

3) CANNONS ENGINEERING CORP., MA

Cannons Engineering stored, treated and incinerated solvents, other hazardous waste and used oil. Incineration-related activities from 1974 to 1980 resulted in contamination of surrounding soils. Operations at the facility ceased in 1980 when the Massachusetts Department of Environmental Quality Engineering revoked the facility's hazardous waste license for failure to operate in accordance with Massachusetts law. Contaminants found at the site include PCBs, polyaromatic hydrocarbons, and volatile organics.

Prior to removal actions, the site contained 711 drums of various wastes and approximately 155,000 gallons of bulk waste. For example, investigations found that wastes from this facility were shipped to unpermitted disposal sites in New England; these sites are also Superfund sites.

Two settlement agreements were signed with PRPs. Clean up of this site has been completed although groundwater continues to be monitored.

4) COMET OIL, MT

This facility functioned as a waste oil re-refinery from 1954 to 1979. A large number of storage tanks and empty 55-gallon drums were found on-site, as were several waste oil lagoons and a large sludge pile. EPA estimated that two on-site lagoons contained approximately 639 cubic yards of waste. In 1985, 100,000 gallons of contaminated waste oil spilled when vandals opened valves on one of the tanks. Under the supervision of the Montana Department of Health and Environmental Sciences, Comet retrieved 75,000 gallons of the waste oil spilled; 25,000 gallons of the spill were lost to the environment. Comet also covered part of the site with 3-5 feet of soil.

Contaminants found at the site include benzene, phenol, 2,4-dimethylphenol, naphthalene, and trans-1,2-dichloroethylene. EPA dropped the Comet Oil site from the NPL because changes in the waste quantity, target population, and rainfall estimates lowered the hazard ranking score.

5) COMMENCEMENT BAY, WA

Commencement Bay consists of an area in which used oil has been recycled since 1927. Tacoma Well 12A, part of the drinking water system for the City of Tacoma, WA, was found to be contaminated with volatile organic solvents in September 1981. The source of contamination was traced to the Commencement Bay site - used oil recycling area. Paint and lacquer thinner manufacturing also took place on the site until 1964. The solvents used in these operations were stored in barrels and drums which may have leaked their contents into the soil.

The waste oil recycling process consisted of collecting waste oil in a large tank, adding chemicals such as sulfuric acid, and pressurizing and heating the contents. The process caused the formation of a tar-like sludge on the bottom of the tank. The sludge was filtered from the oil and the resulting filter cake was stored in piles or used for fill around the site. In 1982, a railroad spur was extended and some of the filter cake was used in the construction of the roadbed.

Soil and groundwater at the site have been contaminated. Contaminants found at the site include 1,1,2,2-tetrachloroethane, 1,2-transdichloroethylene, trichloroethylene, and tetrachloroethylene.

EPA is installing stripping towers, a groundwater pumping and treating system, and a vapor extraction system to clean up the site.

6) EKOTEK, INC., UT

This facility was operated as a refinery from 1953 to 1978, and as a hazardous waste storage/treatment facility and petroleum recycling facility from 1978 to 1988. The facility filed a RCRA Part A permit application in 1980 and received Interim Status; the facility received their RCRA permit in 1987. The owner of the site (Ekotek, Inc.) filed for bankruptcy in November of 1987.

Petrochem Recycling Corp. leased the facility from Ekotek in 1987 and continued operations as a petroleum recycler. Petrochem continued in operation until early 1988 when the Utah Bureau of Solid and Hazardous Waste and the Bureau of Air Quality issued the company a Notice of Violation. Waste material (it is not known what type) were kept in 60 tanks, 1,200 drums, 1,500 other containers, 3 surface impoundments, an underground drainfield, numerous piles and pits, and underground tanks.

Contaminants found on site include arsenic, chromium, lead, mercury, chlorinated solvents, other volatile organics, polynuclear aromatic hydrocarbons, phthalates, pesticides, PCBs, dioxin, and furans. Contaminants have been detected in groundwater which is a drinking water source and in private wells. Gas (2-methylnaphthalene) in the atmosphere at the site threatens residents living and working within 1 mile of the site.

