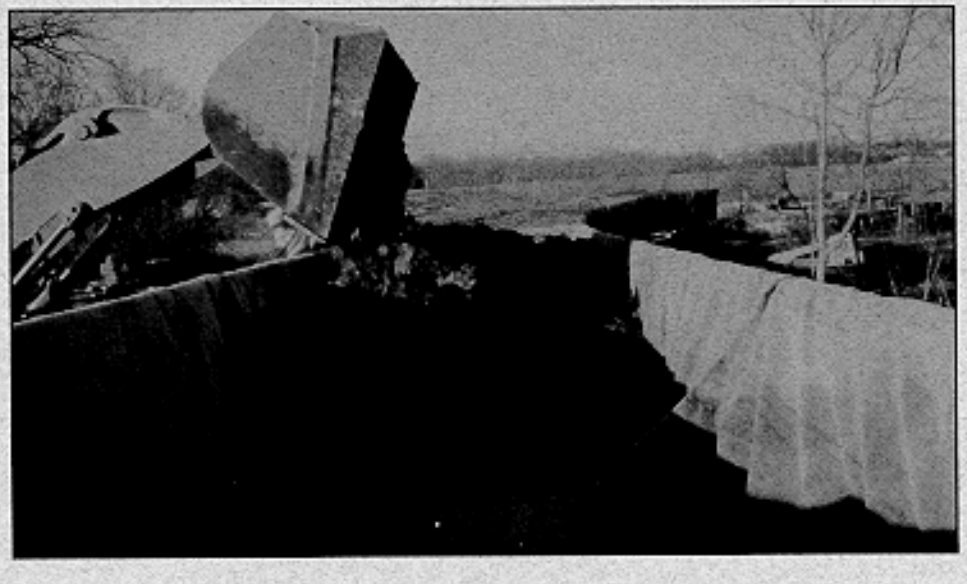
The Whitmoyer Laboratories Private Study Group (WLPSG) was permitted to use methods of disposal and treatment differing from the on site incineration initially specified in the ROD.

"This decision really pleased the residents in the area," comments Chris Corbett, USEPA remedial project manager.

"Since 1990, a number of new hazardous treatment facilities and technologies have been developed which more efficiently and effectively treat hazardous waste materials from the site," explains Corbett.

"I think everyone was pleased to see the materials go off site for incineration," he comments.

Workers prepare gondola rail car by placing a poly vinyl liner inside (above). Once the liner is securely in place, the front loader drops lower vault waste sludge into the car (below).



Lower Vault Waste is shipped off site

During the winter and spring of 1995–1996, Lower Vault Waste (LVW) was transported off site for treatment and disposal. Approximately 2,900 cubic yards of sludge and underlying sand were removed from the vault and shipped via rail to North Las Vegas, Nevada. There, the material was transferred by truck to U S Ecology's (ECOL) licensed hazardous waste treatment facility in Beatty, where the material was treated and disposed.

Removal begun in October '95

The excavation work, removing the sludge material from the vault, was initially undertaken in October 1995, by ECOL, as supervising contractor, and started by Chemical Reclamation, Inc. as on-site contractor. The work involved using a back hoe and front loader to scoop the sludge and transfer it to the gondola rail cars.

The vault is located about 200 yards from the rail spur. The roadway between the vault and the rail spur was protected with a thick poly vinyl cover to ensure that any spills could be quickly contained and the ground beneath protected from contamination.

Problems are resolved

The gondola cars were lined with thick poly vinyl sheeting and sludge deposited within. After the first three cars were loaded, it was discovered that liquid (rainwater and water added to prevent dust) was dripping from the cars onto the protective ground cover.

Action was immediately taken to resolve the problem. The cars were

unloaded and additional poly liners were installed. Bentonite, an absorbent material, was added to the sludge before replacing it into the gondola cars.

Railcars shipped to Nevada; Cold weather sets in

Approximately 280 tons of material were loaded into those first three railcars that left the site in November.

By the second week of December, the snow and ice prevented continuing safe operations.

Work stopped until March when Sevenson Environmental Services, Inc. of Niagara Falls, New York, was contracted to complete the excavation activities. During March and April, each Tuesday and Thursday, Conrail stopped at the site to remove three filled gondola cars and deliver three empty cars. The removal was complete on April 12, 1996.

