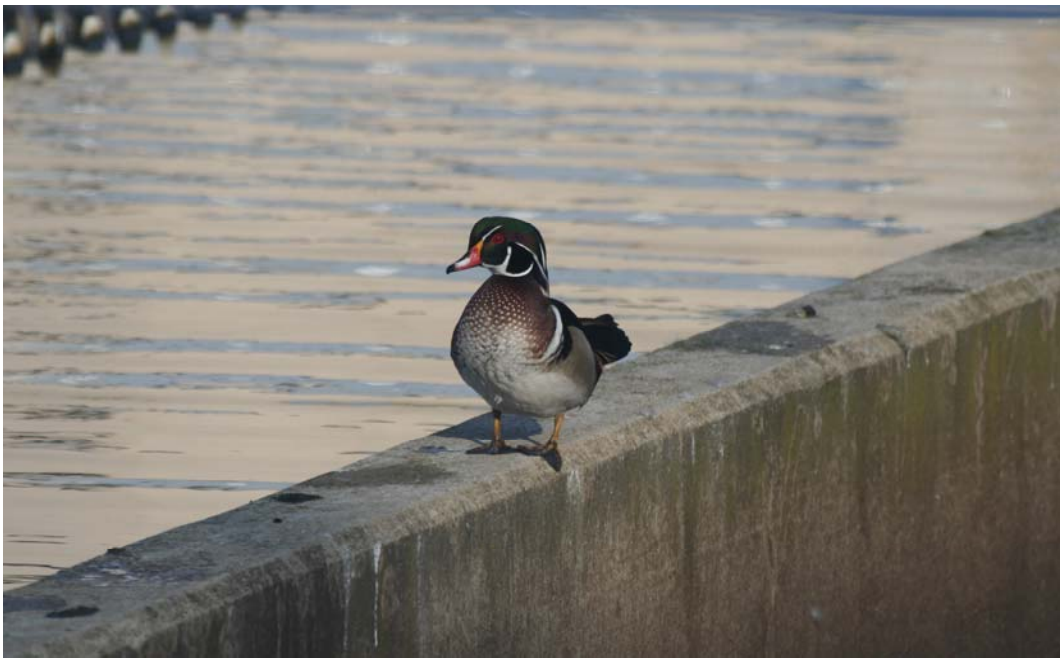
NPDES Permit No. IN 0025631



Muncie Sanitary District's

# BUREAU OF WATER QUALITY

## Pretreatment Program
## Annual Report
## 2008

Prepared by:
Rick Conrad, Director
Tom Bowling, Pretreatment Coordinator
April, 2009

# BUREAU OF WATER QUALITY

## LOCAL WATER POLLUTION CONTROL

"WE HAVE ONLY ONE EARTH, LET'S ALL WORK FOR ITS PROTECTION"
- John M. Craddock

5150 W. Kilgore Avenue
Muncie, Indiana 47304-4710

RICK C. CONRAD
DIRECTOR

TEL. (765) 747-4896 FAX (765) 213-6444

# CONTENTS

*"We have only one earth,*

**Muncie Sanitary District's**
# BUREAU OF WATER QUALITY

*let's all work for its protection"*
*John M. Craddock*

Bureau of Water Quality
5150 West Kilgore Avenue
Muncie, IN 47304-4710
Tel. (765) 747-4896
Fax (765) 213-6444
www.munciesanitary.org/bwq/

April 1, 2009

Natalie Maupin, State Pretreatment Coordinator
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 N. Senate Avenue
Indianapolis, IN 46204-2251

Re: 2008 Annual Pretreatment Report for Muncie, Indiana

Dear Ms. Maupin:

Please find attached the 2008 Annual Pretreatment Report for the City of Muncie, Indiana. Muncie's Pretreatment Program is administered by the Muncie Sanitary District's Bureau of Water Quality under the authority of the Indiana Department of Environmental Management and the US EPA Region V. Included in the order prescribed are the narrative, attachments, and completed report forms.

Please contact me or Thomas Bowling, Pretreatment Coordinator for the BWQ, should you have any questions.

Sincerely,

Rick Conrad, Director

Cc: Muncie Sanitary District Board of Sanitary Commissioners
Barbara Smith, MSD District Administrator
Ash Sajjad, EPA Region V

BUREAU OF WATER QUALITY
PRETREATMENT PROGRAM
ANNUAL REPORT

Since the establishment of the Bureau of Water Quality (BWQ) in 1972, the Muncie Sanitary District has been a pioneer in local water pollution testing and enforcement. The implementation of cooperative industrial pretreatment programs, emergency spill response related to stream pollution control, chemical and microbial analysis of the Muncie Water Pollution Control Facility and its feeding and receiving streams, and annual assessments of the health of fish, aquatic insects, mussels, and in-stream habitat continues to exceed the minimum legal requirements allocated by National Pollutant Discharge Elimination System (NPDES) permits. This commitment to acquiring a complete picture of water quality has led to dramatic improvements in the West Fork of White River in Delaware County and has made the Muncie Sanitary District's Bureau of Water Quality a model for local wastewater pretreatment and water quality management worldwide.

In the early 1970s, White River in Muncie was terribly polluted. As with many cities in Indiana, widespread industrialization had taken a serious toll on water quality. Combined sewer overflows (CSOs), battery and transmission plants, tool and die shops, and many other point source stressors that discharged to the river either directly or indirectly had gone unregulated. The resulting water quality degradation was the consequence of chemical agents whose sources were most associated with the common practice of dumping untreated wastewater directly into the river. Toxic pollutants such as ammonia, cyanide, and lead were in such high concentrations in White River that it was once unsuitable for all but the most tolerant forms of aquatic life and unusable for human recreation.

Before the Clean Water Act gave municipalities the legal authority to require pretreatment standards, the BWQ was already working with local industries to maintain voluntary compliance with its pretreatment standards. Both the City of Muncie and its industries have invested greatly in their pretreatment programs. The industrial community has spent approximately $14.5 million dollars within the Muncie Sanitary District for pretreatment equipment from the time the BWQ was established in 1972 through 2008. Of the BWQ's $944,677 annual budget, approximately 60% is allocated specifically for the industrial pretreatment program. The BWQ maintains a Pretreatment Coordinator, a Chemistry Section for laboratory analyses, Surveillance Section for field work, and Biological Section for stream surveillance, each with specific roles related to the pretreatment program.

Even as early in its history as 1982, when many cities were just beginning to establish their own pretreatment programs, the BWQ was already seeing measurable improvements in the quality of wastewater being collected by the MWPCF. Some of the changes could only be seen through chemical analyses; the reduction in metal concentrations reaching the MWPCF equates to removing 63 tons of metal every year. Some of the changes could be seen in the biology; since the BWQ's first biological assessments over thirty years ago, the number of fish in White River downstream of the MWPCF has doubled, and sensitive species like the smallmouth bass, longear sunfish, and many freshwater mussels have returned. And some of the changes were

easily visible to the naked eye; White River, which once ran orange and whose stream bottom was once nothing but sludge, is now clear and its substrate is once again a healthy mixture of gravel and cobble.

## PRETREATMENT SECTION

The BWQ's pretreatment program has been federally mandated through the United States Environmental Protection Agency (EPA) and the Indiana Department of Environmental Management (IDEM) to ensure the safe and effective operation of the Muncie Water Pollution Control Facility (MWPCF) and to protect the quality of the facility's receiving stream. Publicly owned treatments works are designed to remove contaminants and harmful organisms commonly associated with residential wastewater; however, many facilities including the MWPCF also service local industries whose wastewaters may contain uniquely toxic compounds capable of interfering with, passing through, or accumulating in the sewage sludge of the treatment facility. Through the pretreatment program, the BWQ serves as the Control Authority responsible for ensuring that local industries comply with the regulatory requirements of the EPA, IDEM, and Muncie's local Pretreatment Ordinance. Major responsibilities of the program include

- permitting industries
- sampling and analyzing industrial wastewater
- requiring industries to self-monitor their wastewaters
- requiring industries to implement spill response plans and pollution prevention (P2) management plans
- sampling and analyzing the MWPCF's influent, effluent, and biosolids
- sampling and analyzing the MWPCF's receiving stream

Industrial compliance is maintained nearly entirely through cooperation; however, the Bureau has the authority to issue enforcement actions including administrative orders, fines, and/or the termination of service to the MWPCF.

## LABORATORY SECTION

The BWQ laboratory is well equipped to ensure the accuracy, precision, and legal defensibility of its results. The qualified staff includes those with degrees in chemistry, biology, and environmental management. BWQ personnel attend professional seminars and workshops to stay up-to-date on current regulations, laboratory techniques, and other topics related to pretreatment. In the last ten years, over $1 million has been invested in renovating and upgrading the laboratory. Equipment available to the staff includes a SmartChem 140 Discrete Chemical Analyzer (2005), Inductively Couple Plasma Atomic Emission Spectrophotometer (ICP-AES), (2001), and trace-metal free digestion fume hoods.

In 2008, the BWQ Laboratory Section was awarded its 17$^{th}$ Indiana Water Environment Federation Laboratory Excellence Award based on quality assurance/quality control, record keeping, general procedures, safety, specific analytical procedures, facilities, and instrumentation. They also received across–the-board 100% scores on the EPA required Discharge Monitoring Report Quality Analysis evaluation. The Laboratory Section is responsible for analyzing daily samples

(365 days per year) taken from the MWPCF influent, effluent, and process waters. The Laboratory Section also analyzes samples from industries, local streams and rivers, and various local community driven projects aimed at improving water quality in and around the White River. Samples are taken for a wide range of parameters including metals, nutrients, and bacteriological contaminants. In all, thousands of analyses are run in the BWQ's laboratory each year.