EPA notified PRPs of the need to conduct an RI/FS in early 1992.

7) ENVIROCHEM CORP. (ECC), IN

From 1977 to 1982, ECC operated as a used oil, solvent and waste recycler and broker, and generated approximately 5,000 gal/day of oil recovery waste and 1,500 gal/wk of still bottoms. Accumulation of contaminated stormwater on-site, poor management of the drum inventory, and several spills led to EPA investigations. The facility filed a RCRA Part A application but failed to submit a Part B when it was requested.

Activities at the site resulted in contamination of the soil and possibly surface water and groundwater. One contaminant that is known to exist at the site is chlorinated hydrocarbons. EPA and the State of Indiana have negotiated with PRPs to clean up the facility.

8) ILADA ENERGY, CO., IL

The site of the Ilada Energy Company was used as a bulk fuel oil storage and transfer station. From 1981 to 1983, Ilada processed waste oil at the site. Some of the waste oils were contaminated with chlorinated organic solvents, metals and PCBs. The process operation consisted of phase separation to remove bottom sediment and water from the waste oil and blending the oil for desired Btu content. One process tank was heated with steam coils to aid separation. Steam was provided by an oil-fired, low-pressure on-site boiler. Oil used to fire this boiler was contaminated with PCBs.

An inspection conducted by IEPA in 1982 found that the company was improperly storing, handling, mixing, and disposing of waste oils containing PCBs. The storage capacity of the 17 bulk tanks on the site was in excess of 11 million gallons. Eleven of the 17 tanks contained contaminated oil, which spilled onto the ground. In 1983, EPA filed a complaint against Ilada for PCB violations under the Toxic Substances Control Act. The company agreed to clean up the site, but then abandoned the property.

An RI/FS has been conducted. All tanks have been dismantled and all used oil hauled off-site. All field investigations are complete and EPA is in the process of reviewing the draft RI.

9) **JOHNS' SLUDGE POND, KS**

Johns' Sludge Pond was used by the Super Refined Oil Company in the 1950s and 1960s for disposal of waste oil and oily sludge from recycling and reclamation of motor and other oils. The refining process involved the use of sulfuric acid. The wastes from this process were disposed of in an open pit with no controls to prevent release of contaminants to the environment. High lead levels were found in the groundwater and surface waters were contaminated when heavy rains caused flooding of the pit. Other contaminants found at the site include PCBs, barium, cadmium, copper, nickel, zinc, benzene, chloroethane, ethylbenzene, methyl bromide, methyl chloride, methylene chloride, tetrachloroethylene, toluene, and trichloroethylene.

In 1983, EPA issued a Consent Order (under Section 106 of CERCLA) to the City of Wichita, as the owner of the site, requiring that an interim cleanup action be conducted. The city cleaned up the site under EPA oversight in 1986. Pursuant to an EPA-approved post-closure monitoring and maintenance plan, the City/County Health Department monitors the groundwater and surface water at the site for lead and PCB contamination. The City's Public Works Department provides post-closure maintenance on the cap, covers, and fence.

This site has been removed from the NPL. Land use restrictions at the site have been implemented by EPA's Region 7.

10) KEEFE ENVIRONMENTAL SERVICES (KES), NH

Between 1978 and 1981, this facility received more than 1 million gallons of solid and hazardous wastes including toluene, methanol, acetone, methyl ethyl ketone, glycols, waste alcohols, styrene cyanide, heavy metals, and waste oils. In addition, many very reactive materials such as shock-sensitives, explosives, water reactives, and spontaneous combustibles as well as toxic gases are located on-site. Site conditions include leaking storage tanks and drums, and an overflowing lagoon.

KES was cited for health and safety violations on several occasions during the facility's operational life. In January 1981, KES filed for bankruptcy and the site was abandoned. Contamination of the soil, groundwater, and surface water has been detected. Contaminants found include methylene chloride, 1,1,1-trichloroethane, trichloroethylene, tetrachloroethylene, carbon tetrachloride, and chloroform.

