

Muncie Sanitary District Information from 2009

1. **Sanitation –**

- a. 2009 Code Enforcement took 2379 properties to court
- b. Code Enforcement Officers visited 3025 properties. Many times properties are cleaned prior to court action. In 2009 the voluntary rate was 99.3%.
- c. Code Enforcement had 1 court ordered clean-up

Special Events

The Sanitation department was involved in 9 special events that required trash service in 2009. Those events included Mardi Gras, neighborhood clean-ups, Relay for Life, Gus Macker, River clean-up, Rib fest and Music Fest. From those events we dumped a total of 156.72 tons. It is important to note that the department was involved in a handful of other events that did not require trash service but that we had other involvement with, i.e. setting up tents, delivering tables etc.

Leaf Season

Leaf season lasted 6 weeks this year. Over that span we collected a total of 662.23 tons of leaves.

Overtime Cost

The total overtime payroll cost for 2009 was \$136,880.09. That figure is down from \$181,874.05 in 2008. (Difference of \$44,993.96) The decrease in funding needed for overtime may be attributed to automation of trash routes and attrition.

Total Payroll

Total personnel cost made payable in 2009 was \$2,309,980.41 down from \$2,533,703.78 in 2008. (Difference of \$223,723.37) Again these figures are largely due to the advancement of automated trash collection and attrition. We now service a larger customer base with fewer employees.

Annual Tonnage Figures

In 2009 the Sanitation Department collected a total of 32,848 tons of refuse. (65,695,535 pounds) That figure is up from the previous year which we reported at 29,540.09 tons (59,080,190 pounds). On average our trucks collect and dump 126.3 tons daily.

Other Relevant Information

- Implemented an electronic vehicle walk around inspection and GPS system (Zonar)
- Added two mobile home communities to our weekly collection routes.
- Moved our warehouse location from downtown to the Granville location.
- Installed waste oil heaters – IDEM Grant via Recycling Initiative

- Hired two full time employees
- Revised our Resolution
- Continued to move select stops from alley to street front
- Purchased two new automated trucks and replaced a stake bed.
- Supplied and delivered truck and screen for Friday night movie
- Provided truck to Prairie Creek Reservoir
- Added six new snow plows to our fleet vehicles bringing out total to 13.

2. **Water Pollution Control Facility –**

- Treated 5.9 billion gallons of wastewater as of 12/1/09
- Accomplished 98% BOD (Biological Oxygen Demand) reduction & 97% TSS (Total Suspended Solids) reduction within the same time period
- Hauled 5739 tons of Bio solids to the Randolph County Landfill as of 12/15/09
- Generated \$42,410 in tipping fees from septic haulers as of 12/15/09
- Currently, 19 of 25 WPCF employees hold Indiana Wastewater Certifications
- The remaining 2 ,circa 1983, belt presses were totally refurbished and brought to new specifications for approximately ½ the cost of purchasing 2 new presses
- As of 12/1/09, WPCF Personnel costs were approximately \$40,000 less than 2008 at this time
- WPCF Personnel have assisted in cleaning and televising of the North Area Interceptor line and the White River Interceptor line.
- All flood stations were brought up to current electrical codes and standards
- Currently, the WPCF is undergoing 2 projects, totaling over \$6 million to upgrade the Jakes Creek Lift Station (to meet an IDEM Agreed Order requirement). Jakes Creek Lift Station is being modified with a 2.5 million gallon equalization tank to prevent surcharges within the system upstream. The station is also being upgraded with new pump controls, variable frequency drives, coatings and a new emergency power generator.
- The second project is to replace and upgrade CSO #18 (An approved IDEM Early Action project for the Long Term Control Plan). The CSO 18 Project will move, modify & improve the existing CSO 18 structure with debris screening, monitoring improvements, and a new overflow structure. It will also serve as a flow junction structure for a future storm water treatment process if needed.
- The WPCF has had 0 (zero) IDEM Water Quality Non-Compliance incidents for 2009, as of 12/15/09

3. **Engineering –**

- Lengths of Sanitary Sewer Mains Replaced (372 feet total)
- 8 feet of 6” gravity sanitary sewers