During 2008, the Bureau conducted 126 compliance monitoring events on the 20 permitted industries in addition to collecting 437 samples in conjunction with the 215 scheduled and unscheduled sampling events associated with these industries. As part of its commitment to the environment, an additional 173 samples were collected during 67 sampling events from 10 non-permitted industries during 2008. These sampling events are scheduled to determine compliance with discharge limits established by the City of Muncie's Industrial Pretreatment Ordinance (Code of Ordinances, City of Muncie, Chapter 53).

Also, during 2008, the recorded contacts with the 20 permitted industries totaled 793. Included in these contacts were 112 telephone calls, 232 letters of correspondence between the Bureau and the industrial community, 142 visits/meetings/inspections, and 92 email contacts (see pie chart following IDEM Required Documents Attachment VI). Every effort is made to document each contact with our industries, but we realize that some verbal communications were not recorded.

## SURVEILLANCE SECTION

The BWQ's Surveillance Section is responsible for the collection of representative samples to be analyzed by the Laboratory Section. Available sampling equipment allows the collection of grab or composite samples from industries, the MWPCF, and its receiving stream. These sampling events are conducted to determine compliance with discharge limits established by the City of Muncie's Industrial Pretreatment Ordinance (Code of Ordinances, City of Muncie, Chapter 53). This section is made up of two degreed Surveillance personnel.

During 2008, the Surveillance Section collected over 1200 samples for the determination of water quality. A total of 437 samples were collected in conjunction with 215 scheduled and unscheduled sampling events associated with these industries. An additional 173 samples were collected during 67 sampling events from 10 non-permitted industries during 2008. Recorded contacts with the 20 permitted industries totaled 793. Included in these contacts were 112 telephone calls, 232 letters of correspondence, 142 visits/meetings/inspections, and 92 email contacts. Every effort is made to document each contact with our industries, but we realize that some verbal communications were not recorded.

The BWQ's Surveillance Section is made up of three degreed biologists and is responsible for the collection of representative samples to be analyzed by the Chemistry Section. Available sampling equipment allows the collection of grab or composite samples from industries, the MWPCF, and its receiving stream. The Surveillance Section has had capital equipment investments totaling approximately $145,000 over the past 17 years. Available equipment includes 14 programmable ISCO auto samplers as well as a fleet of four vehicles available for obtaining

samples and for emergency response.

## BIOLOGICAL SECTION

The BWQ is also one of only a handful of pretreatment programs in the country that incorporates biological assessments as an integral component of its receiving stream monitoring. Chemical testing and bioassays are intended to provide empirical and legal validity to assessments, but they often fail to give a complete picture of water quality because they substitute probable cause-effect relationships for direct observation. Organisms that spend most or all of their lives in the water are indicative of the combined influences on a stream; therefore, assessment of the integrity of biological communities represents a holistic measure of water quality with the ability to detect synergistic and antagonistic effects of the myriad compounds which may threaten the environment. Fish and benthic macroinvertebrates (i.e. aquatic insects and mussels), are core indicators of the biological integrity of streams. Community level analysis of these groups provides a measure of ecological sustainability that integrates all components of water pollution.

The Biology Section prepares two reports annually related to fish, mussels, and aquatic insects. These reports are submitted to the Indiana Department of Environmental Management and the Department of Natural Resources Division of Fish and Wildlife, and are available on the Bureau of Water Quality website. These reports have been used for over 30 years to document the condition and continuing improvement of the quality of Muncie's surface waters.

Also in 2008, the Biological Section began applying for grant funding to research the effects of endocrine disruptors, a "contaminant of emerging concern" found throughout the nation's waters. The proposed project will specifically look for unique responses of aquatic life to identify the extent of contamination in White River and will also look at possible ways of reducing the transport of these chemicals into local waterways.

## PUBLIC OUTREACH

Education and outreach are fundamental components of improving water quality, and in 2008 the BWQ contributed to a number of activities designed to teach or involve the public with water quality restoration and conservation. These activities included organization and participation in the 2008 White River Cleanup that involved nearly 400 citizens, participation in the Living Lightly Fair sponsored by Minnetrista, contribution to Earth Day at Ball State University, video taped interviews with Ball State University journalism students, demonstrations of biological sampling to Yorktown High School environmental science students, and maintenance of a permanent website hosted by the Muncie Sanitary District that describes the history of the BWQ and improvements in the water quality of the White River. Presentations to local industries have covered pretreatment regulations, sample collection and preservation techniques, laboratory quality assurance/quality control, storm water regulations, and many others. Additionally, the BWQ works to maintain a presence in the community through presentations for local civic, educational, and governmental groups

## COOPERATIVE PROJECTS

In 2008 the BWQ continued or began work on cooperative projects with other City of Muncie, Muncie Sanitary District, or community organizations related to monitoring water quality. These include a 319 grant-funded project to investigate water quality in headwater streams in Delaware County, a Center for Disease Control grant-funded project to investigate the effectiveness of rain barrels and rain gardens, the Muncie Water Pollution Control Facility's Long Term Control Plan requirement to investigate the impacts of combined sewer overflows in White River and Buck Creek, biennial biological monitoring for the City's MS4 program, and annual monitoring for the Sanitation Department's stormwater permit.

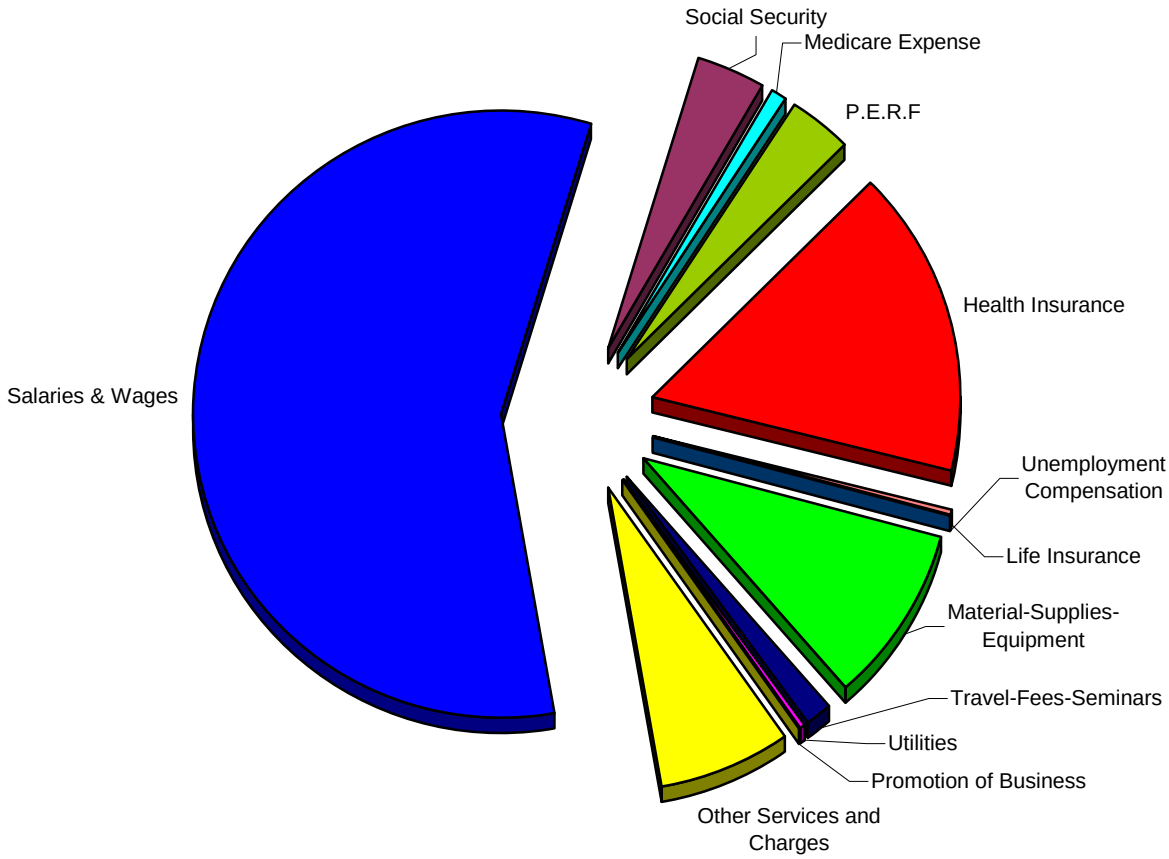
## INITIATIVES FOR 2009

In 2009, a specific focus will be placed on a few select goals. First, we will continue to encourage the use of the fats, oils and grease management plan by the Health Department and local food service establishments. We will continue to proceed with the MS4 illicit discharge detection and elimination mandate. We will seek to find additional grant-funded projects that focus on the removal endocrine disruptors from the Muncie Sanitary District collection system and local streams. We will continue to look for other various grant-funded projects that overlap work already being done by the BWQ or the Muncie Sanitary District. And we will continue to find new venues for public outreach and education.

Future initiatives for the pretreatment program include addressing new compounds of emerging concern (CEC). New compounds are continuously being developed for industry, medicine, and home use. As detection limits decrease, many of these chemicals have been found in wastewaters, surface waters, and even drinking waters across the country. The BWQ is planning research focusing on identifying the presence of a specific group of CECs known as endocrine disruptors that may be found within wastewaters collected by the MWPCF. This research represents one step towards addressing an increasingly diverse group of pollutants.