Treatment systems for soil and water are being planned.



11) LASKIN/POPLAR OIL CO., OH

The Laskin/Poplar Oil site was originally a greenhouse business which used waste oil to heat the greenhouses. When the business deteriorated, the owner began to collect, sell, and dispose of waste oil. Since the oil was not analyzed before acceptance, it was not known that some of it contained PCBs and other hazardous constituents. The company's activities included oiling roads and a horse racing track. Contaminated soils are spread throughout the site, and discharge of contaminated water into a creek has caused further contamination of groundwater and surface water. Contaminants at the site include PCBs, polynuclear aromatic hydrocarbons, volatile organics and lead.

Several emergency cleanup actions have been taken at the site after mudslides and flooding. Superfund removal operations in 1982 resulted in incineration of 302,000 gallons of waste oil, treatment of 430,000 gallons of contaminated water, and solidification of 205,000 gallons of sludge. In 1985, PRPs removed approximately 250,000 gallons of oil and wastewater from the site. Removal actions are currently in progress at this site.

12) LIQUID GOLD OIL CORP., CA

Liquid Gold purchased used oil from generators and sold it for re-refining, as well as for use as fuel oil, lubricating oil, and dust control purposes. Groundwater and surface water were contaminated at the site as a result of spills and leaks from storage tanks and tank cars. Contaminants found at the site include PCBs, phenols, and lead.

The site was the subject of numerous State enforcement actions. The facility owner, Liquid Gold Oil Corp., ceased operations at this location in the early 1980s. The State is working with the landowner to clean up the Liquid Gold facility. Tanks and contaminated soil have been removed; further studies are necessary to determine if additional cleanup activities are needed to address residual contamination.

13) LUKE AIR FORCE BASE, AZ

Four disposal areas which involve used oil contamination have been identified at Luke Air Force Base. Contaminated JP-4 fuel, diesel fuel, waste engine oils, and waste solvents were spread on a perimeter dirt road surrounding a runway from 1951 to 1970. A waste disposal trench was used to dispose of the same types of wastes from 1970 to 1972. In two areas used for fire training from the 1940's to the early 1970's, waste oils were poured onto old aircraft and then the aircraft were set on fire. Both soil and groundwater were contaminated. Contaminants found at the site include chloroform, 1,2-dichloroethane, and trans-1,2-dichloroethylene.

Luke Air Force Base is participating in the Department of Defense (DOD) Installation Restoration Program (IRP), in which DOD identifies and cleans up contamination from hazardous materials. As of May 1990, the U.S. Environmental Protection Agency (EPA), the State of Arizona, and the Air Force were negotiating an Interagency Agreement under CERCLA Section 120 to cover future cleanup activities.

14) MCKIN CO., ME

From 1965 to 1978, McKin operated a tank cleaning and waste removal business using the Gray site for the collection, storage, transfer, and disposal of petroleum and industrial chemical wastes. The materials accepted included wastes from ocean oil spills. Waste handling facilities included 22 above-ground storage tanks, an asphalt-lined lagoon, and an incinerator. Liquid wastes were trucked to the site by McKin and others. Waste handling procedures, such as discharge to the ground, storage of wastes in tanks and unlined lagoons, and on-site burial resulted in soil and groundwater contamination. Contaminants found on-site include dichloroethylenes, freons, trichloroethylenes, benzene, toluene, xylene, and ethylbenzene.

Problems at the site were evident as early as 1973 when nearby residents reported odors in well water and discoloration of laundry. In 1977, after EPA established that contaminants from the site had reached many local private wells, the town in which the site is located issued a cleanup order. The Maine Attorney General's office filed a suit against the McKin Company in 1978.

The Maine Department of Environmental Protection funded a series of emergency actions in the late 1970's and early 1980s. The RI/FS for the site was completed in 1985. Soil remediation was completed in 1987 and groundwater remediation is currently in progress.