246 feet of 8" gravity sanitary sewers
 6 feet of 10" gravity sanitary sewers
 83 feet of 12" gravity sanitary sewers
 5 feet of 18" gravity sanitary sewers
 24 feet of 36" gravity sanitary sewers
 Lengths of Laterals Replaced (1090 feet total)
 316 feet of 4" lateral pipe
 774 feet of 6" lateral pipe
 Lengths of Gravity Sanitary Sewer New (3535 feet total)
 228 feet of 6" gravity sanitary sewers
 1910 feet of 8" gravity sanitary sewers
 1397 feet of 10" gravity sanitary sewers
 Sanitary Sewer Manhole work (30)
 New with casting – 20
 Replaced with casting – 9
 Repaired - 1
 Lengths of Storm Sewer Pipe Replaced (1089 feet total)
 194 feet of 6" storm sewers
 132 feet of 8" storm sewers
 396 feet of 10" storm sewers
 158 feet of 12" storm sewers
 189 feet of 24" storm sewers
 20 feet of 42" storm sewers
 Stormwater Structures
 New Manholes – 6
 Replaced Manholes with casting – 18
 Repaired Manholes – 1
 New Inlets – 3
 Replaced Inlets with casting – 38
 Repaired Inlets – 8
 Replaced castings with lids – 83
 Reset casting with lid – 1

4. Bureau of Water Quality –

a. Pretreatment

- i. Industrial Sampling: The Bureau conducted 301 compliance monitoring events on 19 permitted industries and an additional 549 samples during 144 scheduled and unscheduled sampling events. An additional 249 samples were collected during 98 sampling events from 9 non-permitted industries during 2009. Sampling events are scheduled to determine compliance with discharge limits established by USEPA Categorical Industrial Discharge Standards and the City of Muncie's Industrial Pretreatment Ordinance (Code of Ordinances, City of Muncie, and Chapter 53).
- ii. Stream Sampling: The Bureau collected 1674 samples during 624 sampling events for the MWPCF's NPDES permit. Eleven

scheduled City Baselines accounted for 1122 samples during 198 sampling events from 17 sites throughout the city. The annual 208 White River Baseline had 114 samples collected from 19 locations during one sampling event. As part of a sub-contract with the Delaware County Soil and Water Conservation District, the Bureau collected 167 samples during 11 sampling events from 9 different locations for the community driven White River Watershed Project.

- iii. Industrial Contacts: The Bureau recorded 847 contacts with the 19 permitted industries. Included in these contacts were 89 telephone calls, 165 letters of correspondence, 180 visits/meetings/ inspections, and 29 email contacts. The Bureau also recorded 38 telephone calls, 68 letters of correspondence, 73 visits/meetings/ inspections, 120 email contacts, and 98 sampling events with 24 non-permitted/ non-categorical industries.
 - iv. Permit Updates: In 2009 Borg Warner, J&J Wehner, and King Indiana Forge, and Cintas closed their businesses and their discharge permits with the BWQ. This leaves a total of 49 industries/facilities regularly monitored by the BWQ, 16 of which are required to meet specific discharge limits as outlined in an individual discharge permit. Permitted industries which repeatedly fail to meet the requirements of their discharge permit may qualify as being in significant noncompliance (SNC). In 2009, no industries were in SNC. One new industry is in the process of applying for a discharge permit and is expected to be operational by Jan. 1st of 2010. The Bureau is also oversees the clean-up and remediation of two closed former industrial sites in Muncie.
 - v. Underground Remediation Unit Sampling and Activities: The Bureau oversees the discharge of 2,219,730 gallons into the Muncie sanitary sewer from nine underground remediation units. This is accomplished through the issuance of five-year discharge permits, sampling of wastewaters discharged from the underground remediation units, and reviewing submitted quarterly reports and sample results from the controlling facility for the underground remediation project. The Bureau also calculates total wastewater discharge for billing purposes.
- b. Laboratory: The BWQ Laboratory Section was awarded its 18th Indiana Water Environment Federation Laboratory Excellence Award in 2009 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 projects described below. Samples

are taken for a wide range of metals, nutrients, and bacteriological contaminants. In all, over 22,000 analyses were run in the BWQ's laboratory this year.

c. Biological Section:

- i. In 2009 the BWQ's Biological Section sampled 82 sites for fish, 46 sites for macroinvertebrates, and 5 sites for mussels within White River and its tributaries in and around Muncie for the health of aquatic life. A total of 65 species of fish, 13 species of mussels (or clams), and hundreds of species of aquatic insects were collected. The health of aquatic life in White River is very good, and well above many of the neighboring streams and tributaries in East Central Indiana.
- ii. 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 MSD 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.
- iii. The Biological Section continued applying for grant funding to research the effects of endocrine disruptors in the White River. 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. Sampling of sentinel species (bluntnose minnows) has already begun.

d. Incident/Spill Responses: In 2009 the BWQ responded to 14 incidents involving a spill or potential spill of pollutants to the MSD collection system, the MWPCF, or surface waters within Delaware County. In each case, the BWQ evaluates the severity of the threat, and, when necessary, applies appropriate spill management equipment such as oil booms and drain seals to lessen the potential impacts of the spill.

e. Illicit Discharge Detection and Elimination: In 2009, 94 flowing outfalls identified as Illicit Discharges (IDs) were evaluated using a flow-chart that characterized each based on their chemical make-up. The results of the evaluation identified the sources as 36 sewage, 37 tap water, 20 natural water, and 2 wash water. IDs were then prioritized based on their characterization with sewage being top priority, followed by wash water, tap water, and finally natural water source. Once all IDs were identified, characterized, and prioritized, maps of their drainage areas were made beginning with storm-sewer outfalls to streams in the MSD. The Bureau is currently tracking these outfalls. Outfalls are tracked either to their source or to a point where televised exploration is necessary.

- f. Cooperative Projects: In 2009 the BWQ continued or began work on cooperative projects with other MSD departments, the city of Muncie, 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.

5. Sewage Billing –

From 11/08 to 3/09 –

- a. 4,028 liens were recorded
- b. 6,426 liens were released (liens not placed on amounts under \$50.00 unless final bill)

From 4/09 to 10/09 –

- a. 4,256 claimed in the amount of \$446,849.07
- b. \$109,093.49 received from MSD Legal Council's office
- c. Did not receive a check from Treasurer's office for liens placed in 2009
- d. 819 Flat rate customers (on wells)
- e. Approximately 35,134 meters being billed
- f. Total number of customers – 35,953
- g. Average quarterly bill - \$60.00

6. Stormwater/MS4 Program

A. Major Items

- *City Hall Xeriscape - \$30,000 approx.*
- *Camp Prairie Creek – 40 students between ages 6 and 13*
- *18th & Macedonia Storm Sewer Project*
- *White River Clean-up – 480 volunteers – 16,000 pounds of debris cleared from river*
- *IDEM 5 year Program Audit completed – favorable results*

B. Events and educational programs

- *Muncie Home, Garden, Patio and Remodeling Show*
- *Delaware County Farm Festival*
- *Delaware County Public Health Forum*
- *Ball State Earth Day Celebration*
- *Delaware County Fair*
- *Minnetrissa's Farmers Market*
- *Garden Fair at Minnetrista*
- *Best Management Practice (BMP) Tour at McCulloch Park Rain Gardens*