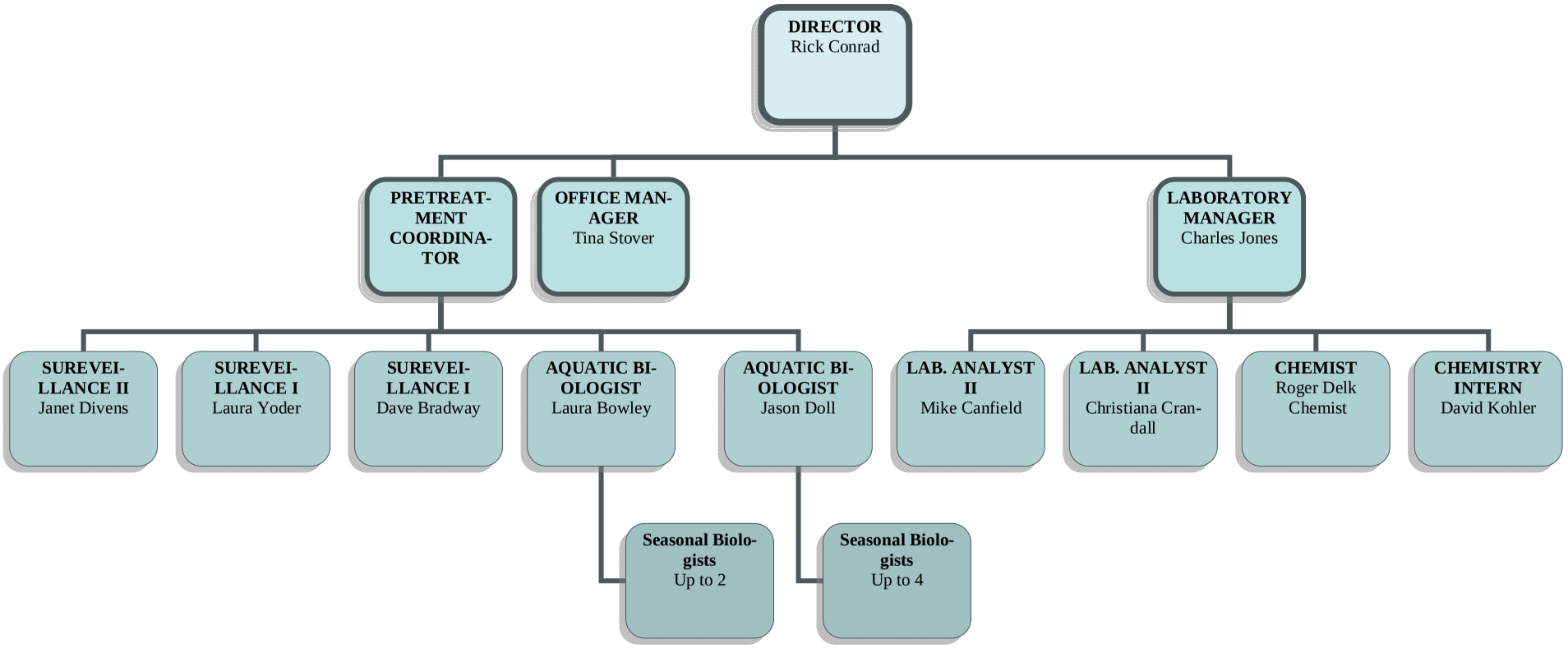
As it has for the past 35 years, the BWQ will continue to work with industries and private citizens to ensure that Muncie remains a leader in water quality management by ensuring that the resources of the White River remain healthy for the people of Muncie and Indiana.

BWQ Budget - 2008




| Description | Actual Y-T-D | Budget | Available | Used |
|---|---|---|---|---|
| Salaries & Wages | $ 573,954.02 | $ 600,000.00 | $ 26,045.98 | 96% |
| Social Security | $ 34,602.99 | $ 35,747.11 | $ 944.06 | 97% |
| Medicare Expense | $ 8,092.89 | $ 8,092.89 | $ 36.02 | 100% |
| P.E.R.F | $ 33,363.97 | $ 33,600.00 | $ 1,333.89 | 99% |
| Health Insurance | $ 165,000.00 | $ 200,000.00 | $ - | 83% |
| Life Insurance | $ 1,165.80 | $ 1,500.00 | $ - | 78% |
| Unemployment Compensation | $ - | $ 5,000.00 | $ 980.40 | 0% |
| Total Personnel Services | $ 816,179.67 | $ 883,940.00 | $ 29,340.35 | 92% |
| | | | | |
| Material-Supplies-Equipment | $ 96,318.01 | $ 103,956.71 | $ 7,638.70 | 93% |
| Travel-Fees-Seminars | $ 12,465.00 | $ 15,040.00 | $ 2,575.00 | 83% |
| Utilities | $ 4,039.00 | $ 10,000.00 | $ 5,961.00 | 40% |
| Promotion of Business | $ 10.01 | $ 5,000.00 | $ 4,989.99 | 0% |
| Other Services and Charges | $ 67,964.74 | $ 156,286.38 | $ 88,321.64 | 43% |
| Total Other Services | $ 180,796.76 | $ 290,283.09 | $ 109,486.33 | 62% |
| | | | | |
| **Bureau of Water Quality Total** | **$ 996,976.43** | **$ 1,174,223.09** | **$ 138,826.68** | **85%** |

BWQ Organizational Structure



Attachment I - Industrial Discharge Permits

| SIU | Date Permit Issued | Date Modified | Date Permit Expires |
|---|---|---|---|
| Borg Warner Automotive DTP, Inc. | 9/18/2008 | - | 9/17/2013 |
| CamTool, Inc. | 2/20/2007 | - | 2/19/2012 |
| Cintas | 2/28/2005 | - | 2/27/2010 |
| Delaware Machinery & Tool Co., Inc. | 4/28/2008 | - | 4/27/2013 |
| DynAmerica Manufacturing (CLOSED) | 10/9/2003 | - | 10/8/2008 |
| East Central Recycling | 5/13/2007 | - | 5/12/2012 |
| Exide Technologies | 10/15/2008 | - | 10/14/2013 |
| GKN Aerospace Muncie, Inc. | 9/17/2008 | - | 9/16/2013 |
| GK Technologies/Indiana Steel & Wire | 6/24/2005 | - | 6/23/2010 |
| H& H Commercial Heat Treating Co., Inc. | 5/26/2005 | - | 5/25/2010 |
| J & J Wehner Incorporated | 7/1/2008 | - | 6/30/2013 |
| King Indiana Forge Co., Inc. | 11/3/2008 | - | 11/2/2013 |
| Luick Quality Gage & Tool Co., Inc. | 10/17/2008 | - | 10/16/2013 |
| Magna Powertrain Muncie | 8/1/2006 | - | 7/31/2011 |
| Maxon Corporation | 9/20/2004 | - | 9/19/2009 |
| Mid-City Plating Co., Inc. | 5/15/2006 | - | 5/14/2011 |
| Mid-West Metal Products | 6/13/2006 | - | 6/12/2011 |
| Muncie Precision Hard Chrome | 10/13/2008 | - | 10/12/2013 |
| TFX Plating Company, LLC | 7/2/2008 | - | 7/1/2013 |
| Witt Galvanizing-Muncie | 7/30/2008 | - | 7/29/2013 |

The Bureau updates, revises, and reissues industrial permits when a change in the production processes occur or the industrial permit expires. This year it was necessary to reissue ten (10) permits due to permit expiration and terminate one (1) permit due to a cessation of operations.
Five (5) year discharge permits to the POTW are issued to industries, when required. Muncie had a total of twenty (20) permitted industries during 2008. Muncie has nineteen (19) permitted industries as of January 1, 2009.

Attachment II - Inspection and Monitoring

| SIU | No. of BWQ Inspections | BWQ Compliance Monitoring | Industrial Self-Monitoring |
|---|---|---|---|
| Borg Warner Automotive, DTP, Inc. | 1 | 52 | 83 |
| CamTool, Inc. | 1 | 18 | 48 |
| Cintas | 1 | 130 | 249 |
| Delaware Machinery & Tool Co., Inc. | 1 | 10 | 0 |
| DynAmerica Manufacturing | 3 | 42 | 128 |
| East Central Recycling | 1 | 60 | 84 |
| Exide Technologies | 1 | 49 | 1818 |
| GKN Aerospace Muncie, Inc. | 1 | 54 | 431 |
| GK Technologies/Indiana Steel & Wire | 1 | 52 | 1288 |
| H & H Commercial Heat Treating Co., Inc. | 1 | 55 | 48 |
| J & J Wehner Inc. (C) | 1 | 88 | Bureau |
| King Indiana Forge Co., Inc. | 1 | 0 | 0 |
| Luick Quality Gage & Tool Co., Inc. | 1 | 52 | Bureau |
| Magna Powertrain Muncie | **2** | 20 | 13 |
| Maxon Corporation | 1 | 36 | 40 |
| Mid-City Plating Co., Inc. | 6 | 36 | 560 |
| Mid-West Metals | 1 | 38 | 60 |
| Muncie Precision Hard Chrome (C) | 1 | 11 | Bureau |
| TFX Plating Company, LLC | 1 | 36 | 304 |
| Witt Galvanizing Muncie(C) | 1 | 44 | Bureau |
| Totals | 28 | 883 | 5154 |

Those companies with a (C) after their name have closed loop systems. As of January 2009, 15% of our industries have closed loop systems as part of the pollution prevention (P2) program.

The Industrial Self-Monitoring column contains (Bureau), in some of the spaces. The Bureau conducts the required testing for those industries for a variety of reasons. An example would be a hard chrome-plating firm with a totally closed system. They are permitted but do not have a process discharge. The Bureau, in that case, does the required monitoring on the connection to the sanitary sewer to make sure there are not any spills or leaks. The industry is required to sample in the case a problem develops.

The Bureau worked with the stand-alone hard chrome-plating firms in Muncie to go to closed loop systems with no process wastewater discharges from these operations in the 1970s and 1980s.