15) MINKER/STOUT/ROMAINE CREEK, MO

Roads near this site were sprayed with used oil contaminated with dioxins, as a measure of dust control. Soils contaminated with dioxins were removed and deposited at the Minker/Stout/Romaine Creek site. In 1983, affected residences were permanently relocated.

During 1986 and 1987, EPA performed 3 removal actions including soil excavation and interim storage of contaminated soil on-site. The 1988 ROD for Times Beach included provisions for soil excavated at this site to be thermally treated at the incinerator at Times Beach. Cleanup activities are ongoing.

16) MONROE AUTO EQUIPMENT, NE

Monroe Auto Equipment began manufacturing activities at this site in 1961 and is still in operation. One manufacturing process performed at the site was production of shock absorbers. The activities involved in this particular manufacturing process included metal finishing, welding, painting, electroplating, and reclaiming used oil. Treatment sludges generated from the plant contained chromium, cadmium, and zinc and were stored in on-site surface impoundments. Organic solvents are stored in underground tanks. Results from a 1982 EPA water supply survey traced the source of drinking water contamination to the site. The exact source of the contamination has not been established. Contaminants found at the site include trichloroethylene and acetone.

RCRA, Subtitle C interim status surface impoundments at the facility were closed 1987. EPA dropped this site from the proposed NPL in August 1989. The company is performing groundwater cleanup under RCRA authorities.

17) PSC RESOURCES, MA

Refinement International reclaimed waste oils at this site that were collected from Massachusetts collection points. The oil was heat treated and sold as lube oil base stock, road spray oil, and heavy fuel mixes. Solvents were also recycled at this site. The company abandoned the facility in 1978 and later went bankrupt. Activities at the site contaminated soil, groundwater, and surface water. Contaminants found at the site include 1,1,1-trichloroethane, toluene, trichloroethylene, and PCBs.

When investigating a 1982 spill, EPA discovered leaking storage tanks containing waste oil, solvents and water, and also discovered saturated containment dikes at the site. EPA required the site owner to contain the oil discharge, determine the contents of the 22 on-site tanks, and investigate the possibility of groundwater contamination under Section 311 of the Clean Water Act. Clean-up activities have removed approximately 1 million gallons of sludges and oil. EPA is currently negotiating with PRPs and planning final clean-up of the facility.

18) QUAIL RUN MOBILE MANOR, MO

In the early 1970's, the road through the Quail Run trailer park was sprayed for dust control with waste oil contaminated with dioxins. Soil at the site was contaminated. Of 33 families, 29 applied for temporary relocation. Between 1986 and 1987, EPA performed a removal action which involved interim storage on-site. There are 16 cubic yards of contaminated soil currently stored on-site. The incinerator set up at Times Beach (Site #33) may be used to treat contaminated soil at this site. In 1991, the site was dropped from the NPL.



19) SHENANDOAH STABLES, MO

In 1971, the area in the horse show arena of the stables was sprayed with dioxin-contaminated used oil for dust control. In 1983, an Administrative Order required closure of the arena and stables building, and restricted access to the property. The 1988 ROD for Times Beach included provisions for soil excavation and decontamination of buildings, and interim storage of contaminated soil on site.

In 1990, remedial action was taken and a ROD was issued for final destruction of contaminated materials by thermal treatment at the Times Beach incinerator.

20) TIMES BEACH, MO

The City of Times Beach was contaminated during the 1970's when roads were sprayed for dust control with used oil contaminated with dioxins. Based on analytical results of soil samples, EPA determined that all residents and businesses should be permanently relocated.

In 1984, a ROD to construct an Interim Central Storage Facility (ICSF) was cancelled because of the failure of the State of Missouri to agree to cost sharing. However, under this ROD, spur levees were constructed to control flood water velocity. In 1988, a ROD was issued to setup a temporary incinerator for thermal treatment of contaminated soil excavated at this site and at the Minker/Stout/Romaine Creek site (Site #34, below). The ROD also established waste management capacity. In 1990, two consent decrees were entered into with PRPs for cash settlement, and a third for setup and operation of the incinerator. Cleanup activities are ongoing, and implementation of the consent decrees is underway.