Gondola car statistics

"Transportation of the material followed strict Department of Transportation guidelines for shipment," says Tom Fizzano, ENVIRON site coordinator.

"In total, 43 railcars were shipped. Two of these contained 75 tons of debris, poly vinyl, and other miscellaneous materials and the other 41 contained sludge." Treatment was complete on June 30.

OU-4 Nonhazardous Waste

Waste Type	Volume/Weight	Technology	Facility
Personal Protective Equipment	20 cubic yards	Landfill	Chemical Waste Management Emelle, AL
Crushed Empty Drums	7.3 tons	Incineration	Rollins Incinerator Deer Park, TX
One Drum	300 lbs.	Incineration	Aragonite Incinerator Aragonite, UT

OU-4 Hazardous Waste

Waste Type	Volume/Weight	Technology	Facility
Decon Water	41,650 gallons	Biological and Chemical Treatment	Dupont Deepwater, NJ
Upper Vault Waste: Carbon/Tar	80 cubic yards	Incineration Demonstration Test	Rollins Rotary Reactor Deer Park, TX
Upper Vault Waste: Lab Pack Drum	1 drum	Incineration	Rollins Incinerator Baton Rouge, LA
Upper Vault Waste: Drummed Tars	74.4 tons	Incineration	Aptus/Rollins Incinerator Aragonite, UT
Upper Vault Waste: Drummed Carbon/Tar	6 tons		
Upper Vault Waste: Drummed Misc. Wastes	15.9 tons		
Lower Vault Waste Sludge	12 cubic yards	Fixation Demonstration Test	Chemical Waste Management Emelle, AL
Lower Vault Waste Sludge	3777 tons	Fixation	US Ecology Beatty, NV
Debris	75 tons	Macroencapsulation	

Rail Spur enabled successful shipment of vault wastes

Using rail transportation was an expedient, safe, and inexpensive method to transport lower vault wastes to the off-site treatment facility in Nevada.

Reconstruction of the on-site rail spur began in September 1995, by Kennedy Railroad Builders, of Harrisburg.

"Rail shipments ensured a high level of safety to the communities through which these materials passed and saved several hundreds of thousands of dollars," explains Fizzano.

Use of rail transportation was approved by both USEPA and the Pennsylvania Department of Environmental Protection (PADEP).

Upper Vault Wastes — Drummed Tars and Miscellaneous Wastes incinerated off-site

Drummed materials were shipped off-site in small quantities to determine if incineration was feasible. The Rollins Rotary Reactor in Deer Park, Texas, accepted 80 cubic yards of upper vault wastes, carbon and tar, for demonstration tests.

The tests were successful and by February, drummed materials were beginning to be shipped off-site for incineration. In total, some 374 drums of wastes were removed from the site

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When the car is completely filled, the poly vinyl is securely wrapped over the load to ensure that no spills will occur.

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OU-Four clean-up complete

and shipped via truck to a Rollins facility in Utah.

Chris Zwieble, site safety officer, marks each car with appropriate Department of Transportation placards, the final step of preparation before the materials are shipped via rail to US Ecology's treatment facility in Beatty, Nevada.

There are limits to the amounts of wastes any incinerator can burn in a day. Thus the material is stored in Utah until it can be incinerated in accordance with their permit requirements and restrictions. The Rollins Incinerator expects to complete incineration by February 1997.

Other vault wastes remain

Still remaining on site and temporarily stored in Buildings 18 and 18-B are the Bulk Carbon/Tar wastes and Soils which were also excavated from the upper vault.

The WLPSG is currently issuing a Request for Proposals for repackaging and transporting Bulk Carbon/Tar wastes to various Rollins Incinerators. WLPSG is also preparing design plans and conducting lab tests to determine the most effective methods of off site fixation and disposal for the Soils. All vault wastes are expected to be off site by the middle of 1998.

"This phase of the remediation has gone extremely well," says Corbett. "The EPA is satisfied with the work progress at this site."

Analysis of soils and sediments affects OU-Three, OU-Five and OU-Six

Activities and studies involving OU-Three, Soils and Sediments, OU-Five, Lagoons, and OU-Six, Groundwater are being conducted simultaneously.

Groundwater, rain, and snow melt all impact the condition of the soils. During the past year, special gauges have been set up to measure ground water activity. The gauges also measure surface water elevation to determine how rain water and ground water mix at the Whitmoyer site.