- *Living Lightly Fair at Minnetrista*
 - *“Liquid Assets” documentary viewing and panel discussion*
 - *Yorktown Luminary Festival (December 12th from 2 to 6pm)*
 - *Municipal Department Good Housekeeping and Pollution Prevention Trainings:*
 - *Departments Trained:*
 - *County Highway Department*
 - *City Sanitation Department*
 - *City Streets Department*
 - *City Parks Department*
 - *Prairie Creek Reservoir Staff*
 - *Animal Shelter*
 - *Water Pollution Control*
 - *MSD Sewer Maintenance*
 - *Bureau of Water of Quality*
 - *Yorktown Employees*
 - *“Food for Thought” Panel Discussion at Scion/Toyota Dealership*
 - *Yorktown Library Project WET workshop with the summer reading program*
 - *Camp Prairie Creek – All MSD departments were represented as well as other educators*
 - *Rain Barrel Workshop for Community Center for Vital Aging*
 - *Roy C. Buley Center – 6 week education program for students*
 - *Ivy Tech Construction Management education program developed.*
 - *Erosion Control newsletters have been published on the website and emailed to contractors.*
 - *All Storm Water brochures have been updated.*
 - *April is Stormwater Pollution Prevention Month*
 - *Partnered with 6 local business including Pizza King, The White River Landing, Amazing Joe’s Grill, The Breakfast Nook, Osborn’s Country Kitchen and The Hideout in Yorktown using Stormwater Education Crossword Placemats given to patrons while they waited for their food.*
 - *Partnered with 2 local Coffee shops including Coffee Junkiez and The Blue Bottle using “Good Coffee Starts With Clean Water” coffee sleeves that had the stormwater management departments URL address*
 - *Coffee Junkiez reported handing out an estimated 5,000 coffee sleeves in the Month of April*
 - *Distributed outreach materials to several local downtown businesses and organizations including The Downtown Farmstand, The Blue Bottle, Kirk’s Bike Shop, Wishbone and Muncie Homeownership and Community Development*
 - *Facilitate information and traffic of our Rain Garden Registry Facebook fan page*
 - *Manage both stormwater websites www.wishthefish.com and www.raingardenregistry.com*
- C. Grants Administered
- *Centers for Disease Control Reducing Health Risks caused by flooding in Muncie Indiana. This \$120k/3 year grant has completed year 2, which saw the*

installation of two large rain gardens in the Whitely Neighborhood. A third garden was delayed due to municipal utility work and will be completed spring 2010.

- IDEM Pollution Prevention Grant – This \$60k 1 year grant enabled the purchase of beet juice products for the City of Muncie, Delaware County and the Town of Yorktown. All three are currently in use and will be evaluated for environmental benefits, cost effectiveness and product quality in the spring of 2010.
- Indiana American Water – For the second year in a row, Indiana American Water has contributed \$5k to the White River Clean-up
- Of note are two additional grants that we applied for but not received in 2009, both of these grants are being resubmitted for 2010. A \$65k 1 year EPA Community for a Renewed Environment (CARE) grant was applied for. The application process included renewing a large community steering committee, partnering with BSU and the City and conducting a public environmental risk survey. The second grant is a partnership between the stormwater department and the BWQ for an EPA Education grant which would see the development of an environmental learning video game that would utilize Wish the Fish and friends.

D. Storm Water Construction

- 18th & Macedonia Storm Sewer Construction began in 2009 and is scheduled to be completed Fall 2010 at a cost of around \$2 million dollars.
- Perdieu and Ewing is set for bid within the next couple months
- Additional projects not on the top 12 originally planned projects are being considered. American Structure Point has been contracted to do a probability study on Mayfield Addition and Engineering is examining possibility of repairing flooding issues at Greenway Depot.

E. Storm Water Construction Program

Construction Site Enforcement

- Total number of IDEM permitted sites inspected in 2009: 68
- Total Number of IDEM permitted sites cited for violation in 2009: 49
- Additional sites inspected which did not require SWPPPs and IDEM permits: 19 +

Plan Review

- Total number of Stormwater Pollution Prevention Plans Reviewed: 16
- Total number of SWPPP plans returned for revisions: 9

Illicit Discharge Inspection

- Illicit Discharge Summary:
Typical violations included:
 - Tracking
 - Sanitary sewer line problems
 - Commercial wash-downs
 - Illegal dumping of used motor oil
 - Illegal dumping of trash and tires
 - Illegal concrete washout

Wetland Summary:

Several sites were originally reported as being in violation of Rule 5. After investigating, these sites were determined to involve regulated wetlands. Each site was referred to IDEM Department of Wetlands.

David George property: pond	Released-1 acre
Scott Freestone property: peat removal	Released-1 acre
Doug Hoover Property: fill activity	IDEM Enforcement Action
Dale Hendrickson property: pond	Released, SWPPP filed
Arnold King Property: clearing activity	IDEM Enforcement Action
David Benedum property: draining	IDEM Enforcement Action