21) **TREASURE ISLAND NAVAL STATION, CA**

**Primary Activities:** Pickling and plating, painting, oil reclamation, and other shipyard operations

**Waste Forms at Site:** Contaminated soil and water

**Contaminants:** Benzene, PCBs, toluene, phenols, heavy metals, and polyaromatic hydrocarbons

Treasure Island Naval Station is a shipyard which has been owned by the Navy since 1939. The Navy leased the facility to the Triple A Machine Shop from 1976 to 1987, which in turn subleased buildings to private tenants. The site includes an industrial landfill containing chemical wastes, asbestos, and sandblast waste; a battery and electroplating shop that discharged plating solutions that contain acids and heavy metals into San Francisco Bay; and oil reclamation ponds which received oily wastes from 1944 to 1974. The landfill and spill areas were unlined and undiked. In addition, Triple A dumped 20 to 30 million gallons of liquids containing waste oil and solvents onto site grounds from 1983 to 1986.

At the time the site was listed on the NPL, a release to groundwater threatened area groundwater supply systems. Releases to surface water contaminated sediments of the San Francisco Bay. Contaminants found at the site include benzene, toluene, phenols, PCBs, heavy metals, and polyaromatic hydrocarbons.

Treasure Island Naval Station is participating in the DOD IRP. Some interim cleanup measures have been taken; sampling is underway to identify the type and extent of contamination.

22) WASTE RESEARCH AND RECLAMATION CO. (WRRC), WI

This site operated as a used oil and solvent recycler and storer and treater of hazardous waste. The techniques used to handle and store drums allowed waste to spill on the site. Certain waste practices contaminated the groundwater (e.g., run-off from solvent waste processing was collected in an unlined impoundment). Organic solvents have been detected in the groundwater. In February 1983, the State of Wisconsin signed a Consent Order with WRRC for a long-term monitoring program.

WRRC has installed several extraction wells and is pumping and treating groundwater. The amount of water pumped and treated is reported to the State on a quarterly basis. WRRC has submitted the necessary papers for corrective action approval and also submitted cleanup approaches to EPA Region 5. WRRC is awaiting approval on both. It is likely WRRC will be removed from the NPL and put into corrective action under RCRA.

23) **WIDE BEACH DEVELOPMENT, NY**

Between 1968 and 1978, about 155 cubic meters of used oil contaminated with PCBs was applied to local roadways for dust control by the Wide Beach Homeowners Association. The source of the waste has not yet been established. PCBs were found in the air, roadway dust, soil, vacuum cleaner dust, and water samples from a private well.

A federally-funded clean up of this site has been completed. New York State is scheduled to begin restoration of a wetlands area disrupted during site cleanup later in 1992.

24) WILLIAMS AIR FORCE BASE, AZ

Combustible wastes thrown into an unlined pit included waste fuels, oils, lubricants, cleaning solvents, and paint stripper. The area where the pit is located had been used as a fire training area from 1948 to 1960. A concrete liner was added to the pit in 1983, but overflow from the pit still seeped into the ground. In addition, soil and groundwater at the base were contaminated with wastes from the plating shop, aircraft washing operations, maintenance operations, and a landfill that accepted unknown quantities of hazardous waste from 1941 to 1976. Contaminants at this site include lead, chromium, cadmium, zinc, and copper.

Williams Air Force Base is participating in the DOD IRP. As of October 1989, the Air Force was developing an RI/FS workplan and had installed monitoring wells to identify the type and extent of contamination.



1) ADAMS COUNTY QUINCY LANDFILLS #2 AND #3, IL

In operation from 1972 to 1978, these two permitted landfills received the majority of waste generated in Adams County. Waste disposed of at this site included: solvents, acids, sludges containing heavy metals, spent organic solvents, electroplating sludges, hydraulic oil, machine coolants, acetone, and toluene. Liquid industrial waste was deposited into pits until it could be pumped into covered areas; the entire site was unlined. In addition to the leachate seeps and ponds, ground water and private wells were contaminated.