Attachment III - Compliance and Enforcement

| Significant Industrial User | Always Compliant | Minor Non-Compliance | Significant Non-Compliance | On Compliance Schedule | Back In Compliance | Publicized Non-Compliance |
|---|---|---|---|---|---|---|
| Borg Warner Automotive, DTP, Inc. | X | | | | | |
| CamTool, Inc. | X | | | | | |
| Cintas | | X | | | X | |
| City Machine Tool & Die Co., Inc. | X | | | | | |
| Delaware Machinery & Tool Co., Inc. | X | | | | | |
| DynAmerica Manufacturing | | X | | | X | |
| East Central Recycling | X | | | | | |
| Exide Technologies | X | | | | | |
| GKN Aerospace Muncie, Inc. | X | | | | | |
| GK Technologies/Indiana Steel & Wire | X | | | | | |
| H & H Commercial Heat Treating Co., Inc. | X | | | | | |
| J & J Wehner Inc. | X | | | | | |
| King Indiana Forge Co., Inc. | X | | | | | |
| Luick Quality Gage & Tool Co., Inc. | X | | | | | |
| Magna Powertrain Muncie | X | | | | | |
| Maxon Corporation | X | | | | | |
| Mid-City Plating Co., Inc. | | X | | | X | |
| Mid-West Metals | | X | | | X | |
| Muncie Precision Hard Chrome | X | | | | | |
| TFX Plating Company, LLC | X | | | | | |
| Witt Galvanizing Muncie | | | X | X | X | X |

The always compliant column includes those permitted industries that may have exceeded their discharge permit limits a limited number of times in relation to all sample results for to that industry. It might be, for example, a few self-monitoring samples out of a total of 100 samples taken during the year. We would not consider this Frequently in Minor Non-Compliance (MNC). MNC occurs when an industry develops a problem and the Bureau works with them to correct the problem before it becomes SNC. Muncie had 20 permitted industries during 2008.

Attachment IV – Public Notification (SNC) Legal Notice

SIGNIFICANT NON-COMPLIANCE (SNC) - 2008

During 1988, Muncie had five industries in Significant Non-Compliance. For 1989, this number was reduced to four and in 1990, the number dropped to two. As required by the EPA Clean Water Act, notices were published in the newspaper indicating each industry's noncompliance status, as was also the case for the one industry in SNC during 1991. The reduction from five industries (1988) to one industry (1991) being in SNC resulted from appropriate Enforcement Actions taken by the Bureau.

From 1991 to 1995, 1998, 2000, and 2001, Muncie did not have any industries in SNC. Enforcement Compliance Schedules (ECS) and Administrative Orders (AO) were issued to one industry during 1996, 1997 and 2001 and two industries in 1999. During 2003, Muncie had two industries in SNC. For the year 2004, Muncie had one industry in SNC. One Compliance schedule was issued to a permitted categorical industry and three Administrative Orders were issued to a permitted categorical industries and one Administrative Order was issued to a permitted non-categorical industry. These actions resulted in these industries returning to a compliant status. Muncie did not have any industries in SNC during 2005 and only one industry for 2006.

During 2008 Muncie had one industry in SNC. Because of this, the Bureau issued one compliance schedule and one letter of violation. A total of nine (9) verbal telephone notices were given to six (6) different industries.

Having only a total of eleven industries in the past seventeen years being in SNC, the Bureau and the industrial community through their time, efforts, concerns, and financial investments have a Pretreatment Program that works.

Muncie's Local Industrial Municipal Pretreatment Program, approved by the Indiana Department of Environmental Management (IDEM) and the United States Environmental Protection Agency (USEPA), requires that any industry in Significant Non-Compliance must be reported to IDEM and also have notice to that effect published in the local newspaper – See following page.

Ad placed by Tina Stover, BWQ

Form Prescribed by State Board of Accounts

General Form No. 99P (Rev. 2002)

Muncie Sanitary District
(Governmental Unit)

To: The Star Press

Muncie, IN

Witt Galvanizing County, Indiana _____
- Muncie

## PUBLISHER'S CLAIM

LINE COUNT

| | |
|---|---|
| Display Matter (Must not exceed two actual lines, neither of which shall total more than four solid lines of the type in which the body of the advertisement is set) number of equivalent lines | |
| Head – number of lines | |
| Body – number of lines | |
| Tail – number of lines | |
| Total number of lines in notice | 52 |

COMPUTATION OF CHARGES

| | |
|---|---|
| _____ lines, _____ columns wide equals 52 equivalent lines at 0.319 per line @ 1 days, | $ 16.59 |
| Additional charge for notices containing rule or tabular work (50 percent of above amount) | |
| Charge for proof(s) of publication | |
| TOTAL AMOUNT OF CLAIM | $ 16.59 |

DATA FOR COMPUTING COST

Width of single column 7.4 ems

Number of insertions 1

Size of type 6 point

Pursuant to the provisions and penalties of Ch. 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Susie M. James

Date: 01/09/, 2009 Title: Clerk

LEGAL NOTICES

NOTICE

In compliance with the public participation requirements of 40 CFR 403.8, Federal Pretreatment Standards under requirements of 40 CFR Part 25, WITT GALVANIZING-MUNCIE was in Significant Noncompliance (SNC) of the General Pretreatment Regulations for both the ALLOWABLE MONTHLY AVERAGE FOR ZINC DURING THE FIRST QUARTER AND SECOND QUARTER OF 2008. This company was under an enforcement action by the Muncie Sanitary District's Bureau of Water Quality and Witt Galvanizing-Muncie has complied with the conditions the Bureau set forth.

The Bureau is pleased with the concern, effort and progress of this company in correcting the problems that led to its non-compliant status. At the time of publication of this notice, Bureau of Water Quality, MSD and sample results show this company to be back in compliance with their monthly average permit limits for the General Pretreatment Regulations Monthly Average for Zinc.

Rick C. Conrad, Director
Bureau of Water Quality
Muncie Sanitary District

S5395969

SALES-0016 Rev. 10-07

## PUBLISHER'S AFFIDAVIT

State of Indiana )

) ss

Delaware County )

Personally appeared before me, a notary public in and for said county and state, the undersigned Susie M. James who, being duly sworn, says that She is clerk of The Star Press newspaper of general circulation printed and published in the English language in the city of Muncie in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time, the dates of publication being as follows:

JANUARY 09, 2009

Susie M. James

Subscribed and sworn to before me this 9 day of Jan, 2009

Tamara M. Reese
Notary Public

My Commission expires:

TAMARA M. REESE
Notary Public, State of Indiana
Delaware County
My Commission Expires
July 16, 2015

Attachment V - Work Plan Proposed for 2009

| SIU | Permit Expiration Date | BWQ Compliance Monitoring | SIU Self-Monitoring | Minimum Inspection Frequency |
|---|---|---|---|---|
| Borg Warner Automotive DTP, Inc. | 9/17/2013 | Quarterly | Weekly | Yearly |
| CamTool, Inc. | 3/1/2012 | Quarterly | Quarterly | Yearly |
| Cintas | 2/27/2010 | Quarterly | Weekly | Yearly |
| Delaware Machinery & Tool Co. | 4/27/2013 | Quarterly | Each Batch | Yearly |
| East Central Recycling | 5/12/2012 | Quarterly | Monthly | Yearly |
| Exide Technologies | 10/14/2013 | Quarterly | Daily/Batch | Yearly |
| GKN Aerospace Muncie, Inc. | 9/16/2013 | Quarterly | Weekly | Yearly |
| GK Technologies/IN Steel & Wire | 6/23/2010 | Quarterly | Daily | Yearly |
| H & H Commercial Heat Treating | 5/25/2010 | Quarterly | Quarterly | Yearly |
| J & J Wehner Incorporated | 6/30/2013 | Quarterly | Bureau | Yearly |
| King Indiana Forge Co., Inc. | 11/3/2013 | Quarterly | Weekly | Yearly |
| Luick Quality Gage & Tool Co. | 10/16/2013 | Quarterly | Bureau | Yearly |
| Magna Powertrain Muncie | 7/31/2011 | Quarterly | Quarterly | Yearly |
| Maxon Corporation | 9/19/2009 | Quarterly | Quarterly | Yearly |
| Mid-City Plating Co., Inc | 5/14/2011 | Quarterly | Weekly | Yearly |
| Mid-West Metal Products | 6/12/2011 | Quarterly | Each Batch | Yearly |
| Muncie Precision Hard Chrome | 10/12/2013 | Quarterly | Bureau | Yearly |
| TFX Plating Company, LLC | 4/27/2013 | Quarterly | 4 Consecutive days monthly | Yearly |
| Witt Galvanizing Muncie | 7/29/2013 | Quarterly | Bureau | Yearly |

The Compliance Monitoring Frequency column is only the minimum amount to be accomplished by the Bureau. During 2008, the Bureau conducted 126 sampling visits on the permitted industries that are both Categorical and Non-Categorical.

The Inspection Frequency column is the minimum only. During 2008, the Bureau conducted a total of 142 meetings, visits and inspections on the permitted industries.

Attachment VI - Pretreatment Performance Summary

**I. General Information**

**Control Authority Name** Bureau of Water Quality, MSD
**Address** 5150 West Kilgore Avenue
**City** Muncie
**Contact Person** Rick C. Conrad, Director
**Contact Telephone Number** (765) 747-4896
**NPDES No.** IN 0025631
**Reporting Period** 2008
**Total Categorical Industrial Users** 13
**Total Significant Non-categorical Industrial Users** 7

**I certify that the information contained is complete and accurate to the best of my knowledge.**

Rick C. Conrad, Director
**Authorized Representative**

**Signature** **Date**

| **II. Significant Industrial User Compliance** | **SIGNIFICANT INDUSTRIAL USERS** | |
|---|---|---|
| **Notes:** | **Categorical** | **Non-categorical** |
| **1) No. of SIUs Submitting BMRs/No. Required** | 0 / 0 | 0 / 0 |
| **2) No. of SIUs Submitting 90-Day Compliance Reports/No. Required** | 0 / 0 | 0 / 0 |
| **3) No. of SIUs Submitting Semiannual Report/No. Required** #1 | 11 / 11 | 7 /7 |
| **4) No. of SIUs Meeting Compliance Schedule/No. Required to Meet Schedule** | 1 / 1 | 0 / 0 |
| **5) No. of SIUs in Significant Noncompliance/Total No. of SIUs.** | 1 / 13 | 0 / 7 |
| **6) Rate of Significant Noncompliance for all SIUs (categorical and non-categorical).** | 1 / 20 = 5.00 | |

| **III. Compliance Monitoring Program** | | |
|---|---|---|
| **1) No. of Control Documents Issued/No. Required.** #2 | 7 / 7 | 2 / 2 |
| **2) No. of Non-sampling Inspections Conducted** | 55 | 19 |
| **3) No. of Sampling Visits Conducted.** #3 | 66 | 60 |
| **4) No. of Facilities Inspected (Non-sampling)** | 13 | 7 |
| **5) No. of Facilities Sampled.** #4 | 13 | 7 |

| **IV. Enforcement Actions** | | |
|---|---|---|
| **1) Compliance Schedules Issued/Schedules Required** | 1 / 1 | 0 / 0 |
| **2) Notices of Violations Issued to SIUs** | 1 | 0 |
| **3) Administrative Orders Issued to SIUs** | 0 | 0 |
| **4) Civil Suits Filed.** | 0 | 0 |
| **5) Criminal Suits Filed** | 0 | 0 |
| **6) Significant Violators (attach newspaper list).** | 1 | 0 |
| **7) Amount of Penalties Collected (total dollars/IUs assessed)** | 0 | 0 |
| **8) Other Actions (sewer bans, etc.) Verbal Notification** | 2 | 2 |

Notes

#1 Industries that submit reports are required by the Bureau quarterly, not semi-annually.