As the seasons change, the location of the ground water table fluctuates. Knowledge of water movement is essential to effectively provide a plan to clean up the soils and sediments at the Whitmoyer site.

Buckeye Pipeline relocation

Another remedial action underway at the site is the relocation of the Buckeye Pipeline and Pumping Station. This facility has been decommissioned and the pipes serving the station relocated.

Operable Units (OUs) and Their Organization

In an effort to consolidate work and focus on the various tasks, the USEPA organizes projects into sections called Operable Units (OUs).

OU-1 related to Concentrated Liquids Stored in Tanks and Other Vessels. The EPA completed OU-1 in 1990.

OU-2 Buildings, Structures, and Miscellaneous Products and Feedstocks, which includes all the actual buildings on site and materials which were left on the site by the previous owner. A report certifying that this unit was complete was submitted to the USEPA in August 1996.

OU-3 Soils and Sediments, which includes all soils on the 22-acre site.

OU-4 Vault Wastes and Buried Drums, most of this unit is now complete, though some upper vault soils and carbon/tar are still on site.

OU-5 Lagoons, which covers two separate areas where evaporation lagoons were once located.

OU-6 Groundwater, which includes the groundwater that runs under the site.

Current remediation activities at the site are focused on OU-3 Soils and Sediments, OU-4 Vault Wastes and Buried Drums, OU-5 Lagoons, and OU-6 Groundwater.

OU-Six Groundwater Investigation Results in Preliminary Treatment Design

In November 1995, the Remedial Design groundwater investigation at the Whitmoyer site was completed. During the winter months, WLPSG used the information collected during this investigation to complete the preliminary design for a groundwater extraction and treatment system.

The proposed design includes active pumping in areas with arsenic concentrations in groundwater that exceed 1 part per million (PPM). Additionally, "hot-spot" pumping will be conducted in areas where arsenic concentrations exceed 100 PPM.

The pumped water will be treated on site using technologies that will remove organic contaminants and arsenic from the groundwater.

The draft preliminary design document was submitted to United States Environmental Protection Agency (USEPA) and the Pennsylvania Department of Environmental Protection (PADEP) in May 1996 for review.

The next step is the submission of the Pre-Final design in January 1997.

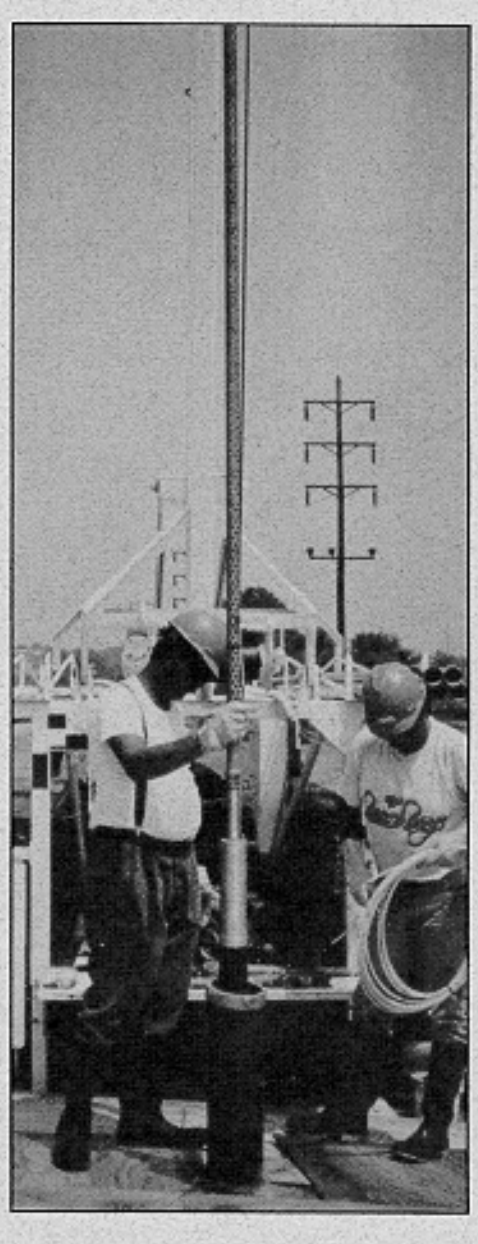
While work continues on the Pre-Final Design, the Whitmoyer Laboratories Private Study Group (WLPSG) is conducting an interim pumping program to provide some preliminary information about the "hot-spot" extraction system.