In mid-1987, a contractor for several of the PRPs associated with the site initiated an RI/FS to determine the type and extent of contamination at the site. Judging from research conducted to date, used oil handling appears to never have been a primary activity at this site.

SOURCE

- 1) Hazard Ranking System (HRS) Package for Adams County Quincy Landfills, #2,#3.



## 2) APPLIED ENVIRONMENTAL SERVICES, NY

The Applied Environmental Services (AES) Site, also known as the Shore Realty Site, served as a blending, storage, and disposal facility for hazardous wastes. The 3.2-acre AES site is located in Glenwood Landing, Nassau County, New York. Judging from research to date, used oil handling appears to never have been a primary activity at this site. Instead, the site was used for the intentional blending of hazardous wastes to produce alternative fuels.

Since 1939, the facility has been used by various companies to store petroleum products and hazardous waste. From 1981 to 1983, the property was used for blending various chemical waste materials to produce fuels. The site was first used for bulk storage of petroleum products in 1939 by Texaco Oil Company. Phillips Petroleum bought the property in 1964 and stored gasoline and fuel oil in above-ground storage tanks until 1972. In 1974, Circle Terminal Corporation began leasing the facility from Phillips. At some point in the same year, part of the facility was also leased to the Mattiace Petrochemical Company, which used it for the storage and distribution of chemical solvents. In October, 1980, Mattiace received 34 citations regarding the poor condition of the storage tanks and safety violations.

In July, 1980, new owners of the site leased the property to AES. AES operated the facility for the blending of various chemical waste materials to provide alternative fuel sources. It also operated a hazardous waste storage facility. Hazardous waste was contained in tanks and containers on-site. A Record of Decision for this site was signed on June 24, 1991.

### SOURCE

- 1) Record of Decision, Applied Environmental Services. June 24, 1991.
- 2) Phone Conversation, Mel Hauptmann, RPM, July 14, 1992.

3) **CHEMICAL CONTROL CORPORATION (CCC), NJ**

From 1970 to 1978, Chemical Control Corporation (CCC) hauled, treated, and disposed of a wide variety of industrial wastes, including hazardous, radioactive, and infectious wastes, and PCBs. However, judging from research conducted to date, used oil handling appears to never have been a primary activity at this site.

The discharge of liquids onto the ground, accumulation of thousands of drums of incompatible waste, and other practices resulted in ground-water and soil contamination. CCC was cited for discharge and waste storage violations throughout its operation.

In 1979, the State of New Jersey initiated a site cleanup. An explosion and fire in 1980 interrupted the site cleanup and created additional site cleanup needs. Cleanup began again on an accelerated schedule in 1981. Additional cleanup activities are scheduled for 1992 and 1993.

**SOURCE**

- 1) Record of Decision for Chemical Control Corporation. September 19, 1983.
- 2) Record of Decision for Chemical Control Corporation. September 23, 1987.
- 3) Hazard Ranking System Package for Chemical Control Corporation.

4) MOTCO, TX

The MOTCO site was developed in 1958-59 to recycle styrene tars generated by local industries. In 1961, the site was inundated by flooding caused by a hurricane, equipment was destroyed, materials were contaminated, and the site reclamation activities ceased. From 1961 through 1964, the site was operated as an uncontrolled open pit dumpsite by a number of haulers of industrial chemical wastes and solid wastes.

From late 1968 through 1979, numerous failed attempts by various parties to recover/recycle waste materials were made, including: incineration for recovery of copper, mercury, and lead; recycling of usable waste portions; and removal of styrene tars as a fuel supplement and/or creosote extender. Judging from research conducted to date, used oil handling appears to never have been a primary activity at this site.

SOURCES

- 1) Source-Control Feasibility Study for MOTCO Site. September 1984.
- 2) Memorandum from Woodward-Clyde Consultants to Monsanto Company regarding Feasibility Study for the MOTCO Site. February 1, 1984.

