

# North Attleborough Pretreatment Program



All impacted businesses will be issued an Industrial Discharge Permit and will also be charged a yearly billing fee.

All new applications will be charged a \$25.00 application fee.



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## Phase II Program

The Town of North Attleborough, Department of Public Works will be holding a Public Meeting on **Wednesday, March 17, 2010** at the North Attleborough Middle School Cafetorium at **7:00 pm** for all businesses in North Attleborough and Plainville who will be impacted by the Phase II Pretreatment Program. These businesses include:

- Restaurants and Food Service/Processing Businesses
- Automotive Services, Automotive Dealers, Gas Stations, Radiator Shops
- Machine Shops
- Funeral Homes
- Municipalities
- Schools
- Dentists, Physicians, Veterinarians
- Printers/Screen Printers
- Laundromats, Dry Cleaners
- Janitorial Services, Cleaning Services

The businesses listed above have the potential to discharge pollutants into the municipal sewer system. The U.S. Congress created the national pretreatment program in 1972 to protect the nation's wastewater treatment plants and waterways from toxic and other pollutants. The term "pretreatment" refers to the requirement that industries discharging pollutants treat their wastewaters before discharging to the municipal sewer system.

### **Why is a Pretreatment Program necessary?**

Discharging certain substances into the sewer system can:

- Interfere with the operation of the Waste Water Treatment Facility (WWTF) by upsetting the biological process and killing the microorganisms needed for proper treatment
- Jeopardize the health and safety of personnel of the Town of North Attleborough and Plainville
- Clog sewer lines
- Be extremely dangerous if dumped in high concentrations
- Mix with other chemicals to cause toxic gases.

WWTF's are not designed to remove heavy metals, cyanide and other toxic chemicals. Approximately 40-60% of these hazardous/toxic substances can settle out with the sludge, contaminating it and thus preventing its beneficial reuse as well as significantly increasing the costs for disposal. The soluble fraction of these toxic materials pass through the treatment plant and add contamination to the Ten Mile River. Marine life is then exposed to toxic substances. The toxics can prevent the Town from meeting its NPDES Permit. These are the reasons the EPA and MA DEP require the Town to implement a Pretreatment Program.

## Restaurants & Food Service/Processing Businesses



Improperly managed oil and grease from restaurants has become a significant problem for wastewater collection and treatment systems. Fats, oils and greases (FOG) coat, congeal and accumulate in pipes, pumps, and equipment, leading to the costly and hazardous flow of waste grease into drain lines, sewer lines, lift stations, drain fields and POTWs. Improper disposal can result in high biological oxygen demand (BOD) and chemical oxygen de-

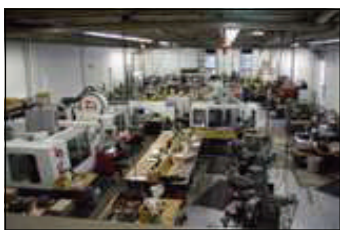
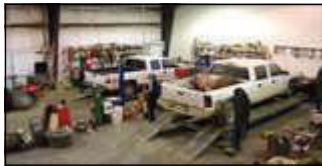
mand (COD) levels, increased operating costs and clogged collection systems.

### Fats, Oils and Grease (FOG)

Significant contributors of FOG include restaurants, cafeterias, grocery meat and bakery departments, and similar food service facilities. Nearly half of all sewer blockages are the result of FOG.



**Do NOT pour oil, grease or food scraps down drains.**



## Automotive Services, Automotive Dealers, Gas Stations, Radiator Shops

Of all the automotive categories which discharge to the sewer, this group is the most problematic. They discharge grease, oil and heavy metals. Many also use chemicals which can cause their discharge pH to suffer wide swings on both sides of the permitted limits. Individu-

ally their flows do not usually exceed 1,000 gallons per day, but collectively they can represent a meaningful contribution to the collection system. Radiator shops are an example of an industry type that generally has a low volume wastewater discharge. However, the concentration of the

metal present can be extremely high and the pH can be in the range of 2-12, depending on what operation is being performed. Gas and oil separators, presently, are not being regulated. We recommend that the Pretreatment Division regulate and permit these devices.

## Machine Shops

Machine shops are primarily involved with specialized manufacturing of metal parts for all types of machinery. The most common wastewater discharge originates from non-contact cooling water for spot welding, air compressors, vapor degreasers and milling machines. The most common oils found in machine shops are hydraulic fluids, lubricating oils, quenching oils and

cutting oils. Acidic or caustic solutions are occasionally used to clean metal parts. Usually there are post-cleaning rinses associated with these acids and caustics. They may be dead rinsed or running or some combination of the two. In every case, the primary concerns are proper handling of any sludge residuals and that the liquid portion discharged to the sewer meets

the local limits.



**Funeral Homes**

The concerns would be the embalming process and routine cleanups that may contain biohazards. These biohazards could take the form of a disease pathogen entrained in or associated with a discharged body fluid such as blood. Typically the Town of North Attleborough would notify the funeral home when work was being performed in the street so there would be no discharge of industrial wastewater.

**Municipalities**

The concerns would be floor drains, oils and greases, resulting from vehicle storage or maintenance.