For industries not required to file reports, the Bureau of Water Quality, MSD performs all of the required monitoring for the permitted parameters.

#2 All industries whose five (5) year permits expired, had process changes, or had name changes. During 2008, one industry had its permit terminated and deactivated.

#3 Ten (10) non-permitted, non-categorical facilities were inspected by the Bureau of Water Quality, MSD during 2008. This resulted in 67 sampling events at these non-permitted facilities. This was to ensure that these industries did not require permitting and their discharge did not exceed local limits established in Muncie's Pretreatment Ordinance.

#4 Ten (10) non-permitted, non-categorical facilities were also sampled. This brings the total industries sampled by the Bureau of Water Quality to forty (30), including all permitted and non-permitted industries.

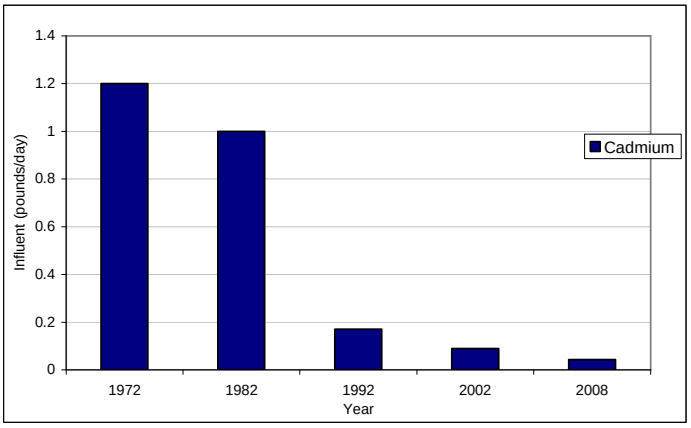
## MWPCF Influent - Metals

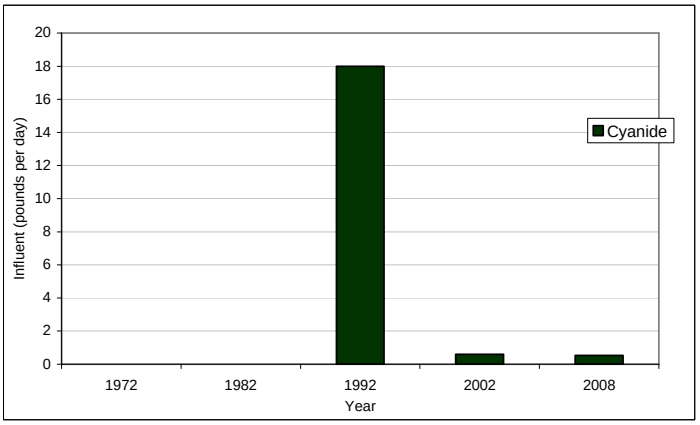
One means of demonstrating the overall effectiveness of Muncie's Pretreatment Program is to graphically present data associated with industrially related parameters in the Muncie Water Pollution Control Facility's (MWPCF) Influent, Effluent and Biosolids. A major portion of the wastewater entering the MWPCF from our industrial base is from metal finishing processes. Muncie has plating firms, zinc coaters, phosphate coaters, automotive transmission plants, a secondary lead smelter, heat treat operations, hammer shops, tool and die operations and others. The following graphs illustrate (1) Individual parameter pounds per day entering and being discharged from the MWPCF, (2) Total metals pounds per day and (3) Percent removal (1972 – 2008). For the purposes of comparison, the Bureau uses the Method Detection Limit or Level of Detection (MDL or LOD) as the basis for reporting results at the low end of the analytical curve.

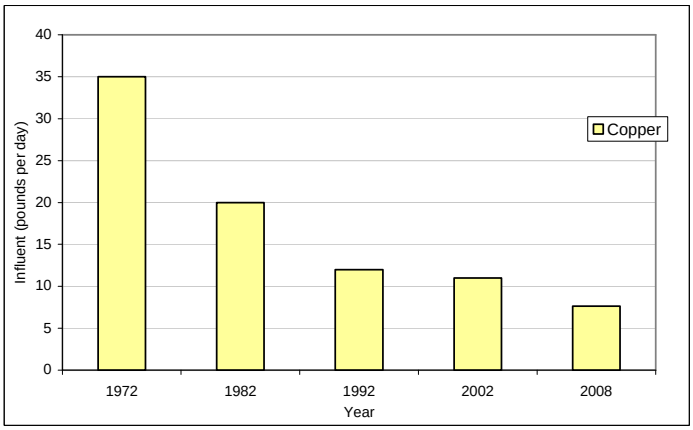
In 1972, the Bureau of Water Quality began working with the industrial community to reduce and/or eliminate the discharge of toxic chemicals to the POTW and to look for less toxic chemical replacements. An example of this would be requiring industries to replace chromium as an anticorrosive agent in cooling towers with a less toxic chemical. The overall effectiveness of a Pretreatment Program can be evaluated by determining the reduction in the regulated parameters from year to year. One can see in the following three sections, substantial reductions have taken place in the MWPCF Influent, Effluent and Biosolids. The graphs for the Influent and Effluent have units of pounds per day. Being directly related to flow measurements, pounds per day allows for a direct yearly comparison even though the flow at the MWPCF fluctuates from year to year. Using pounds per day, we can document the actual decrease in loadings to the MWPCF and West Fork White River. Biosolids concentrations are graphed using mg/Kg dry weight. Graphing dry weight concentrations for the Biosolids eliminates the percent moisture variable in the biosolid samples.

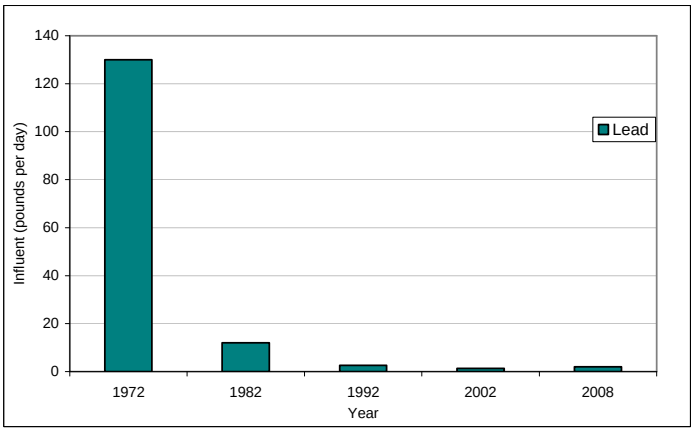
Following the creation of the Bureau of Water Quality in 1972, the amount of toxic metals entering the MWPCF has been reduced as a result of our Pretreatment Program by an average of approximately 133,000 pounds (66.5 tons) annually.

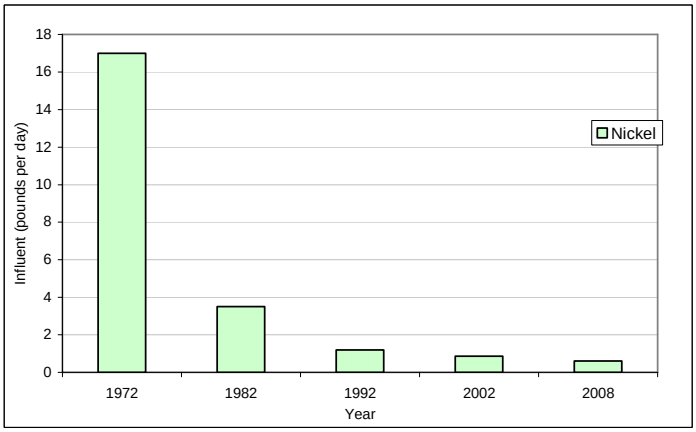
MWPCF Influent - Metals
1972 to 2008 Selected Years