5) OAK GROVE LANDFILL, MN

From 1976 to 1983, this landfill was operated by a consortium of refuse haulers. Most of the waste received by the landfill was municipal trash and garbage. However, a small documented quantity of industrial, chemical, and hazardous wastes were buried there as well. Wastes disposed of at this site included: municipal trash, acidic oil sludge, paint and solvent wastes, foundry sands and sludges, inorganic acids, metal sludges, chlorinated and unchlorinated organic compounds, cutting oils and lubricants, cleaning solvents, and inks.

In 1984, ground-water contamination was discovered in the monitoring wells at the facility. State and county records indicate that numerous permit violations and operational problems occurred at the facility prior to that time. In 1985, the facility operator was ordered to halt the application of a final sludge lime cover because it was being improperly applied.

The site was put on the NPL in 1986. RI/FS activities are expected to begin in 1992. Judging from research conducted to date, used oil handling appears to never have been a primary activity at this site.

SOURCE

- 1) Record of Decision for Oak Grove Landfill. September 29, 1988.
- 2) Record of Decision for Oak Grove Landfill. December 20, 1990.
- 3) Hazard Ranking System Package for Oak Grove Landfill.

6) **PAB OIL AND CHEMICAL SERVICES, INC., LA**

The PAB Oil site was used to receive and dispose of oil-field exploration and production wastes. Such wastes included a variety of drilling muds and salt water. As part of its normal operations, PAB Oil supposedly sold to reclaimers the waste oil skimmed from the oil-based drilling mud separation/disposal pits. Judging from research conducted to date, used oil handling appears to never have been a primary activity at this site.

**SOURCE**

- 1) **Remedial Investigation Study for the Remedial Investigation/Feasibility Study at the PAB Oil and Chemical Services, Inc. Superfund Site, Vermilion Parish, Louisiana. May 15, 1989.**

7) UNITED CREOSOTING COMPANY, TX

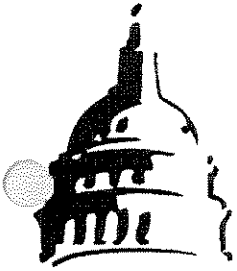
The United Creosoting Company site is a decommissioned, demolished, wood preserving facility, over which new industry and industrial subdivisions have been built. The United Creosoting Company operated from 1946 to 1972. This site contained a coal-tar distillation still, a processing building, tanks and pressure cylinders, two waste ponds (which now are buried), and several areas where treated lumber was stored. The waste ponds were used for disposal and possible reclamation of wood preserving process wastes.

The wood preserving process involved the pressurized addition of pentachlorophenol (PCP) and creosote into formed lumber (e.g., telephone poles, railroad ties). Diesel oil was used as a carrier for the PCP and creosote, but it was not recycled or disposed of on-site.

Wood preserving operations and contaminated surface water runoff from former waste ponds caused soil and ground-water contamination and contamination of private residential properties. Demolition of contaminated homes has been completed and residential remediation is about to begin. Remediation of industrial soils will begin after residential remediation has been completed. Judging from research conducted to date, used oil handling appears to never have been a primary activity at this site.

SOURCE

- 1) Final Feasibility Study Report, Volume I. May 1986.



**MARC  
DUFF**

STATE REPRESENTATIVE

Chair: Environment & Utilities

Vice Chair: Urban Education

Co-Chair: Joint Legislative Council

**TO: Members, Assembly Committee on Environment**

**FROM: Mike Prentiss**

**DATE: February 18, 1998**

**RE: Testimony from yesterday's hearing**

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Attached please find copies of testimony from yesterday's hearing which was not distributed to all committee members.

Also, as a reminder, we received the following materials yesterday. If you'd like to take a look at them, please let me know.

1. Public Service Announcement for Minnesota Oil and Filter Recycling featuring NASCAR driver David Green. (VHS Copy)
2. A binder from U.S. Oil Company with supporting documents to their testimony on AB 701.