The pumping program has the beneficial effect of removing chemicals from the groundwater in "hot-spot" areas on site. The water pumped during the interim program is being treated by the temporary package treatment system that has been operating since 1994.

In addition to the interim pumping program, WLPSG is conducting studies along Tulpehocken Creek during 1996. The studies include water quality sampling at seven locations between Ramona Road and College Avenue.

Tulpehocken Creek will also be evaluated by measuring creek flow at various locations. This information will provide a base-line for creek conditions prior to the start of the Remedial Action.

Currently various oxidation treatments are also under study in pilot programs to reduce the organic content in water at the site. These pilot treatment programs will continue and the results will be fully analyzed before a permanent treatment facility is installed.



Several wells have been drilled on site to monitor and measure the groundwater. Here a crew is sampling a well (right). Once water is collected, it is analyzed for content as well as volume (below right). Narrow piezometers have also been installed at various locations on site to measure water level and pressure (below).

Information Available

The United States Environmental Protection Agency (USEPA) maintains a local information repository providing residents access to documents about the site clean-up. You can review these documents at:

MYERSTOWN PUBLIC LIBRARY
199 North College Street
Myerstown, PA 17067
(717) 866-2800

Keeping You Informed

To help answer any questions you may have, the WLPSG maintains a toll-free number.

The number is:
(800) 334-5263

or you may call or write:

Lisa Brown
Community Involvement Facilitator
at the USEPA:
(800) 553-2509
or (215) 566-5528
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The *Community Update* is published by the Whitmoyer Laboratories Private Study Group.

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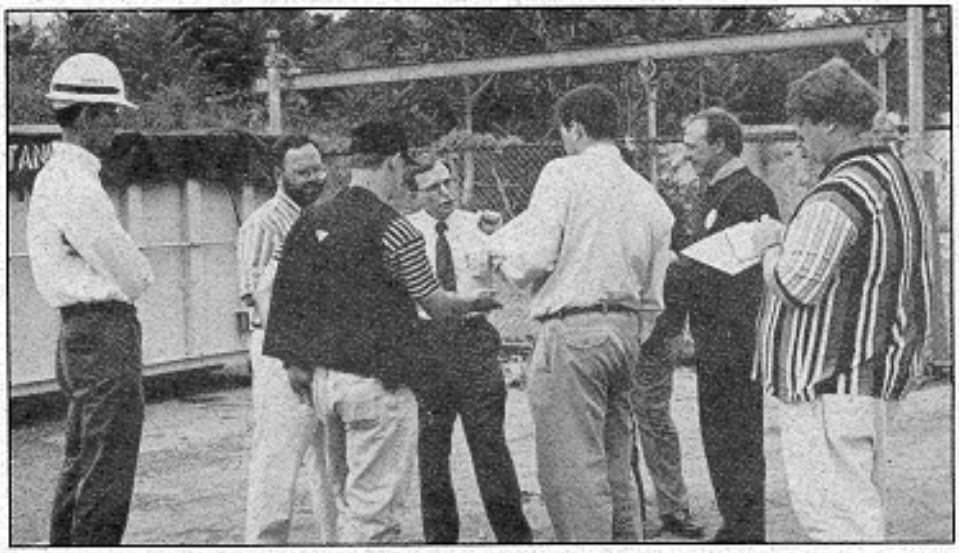
Just What Is WLPSG?

The Whitmoyer Laboratories Private Study Group (WLPSG) has been formed to coordinate clean-up tasks at the site of the former Whitmoyer Laboratories.

The clean-up work is planned and funded by the Whitmoyer Laboratories Private Study Group and is designed by ENVIRON, an environmental engineering and health science firm from Princeton, New Jersey. Jennifer Bryson, project manager from ENVIRON, assists WLPSG in selecting the most qualified firms to handle specific tasks and responsibilities.

All of the work is performed under the authority and quality assurance procedures of both the United States Environmental Protection Agency (USEPA) and the Pennsylvania Department of Environmental Protection (PADEP).



During September, 1995, Abraham Ferdas, associate director of Superfund Programs for The United States Environmental Protection Agency, USEPA Region III, (in the center with tie) spoke with regional news media outside the Whitmoyer gates to draw attention to the US Congress debate on Superfund reauthorization. Chris Corbett, USEPA project manager (in dark overalls), helps to explain progress at the site.

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