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# Wauconda Environmental Quality Department

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2009-2010 Annual Report

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Director Jacqueline D. Soccorso

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*Village  
of  
Wauconda*

## Overview of the Environmental Quality Department

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The Environmental Quality Department was created in 2004 and began as a one-person department. By 2006, the Department had grown to include an Administrative Assistant and Field Assistant. By summer 2009, the size of the Department had been reduced by two due to budgetary constraints. The Department has now returned to consist only of the Director of Environmental Quality. In October 2009, the Department merged with the Public Works Department and the Director assumed a second position as Superintendent of Administration for Public Works. As such, many Environmental Quality Department functions are carried out by Public Works staff.

The Department was originally created to serve two functions. These were 1.) to aid the Public Works Department in maintaining compliance with Illinois Environmental Protection Agency (IEPA) requirements and 2.0 to maintain compliance with the requirements set forth in the December 2004 Consent Order entered into between the State of Illinois, IEPA, and the Village of Wauconda. This Consent Order requires the Village to, in part, implement and enforce a pretreatment program in accordance with established Village ordinance. It also requires additional pretreatment reporting requirements.

Since the Department was created, it has taken on many other functions and responsibilities. These include, but are not limited to, stormwater management, hazardous environmental emissions, mosquito control, lake management, IEPA stream study, Superfund site management, leaking underground storage tank (L.U.S.T.) site management, public educational outreach, SWALCO, environmental programs, environmental initiatives, IDNR consultations, and grant research.

The following pages outline the Department's major activities for FY 2009-2010.

# Environmental Quality Department Annual Report FY 2009-2010

## **Industrial Pretreatment Program**

The Industrial Pretreatment program, required by the 2004 Consent Order, serves to protect the Village's publicly owned treatment works (POTW), commonly referred to as the water reclamation facility, from upset and pass-through by reducing or eliminating discharges of harmful pollutants to the Village's sanitary sewer collection system. Upset and pass-through can cause the Village to violate its NPDES wastewater discharge permit and State water quality standards. The program consists of administering wastewater discharge surveys, permitting, inspecting significant industrial users (SIUs), collecting wastewater samples from SIUs and the collection system, enforcing wastewater discharge permit violations, enforcing local discharge limits, preparing reports, and reviewing records. In October 2009, the Environmental Quality Department began using Public Works Department staff to complete these activities.



## **Local Limits Study**

As a requirement of the Consent Order, the Village must regularly review its local limits and revise them as appropriate. The purpose of the study is to characterize the wastewater that is discharged to the water reclamation facility and ensure that the facility can effectively process this wastewater without violating its NPDES permit or State water quality standards. This study began in January 2010 and will take approximately 18 months to complete. It consists of literature and Federal regulation review, pollutant of concern identification, wastewater sample collection, data analysis, draft ordinance revision, legal review, periods for public comment, final ordinance preparation, and ultimately the consent of the Village Board. In January 2010, the Environmental Quality Department began using Public Works Department staff to complete some of these activities.



## **Fats, Oils, and Grease (FOG) Program**

Excess amounts of fats, oil, and grease (FOG) that enter the sanitary sewer system can clog pipes and result in sanitary sewer overflows (SSOs) into businesses, homes, or out into the street. All generators of FOG are required to have a grease interceptor, grease trap, or oil-water separator. In October 2009,

the Department began to utilize Public Works Department staff to conduct multiple inspections of these devices. There are 72 such devices within the Village. During the reporting year, approximately 178 inspections were conducted.

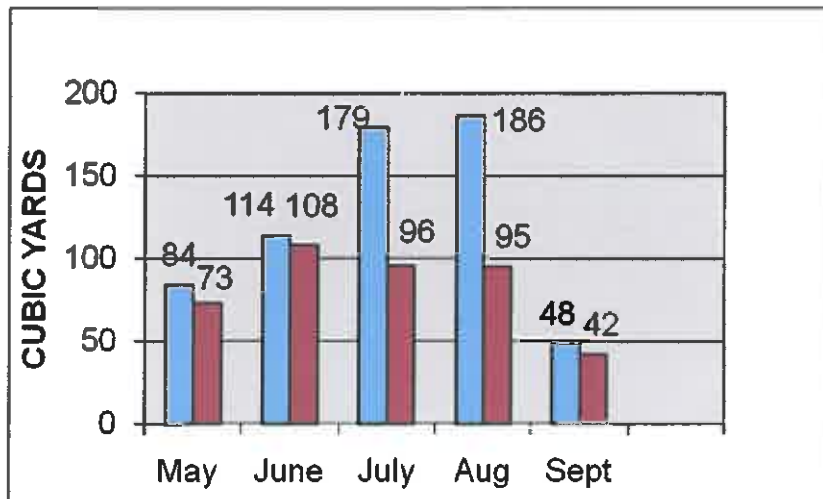
**Fiddle Creek Stream Study**

The Village’s NPDES permit requires the Village to participate with IEPA in a five year study of the water quality present in Fiddle Creek downstream of the water reclamation facility discharge point. The last year of the study is 2010. Stream samples are collected at six different locations twice per month from April through October. Public Works Department staff conducts this activity. The results of the samples are analyzed by IEPA.