**Dentists, Physicians,**

**Veterinarians**

The concerns would be the use of x-ray equipment, chair waste and labs that could potentially contain amalgam, silver mercury in their discharge. Dentists in MA are required to install amalgam separators. The Town will be monitoring these.

**Schools**

The concerns would be floor drains, boiler discharges, kitchen/cafeterias, grease traps and chemicals, which are being discharged from science laboratories and cleaning solutions.

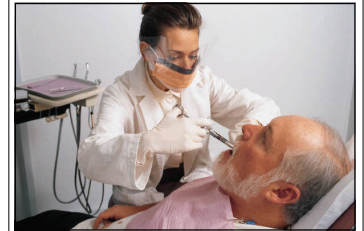
**Printers/Screenprinters**

The printing/publishing industry group, as a whole, is

involved in converting printed material and/or images from some prior format onto paper or other media. The gamut of printing procedures ranges from printing activities that use no chemicals and produce no waste to other activities, which use many products that are hazardous and contribute to an industrially oriented effluent, which requires permitting and monitoring.

**Janitorial/Cleaning Svcs.**

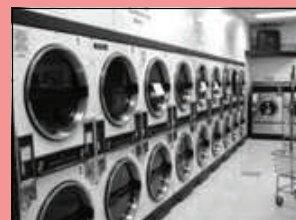
The concern would be the chemicals generated from wastewater and dispose to the Town's Collection System and/or ground by these businesses.



**Laundromats/Dry Cleaners**

At both commercial and industrial laundries, pH can be a problem. This is especially true if there are no equalization pits or clarifiers present. Also, if a commercial laundry has a high volume of restaurant business their grease and oil level can approach or exceed local limits. More commonly, it is the industrial laundries that have a consis-

tent problem in meeting many of the locally imposed sewer limits. In addition to the pH and oil and grease problems, they can exceed zinc and lead limits (and sometimes other metals). The concerns of dry cleaners would be the solvents they use. The other concerns would be the direct discharge of non-contact cooling water.



**Permits and Fees**

**Industrial Discharge Permits**

A. Fee is \$500.00 per year plus a yearly billing fee of 80% water usage. This permit is required by categorical/significant users. These would also include businesses that discharge more than 1,000 gallons per day. (133.68 cubic feet)

B. Fee is \$250.00 per year plus a yearly billing fee of 80% water usage. These

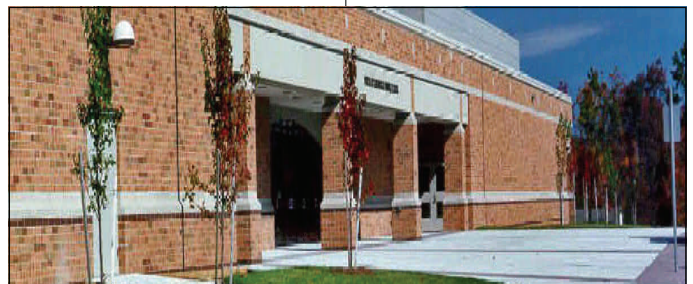
would include businesses that have grease traps or gas/oil separators in the ground and/or discharge less than 1,000 gpd.

**Commercial Discharge Permit**

C. Fee is \$125.00 for three (3) years plus a yearly operating fee of \$50.00. For businesses that discharge less than 1,000 gpd.

**Application Fees**

All new applications will be charged a \$25.00 application fee.



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*Leaking, Overflowing  
Grease Traps attract  
Mice, Insects and Rats*



## **Background**

The Clean Water Act (CWA) was signed by Congress in 1972 and was passed to protect the waters of the United States from pollution and to ensure the quality of water for future generations.

The CWA granted the US Environmental Protection Agency (EPA) the authority to develop water quality standards which are required to be met by POTWs. (Publicly Owned Treatment Works)

The General Pretreatment Regulations in 40 CFR require POTWs to develop an approved Pretreatment Program to regulate the wastewater generated from industrial and commercial facilities that discharge to the POTW.

The Town of North Attleboro operates a 4.6 MGD Wastewater Treatment Plant which discharges into the Ten Mile River. A National Pollutant Discharge Elimination Sys-

tem (NPDES) permit dictates the quality of the effluent discharge from this plant to the Ten Mile River. This permit is issued jointly by the EPA and the Massachusetts Dept. of Environmental Protection (DEP). The NPDES permit also includes a requirement for the Town to have an approved Pretreatment Program to control industrial wastewater discharged to the POTW. The POTW includes the entire municipal collection system, pump stations, and the WWTF.

The Town of North Attleboro Pretreatment Division was approved by EPA on February 21, 1985 and is responsible for evaluating all industrial wastewater discharges to the sanitary sewer collection system located in North Attleboro and Plainville. The goals of the program strive to ensure a safer environment,

protect the operational integrity of the WWTF and wastewater collection system, offer a level of safety for DPW personnel to work on these important infrastructure elements and enable the Town to discharge wastewater of sufficient quality to the Ten Mile River which meets all US EPA requirements.

The Town of North Attleboro has both the legal and moral obligation to ensure that its wastewater is properly treated and that resulting effluent and sludge are safe for disposal. The Town's WWTF was not designed to treat toxic and hazardous wastes discharged from Industrial and Commercial customers.

If you have any questions, please call Thomas Houle, Pretreatment Officer at 508-695-7879.