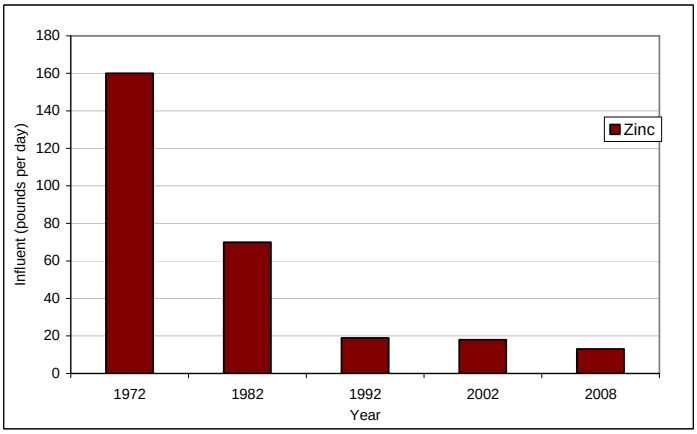


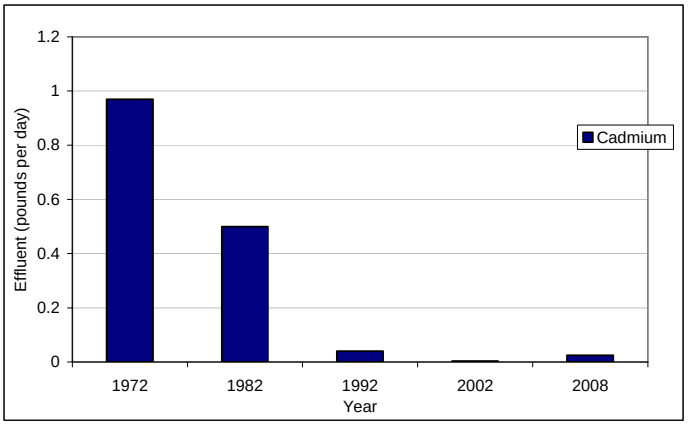
MWPCF Effluent - Metals

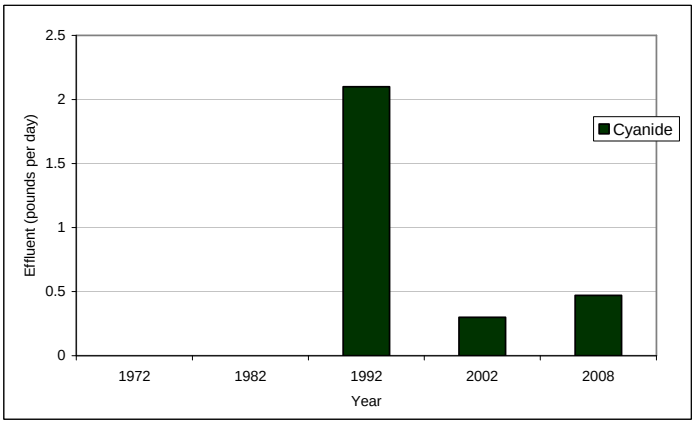
The Effluent graphs correspond to the charts in the previous Influent section with the addition of a graph that compares our NPDES discharge limits (IDEM permitted monthly mean) to the actual concentration of metals (yearly mean) being discharged to West Fork White River. We observe the concentration of Effluent toxic metals discharged to the river is decreasing, mirroring what is occurring in the Influent. Fewer toxic chemicals are being discharged to the POTW due to pretreatment, chemical substitution, pollution prevention (P2) activities and better housekeeping by the industrial community. This result is lower concentrations of toxic chemicals being discharged to the receiving stream.

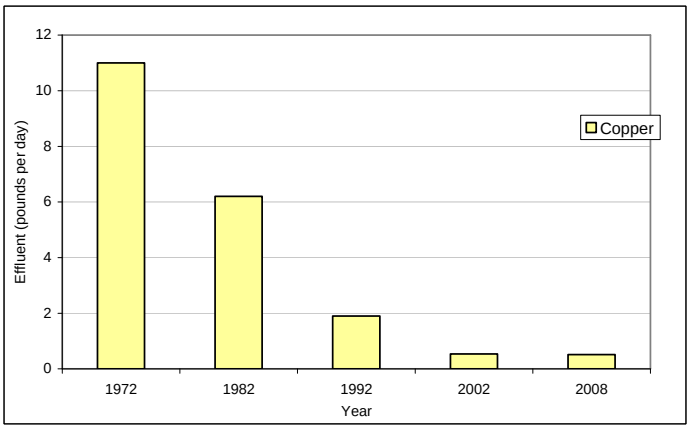
Following the creation of the Bureau 1972, we have reduced, through our Industrial Pretreatment Program, the mass quantities of permitted toxic chemicals discharged to the West Fork White River by an average of approximately 34,500 pounds (17.2 tons) annually. This reduction has greatly reduced the pollutant loadings that, in the past, contaminated the water column and sediment of the river. The end result is less bioaccumulation of pollutants and a significant increase in total numbers and diversity of pollution intolerant species living in our receiving stream.

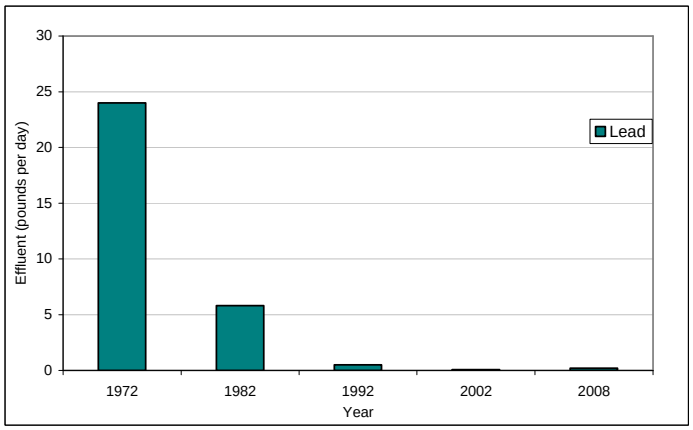
| Parameter | Mean Daily Concentration (mg/L) | Monthly Limit | Daily Limit | Percent Results Below Detection Limit | Percent Removal |
|---|---|---|---|---|---|
| Cyanide | 0.0030 | 0.004 | 0.008 | 100% | 11% |
| Cadmium | 0.00017 | 0.002 | 0.004 | 98% | 41% |
| Chromium | 0.0020 | | | 98% | 79% |
| Copper | 0.0035 | 0.02 | 0.05 | 91% | 93% |
| Lead | 0.0013 | 0.009 | 0.021 | 100% | 90% |
| Nickel | 0.0017 | 0.07 | 0.17 | 98% | 58% |
| Zinc | 0.020 | 0.19 | 0.44 | 0% | 77% |
| Mercury | 0.59 (ng/L) | - | - | 50% | 98% |

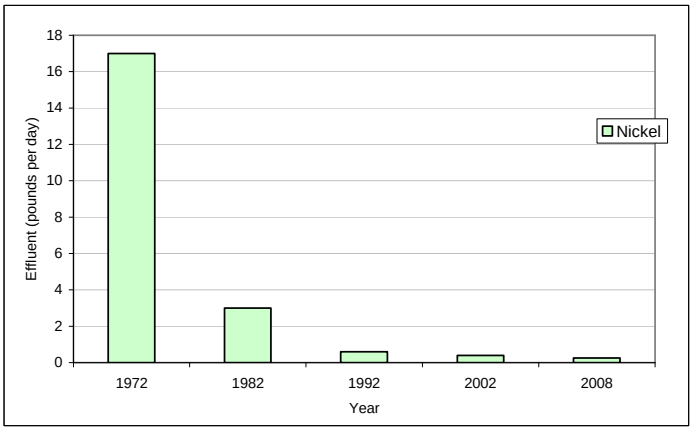
MWPCF Effluent - Metals
1972 to 2008 Selected Years