**Weed Harvesting**

Since the Environmental Quality Department’s inception, the operation of the weed harvester has been shared with the Public Works Department. Public Works Department staff operates the weed harvester to cut and harvest aquatic plants and to control invasive plant species in Bangs Lake. A total of 611 cubic yards of aquatic plants were removed from the lake between May 2009 and September 2009. Weeds are taken to a nearby composting facility where they become a key ingredient in the compost. Approximately 414 labor hours were spent to conduct this activity. Environmental Quality Department staff coordinates this activity with the lake County Health Department Lakes Management Unit and the Illinois Department of Natural Resources.





### **IDNR Consultations**

The Environmental Quality Department is involved in all lake activities that have the potential to affect State-listed endangered species present in Bangs Lake and the immediate surrounding area, including the Wauconda Bog. These activities require consultation with the Illinois Department of Natural Resources (IDNR). Some of these types of activities include weed harvesting, fish stocking, enzyme application, beetle application, buckthorn clearing, etc. The weed harvesting consultation remains open. The IDNR has not issued its recommendations as of this time.

**Circle Channel Spillway Restoration**-In January 2009, the Village was awarded a \$5,000.00 grant from the Lake County Stormwater Management Commission. In summer 2009, the grant was used to restore the Circle Channel Spillway. The spillway is the point at which stormwater discharges to the north side of the Circle Channel. The grant allows the Village to remove the concrete spillway and replace it with an environmentally friendly vegetated swale and sediment basin. Construction of the vegetated swale and sediment basin was completed in summer 2009. The concrete spillway is scheduled to be removed in autumn 2010, once the native plants establish sufficient root systems. The vegetated swale and sediment basin will help to clean-up the stormwater before it enters the channel. This should result in improved water quality.



May 2009



August 2009



September 2009

### **Environmental Mosquito Management Program**

The Village of Wauconda contracts with Clarke to administer the Environmental Mosquito Management Program. The program is based in disease prevention. It does not eradicate the mosquito population, but controls it to prevent West Nile virus. The mosquito control program runs May-September. In 2009, the Village did not have any mosquito batches test positive for West Nile virus. Over 733 stormwater catch basins were treated with a larvicide on a monthly basis. In addition, over 100 other stormwater collection areas were inspected, and if mosquitoes were found to be breeding, the areas were treated. The Village was sprayed for adult mosquitoes three times during the season.



### **Wauconda Sand and Gravel Landfill Superfund Site**

The Wauconda Sand and Gravel Landfill is a closed, non-hazardous waste landfill covering 60 acres. It has an underground leachate collection system. Environmental Quality Department

staff continued to monitor and sample the discharge of leachate to the Village's sanitary sewer system.

### **NPDES Phase II MS4 Stormwater Permit**

The Village holds an NPDES Phase II MS4 permit issued by IEPA. This permit requires the Village to regulate illicit discharges to the storm sewer system. As such, approximately 100 storm outlets were inspected by Environmental Quality department staff. These storm outlets drain to Bangs Lake and area wetlands. The inspection results showed no apparent illicit discharges. In addition, the Environmental Quality Department responded to reports regarding illicit discharges to the storm sewer system.



### **Public Outreach**

Environmental department staff educated residents and provided them with information on environmental issues at the 3<sup>rd</sup> Annual Public Works Open House, Wauconda Chamber of Commerce Business Expo, and the Earth day celebration at Wauconda Middle School. In addition, staff attended the Wauconda high School Career day to promote careers in the environmental field, including public service.



### **Rain Barrel and Composter Sale**

The Village partnered with the Lake County Soil & Water Conservation District for their annual rain barrel and composter sale. At the conclusion of the sale, a total of 46 rain barrels, 4 composters, and numerous accessories were sold to Wauconda residents.

Residents picked up their rain barrels during the 3<sup>rd</sup> Annual Public Works Open House in May 2009.



### **Latex Paint Collection**

This year, Earth Paints Collection Systems was on hand at the Public Works Open House in May 2009 to collect unwanted latex paint. A total of 63 containers of paint were collected and small recycling fees were charged per container. All of the latex paint and containers will be recycled into new products.



### **CFL Recycling Program**

The Department offers recycling of compact fluorescent light bulbs (CFLs) to area residents. Drop off locations were established at the Environmental Quality Department, Village Hall, and the Public Works Department. Although the program has been underutilized, it provides an important and convenient alternative that keeps CFLs out of the landfill.