G. Yorktown Storm Water Utility billing was started in 2009.

7. **Recycling Efforts -**

- 19 Neighborhood clean-ups
 - 313,440 lbs. debris collected
 - Recycled Material – 26.97% not allowed to include numbers unless it is sold – have quite a bit on site – but not sold yet
 - White Goods- 1.32% or 439.82 tons
 - Leaves- 662.23 tons
 - Yard Waste – 2763.40 tons – leaves and limbs (all mulched or composted) – only allowed to count 25% of this for total recycling numbers
 - HHW- 22.63 tons
 - Tires- 75.7 tons
 - Electronics- 137.62 tons – either go to Work One or Unicor (Ohio) where they are dismantled or hard drives wiped cleaned and donated (not sent overseas – spelled out specifically in contract)
 - Reused Center – 4.42 tons
- East Central Recycling Tours
 - 93 tours
 - 67 classrooms
- Events
 - Delaware County Fair – trailer set up with recycling info and Mr. Blue
 - Day of Giving – TV and radio promotion
 - Living Lightly – weekend event – trailer set up with recycling info and Mr. Blue, Recycling Express (children’s train)
 - Garden Fair – weekend event – trailer set up with recycling info and Mr. Blue, Recycling Express
 - Santa Arrival – TV, radio, 6 week promotion
 - Mall-o-ween – TV, radio, staffed table with candy and recycling pencils
 - Muncie Gras – All day, all night with trailer, Mr. Blue, cans for cash (National Mayor’s conference program – contest for number of cans recycled for that night – came in 3rd nation-wide)
 - Treats for Troops – radio, Marsh on Wheeling live remote, games and recycling info
 - New Year’s Eve Ball Drop – recycled ball, TV, radio

- TRIAD Drug Drops (2) – 2,310 pounds of drugs were taken in and destroyed
 - Youth Reach – summer environmental outreach, provide on class a week for 6 weeks
 - Coat Drive – donated totes
 - Spring Zing – 2 day, trailer, Mr. Blue, train, recycling games
 - Rib Fest – 2 day, trailer, Mr. Blue, training, recycling games
 - Music Fest – Recycling phone drive, trailer, Mr. Blue
 - Muncie Black Expo – trailer, Mr. Blue
 - Habitat Home Store Programs – Reuse campaign – IDEM Grant
 - BSU panels & community partners – speaking engagements for Nikki (approx. 10 panels)
 - Cardinal Greenway Turkey Trot & Polar Express – Mr. Blue, trailer
 - Mayor’s Roundtable – Mr. Blue, bags, recycling info and other misc.
 - Show Off Your City – Mr. Blue, trailer, tours, trash trucks at ECR
 - Sutton Earth Week – Mr. Blue, information, games
 - Shred Your Files Day – approx. 20,000 lbs
- HHW IDEM Grant – disposal and supplies to office MSD cost - \$20,000
 - Reuse Center is open to all educators and non-profits 11 months out of the year. This is material that would have made its way to the landfill – now being reused instead

8. Sewer Maintenance -

- Number of sewer complaints received and addressed: 781
Note: This figure represents a multitude of complaints. Flooding, back-ups, Inlets needing cleaned, sewer odor problems. Etc.
- The Mowing Crew worked on the following special projects:
 - a. Maintained their normal routine of levy control
 - b. Mowed and cleaned up area for road access to Plant
 - c. Sprayed for weed along streets and curbs where needed
- Routine Maintenance:
 - a. Degreasing lines: The degreasing list was completed twice during the year. This list takes approximately two weeks and one truck with two men to complete all the current sites.
 - b. Root Cutting & Control: Cleared pipes of roots by mechanical means
 - c. Televising: Televised many areas of sewer to coincide with cleaning efforts and for inspection purposes
- Manhole Sealing: Sealed Manholes in the Mayfield area
- Special Cleaning Projects: Cleaned Interceptor along levy
- Swept inner city area where combination sanitary sewer/storm sewers are twice
Swept neighborhood areas once, swept to assist in cleaning on special events like Rib Fest, Mardi Gras, Fourth of July, and other events.

9. Health Insurance –

- There are 23 MSD Retirees older than 65.
- There are 8 MSD Retirees younger than 65.
- Total MSD employees active in insurance is 123.

2010

Tax Side:

Budget for Sanitation: \$7,346,460

Budget for Engineering: \$1,705,500

Revenue Side:

Budget for Administration: \$1,558,180

Budget for BWQ: \$1,124,988

Budget for Sewage Billing: \$943,140

Budget for Sewer Maintenance: \$2,841,026

Budget for Plant: 3,865,630

Budget for IT: 807,950