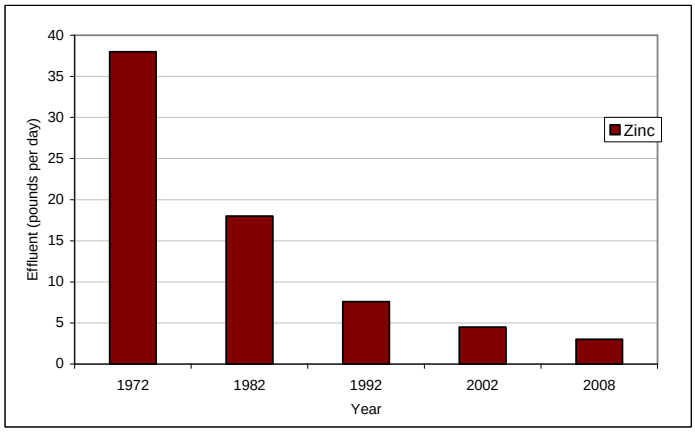


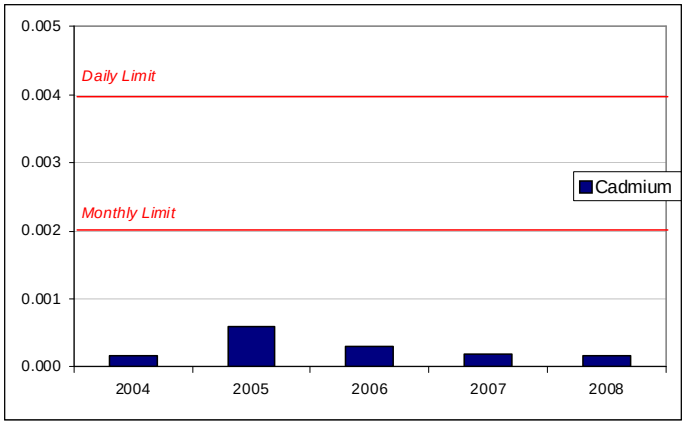



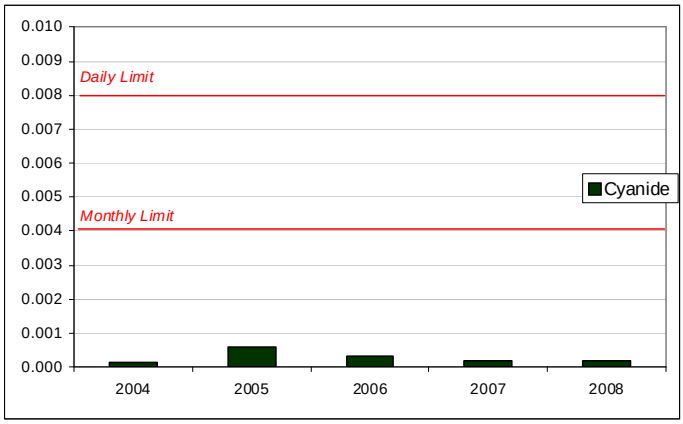



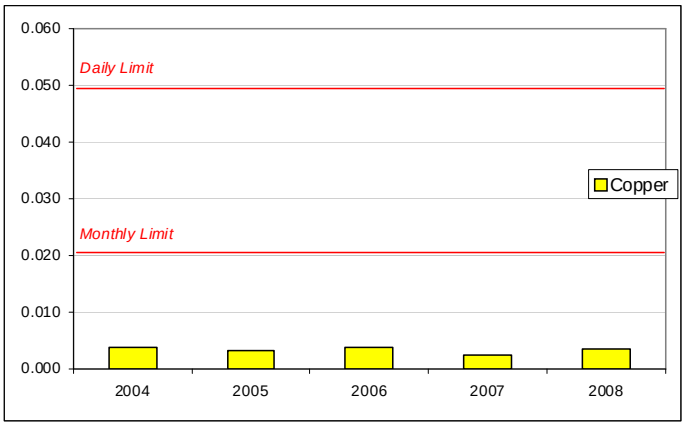



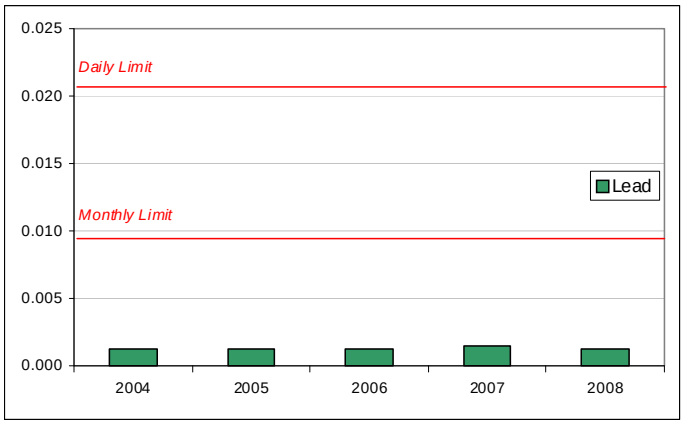



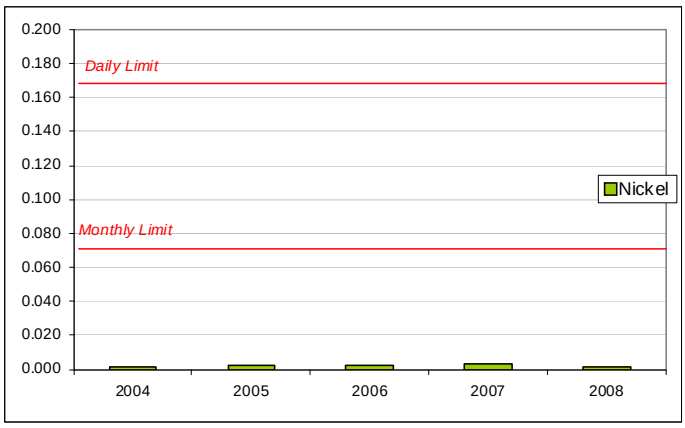
MWPCF Effluent - Metals
2004 to 2008 Including Permit Values

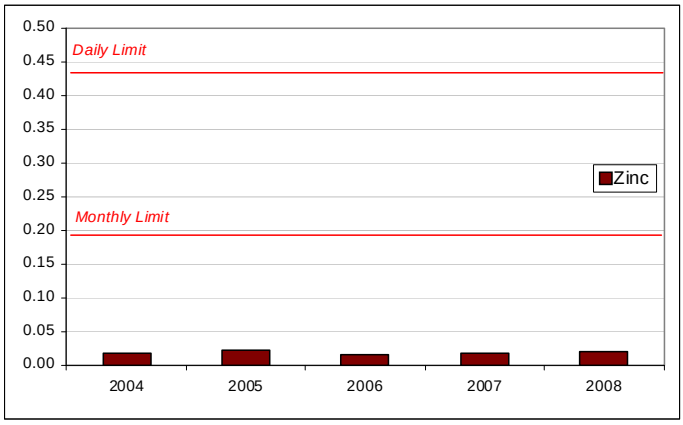


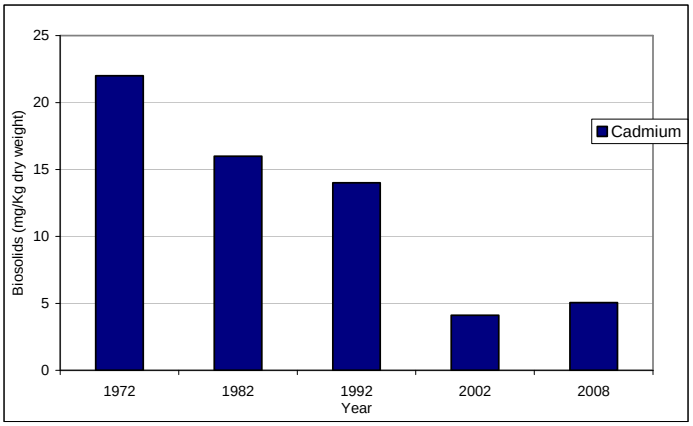



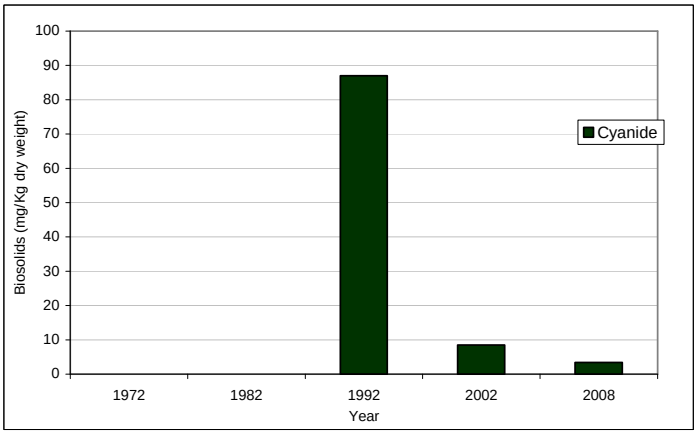
## MWPCF Biosolids – Metals

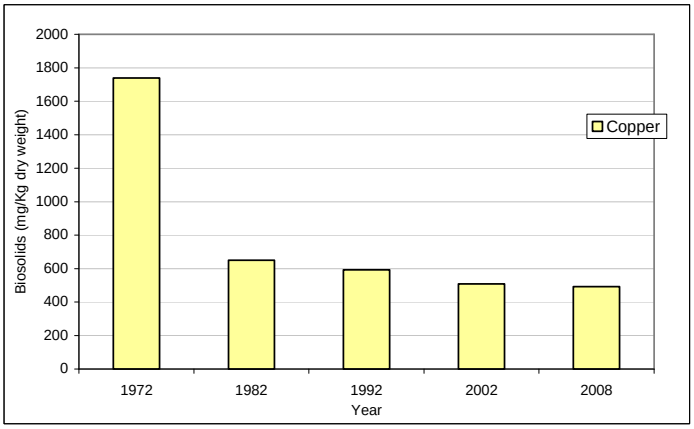
As discussed previously in this report, the MWPCF Biosolids is one of the three sample types that can be evaluated to measure the effectiveness of the Industrial Pretreatment Program. Most metals adhere to solids in a Water Pollution Control Facility and accumulate in the Biosolids. The concentrations of metals in the Biosolids should be reduced as a Pretreatment Program becomes more effective, reflecting the decrease in pound loading of toxic chemicals entering the WPCF. This, coupled with pollution prevention efforts by the industrial community, e.g., chemical substitution, better housekeeping, changes in production methods and others, will result in decreased chemical concentrations in the Biosolids (sludge).

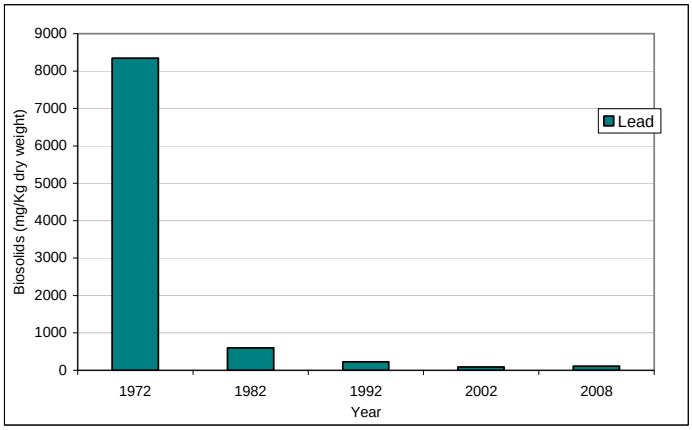
The results in the following graphs are expressed in milligrams per Kilogram (mg/Kg) dry weight making them comparable with other municipality's biosolids concentrations. A comparison using milligrams per Liter (mg/L) on a wet weight basis would not give a true comparison of the concentration levels as the percent total solids (%TS) found in Biosolids samples fluctuates from sample to sample and also between communities depending on the processes used, e.g., sludge thickening, de-watering and others. As our local Pretreatment Program has matured, we now observe small yearly fluctuations in the Biosolids metals and Total Toxic Organic (TTO) concentrations (graphic illustrations follow). Because of the exceptional level of compliance by Muncie's industries, we hypothesize these fluctuations are due to natural events occurring within the Muncie Sanitary District. Examples of these would be either stormwater entering the MWPCF through combined sewers contributing more pounds of cadmium, lead, and zinc during wet years as opposed to dry years and/or elevated cyanide loadings resulting from the rock salt applied to roads and parking lots during years with more snowfall events. In previous years, many of the Total Toxic Organics found not only in the Biosolids, but also in the Influent could be attributed to improper disposal of Household Hazardous Waste (HHW). With Muncie's aggressive recycling program, all residents of Delaware County are offered free disposal of hazardous waste, at the East-Central Recycling Facility (one of our permitted industries). As stated above, these yearly fluctuations are not due to a lack of diligence in operating our Pretreatment Program, but are small variations that are expected in a mature Pretreatment Program.

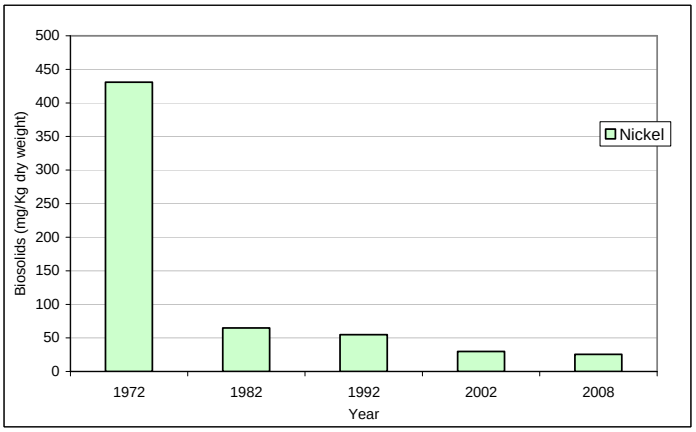
MWPCF Biosolids - Metals
1972 to 2008 Including Permit Values

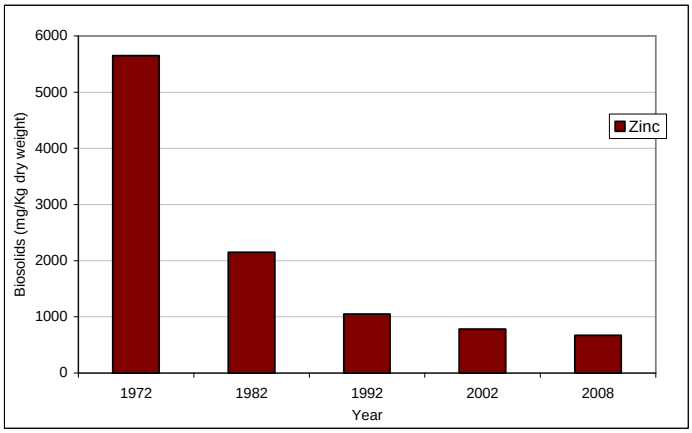


## Groundwater Remediation

Another emphasis of the Bureau of Water Quality's Pretreatment Program is the permitting and monitoring of groundwater remediation projects within the Muncie Sanitary District (MSD). Although this function is not a part of our USEPA and IDEM approved Local Pretreatment Ordinance, the necessity to monitor these cleanup projects relates back to our objectives of protecting the Muncie WPCF and waters of the State of Indiana within the MSD jurisdictional boundaries. Currently there are eight (8) permitted groundwater remediation projects discharging to the POTW in addition to a remediation project included in GK Technologies/Indiana Steel & Wire Industrial Discharge Permit. Four previously active underground remediation sites were granted or are awaiting **No Further Action** status by the Indiana Department of Environmental Management or had the underground remediation permit terminated. Of the remaining nine (9) active remediation projects, seven (7) projects involve the cleanup of contaminated groundwater associated with gasoline service stations, one project is located in a permitted non-categorical industry for the cleanup of an industrial plume, and the final project is located in a non-categorical/non-permitted industry and is for the cleanup of an industrial plume.

The Bureau typically requires these remediation projects be monitored for:

| Parameter | Typical Discharge Limit |
|---|---|
| Flow | Varies (gallons/day) |
| Benzene | 5.0 µg/L |
| Ethylbenzene | 700 µg/L |
| Toluene | 1000 µg/L |
| Total Xylene | 10,000 µg/L |
| Total Lead | 15.0 µg/L |
| Oil and Grease | 10.0 mg/L |
| Napthalene | 100 µg/L |
| MTBE | Report |

The Bureau of Water Quality Director has the discretion of adding additional parameters to this list if deemed necessary to protect the Muncie WPCF, West Fork White River and its tributaries. All other parameters not specifically listed in the Groundwater Discharge Permits, but contained in the Muncie Code of Ordinances, Chapter 53 "PRETREATMENT ORDINANCE" are also in effect. However, no monitoring for any other parameters is required unless deemed necessary by the Director. The one non-categorical/non-permitted industrial site monitors for a total of 19 organic parameters as part of their discharge permit. Wastewater discharges from these underground remediation units to the POTW during 2008 totaled 4,724,088 gallons. During 2008, from the nine (9) active underground wastewater discharge permitted facilities, a total of 588 samples were obtained with 1285 parameter analyses performed. Underground Remediation Discharge permit limits were exceeded a total of three (3) times in 2008, and a total of two (2) times in 2007, a significant reduction from the 10 documented during 2005. When these permit violations occur, the remediation units for these facilities are shut down, the problem corrected and acceptable analytical results submitted to the Bureau prior to the Bureau granting permission to restart these underground remediation units.

The Bureau of Water Quality will continue to monitor groundwater remediation projects and make every attempt to ensure these types of discharges go to the POTW rather than a receiving stream. This allows for additional treatment at the MWPCF of any contaminants that may pass through the remediation units. Following is a summary of the groundwater remediation units currently permitted by the Bureau.

Underground Remediation Unit Permits

| FACILITY LOCATION | PERMIT ISSUED | PERMIT EXPIRA-TION | MONITORING FREQUENCY |
|---|---|---|---|
| Amoco Station-Former BG. & G. Oil Co.<br>1915 W. McGalliard Ave.<br>UR 2005-006 | March 14, 2005 | August 12, 2008 | No Further Action |
| Crystal Flash<br>300 East McGalliard Ave.<br>UR 2004-005 | May 27, 2004 | May 26, 2009 | Monthly |
| Duffy Tool & Stamping, L.L.C.<br>3224 S. Meeker Ave.<br>UR 2005-009 | October 3, 2005 | October 2, 2010 | Monthly |
| Gas America # 30<br>3300 E. Jackson St.<br>UR 2006-001 | July 25, 2006 | July 24, 2008 | Weekly |
| Hoosier Pete # 11 G. & G. Oil Co.<br>2535 Hoyt Ave.<br>UR 2004-001 | January 28, 2004 | January 27, 2009 | Monthly |
| Marathon Petroleum Company-SSA #6042<br>1301 E. Jackson St.<br>UR 2007-001 | April 11, 2007 | April 10, 2011 | Weekly |
| Southside Hoosier Pete- G. & G. Oil Co.<br>1401 E. 29th St.<br>UR 2005-002 | January 26, 2005 | January 25, 2008 | Weekly |
| Village Pantry # 374 Astbury Environmental<br>1501 S. Macedonia Ave.<br>UR 2004-002 | February 20, 2003 | February 19, 2008 | Awaiting No Further Action |
| Village Pantry # 441 Astbury Environmental<br>101 E. McGalliard Ave.<br>UR 2005-008 | August 5, 2005 | August 4, 2010 | Every 50,000 gallons |
| Village Pantry # 500- G. & G. Oil Co.<br>715 W. University Ave.<br>UR 2006-002 | June 20, 2006 | June 19, 2008 | No Further Action |
| Village Pantry # 501- G. & G. Oil Co.<br>1800 W. Jackson St.<br>UR 2005-007 | July 6, 2005 | July 5, 2008 | Monthly |
| Village Pantry # 566- G. & G. Oil Co.<br>1901 S. Burlington Dr.<br>UR 2003-002 | January 3, 2005 | January 2, 2008 | No Further Action |

Pollution Prevention (P2)
1972 to 2008

The Bureau started to work with the Muncie industrial community in the early 1970's with what is now referred to as Pollution Prevention (P2) initiatives. An example of these efforts was the Bureau's requirement that Muncie's "Hard Chrome" plating firms become closed loop systems. This resulted in no process wastewaters being discharged from these type operations by the mid to late 1970's.

The Bureau has also worked with radiator repair shops to eliminate the discharge of lead contaminated wastewater to the POTW by requiring them to install closed loop systems and high pressure air cleaning to blow the lead contaminated fluid out of the radiators. We work with auto repair shops and gas stations to recycle spent oil and other fluids rather than discharging them into the sewer, an acceptable practice in the past. Silver reclaim units were installed at our local hospital and this practice continues as more businesses offer one-hour photo finishing services. Zinc etching processes in our two local newspapers were changed to a photographic process through the efforts of the Bureau as part of our efforts to reduce zinc loadings to the WPCF. These are just some examples of working with sources that do not usually come to mind when thinking of potential sources for an array of pollutants. Often we only think of the permitted categorical and non-categorical industries when incorporating (P2) initiatives.

The (P2) activities with permitted categorical and non-categorical industries along with other commercial establishments and non-permitted industries over the past thirty-four years have included everything from water conservation, closed loop systems, process changes, better industrial housekeeping, chemical substitution, the sealing of floor drains, constructing retaining/containment walls around process and chemical storage tanks, installing chemical storage areas, training programs and requiring chromium, molybdenum and zinc compounds not be used in cooling towers. Other initiatives instituted since 1972 were the rerouting or closing off loading dock drains, requiring chromium not be used in an air conditioning system if a bleed-off from the system is possible, changes in types of degreasers and many other practices where the Bureau and the commercial/industrial community partnered to improve the environment.

The Bureau has the authority to institute (P2) practices in its Enforcement Compliance Schedules (ECS) that are issued to industries when necessary. It has been our experience that when an industry can save money by reducing water usage, thereby lowering their water and sewer bills along with saving money by reduced chemical usage, the program is not a hard sell.

When an industry eliminates the use of a regulated chemical, its monitoring (testing) and reporting costs also decrease. When spill containment and management plans are instituted along with items such as retaining walls around tanks, elimination of floor drains and other practices, the environmental liability and regulatory processes affecting the industry also decrease.