If you have any other questions, please don't hesitate to give me a call.

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# Vote Record

## Assembly Committee on Environment

Date: 3-17-98       Executive Session       Public Hearing  
Bill Number: AB 701  
Moved by: Bock      Seconded by: Rosson  
Motion: RECOMMEND A PASSAGE

<u>Committee Member</u>	<u>Aye</u>	<u>No</u>	<u>Absent</u>	<u>Present</u>	<u>Absent</u>
Rep. Marc Duff, Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Tim Hoven	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. DuWayne Johnsrud	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Eugene Hahn	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Lorraine Seratti	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Neal Kedzie	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Peter Bock	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Judy Robson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Spencer Black	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. John La Fave	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Totals:	<u>9</u>	<u>1</u>	_____	_____	_____

Motion Carried

Motion Failed



# Vote Record

## Assembly Committee on Environment

Date: 3-17-98       Executive Session       Public Hearing

Bill Number: AB 701

Moved by: ~~Duff~~ JOHNSRUD      Seconded by: ROBSON

Motion: INTRODUCE SUB / ADOPT SUB

↓

UNANIMOUS CONSENT

(DUFF/ROBSON)

<u>Committee Member</u>	<u>Aye</u>	<u>No</u>	<u>Absent</u>	<u>Present</u>	<u>Absent</u>
Rep. Marc Duff, Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Tim Hoven	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. DuWayne Johnsrud	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Eugene Hahn	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Lorraine Seratti	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Neal Kedzie	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Peter Bock	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Judy Robson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. Spencer Black	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rep. John La Fave	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Totals:	<u>9</u>	<u>1</u>	<u>          </u>	<u>          </u>	<u>          </u>

Motion Carried       Motion Failed

**Proposed State of Wisconsin Legislation**

**Landfill Ban on Used Oil Filters**

**U.S. Oil Co., Inc. Comments - Public Hearing**

**Bryan Thompson - General Manager, Lubricants Division**

**U.S. Oil Co., Inc. - Background on this issue**

U.S. Oil Co., Inc., has a long history of investment in operations involved in recycling, remediation, and analytical testing of petroleum wastes. Our mission is to seek out investments and activities that benefit our associates, community, stockholders, suppliers, and customers. Over the last few years customers have requested that our company offer used oil filter recycling services to compliment our used oil and oily water processing services. Information regarding used oil filters was gathered and reviewed. This review certainly indicated that there was indeed an environmental problem associated with the disposal of used oil filters. The solution to this problem, recycling, certainly meets the condition of our mission. In early 1996, U.S. Oil founded a task force comprised of representatives from the DNR, Outagamie County, UW Recycling Market Development Office, a commercial generator, and a scrap dealer. Over 18 months later a completed action plan and request for grant funds was made twice to state agencies. The group's interest was to determine the ability to overcome obstacles to recycling used oil filters through education of commercial generators. The largest obstacle is believed to be the cost disadvantage incurred by recyclers of oil filters v.s. those that choose not to recycle. The grant requests were denied twice. Our involvement in this effort ultimately led to our development of educational materials regarding this issue. This came to the attention of Representative Harsdorf which led to the introduction of AB 701 and this meeting.

A recycling infrastructure already exists within the State of Wisconsin<sup>2</sup> that is capable of handling and processing used oil filters. As the demand for used oil filter recycling services increases more service providers that are not already serving the State of Wisconsin will likely expand their service area to include Wisconsin, creating a more competitive market, as well as new job opportunities. U.S. Oil is not currently a recycler of oil filters. We forecast that an investment in this industry with a ban would result in an impact of <1% to our net income even at 15% market share.

U.S. Oil is committed to being a leader in creating innovative and environmentally sound solutions for our customers, our industry and our community. **Recycling oil filters is simply the right thing to do for all concerned.**

**Isn't this residual used oil contained in landfills?**

There is a popular belief that whatever is put into a modern lined solid waste landfill will be contained and pose no environmental threat. This issue should be explored further in regard to used oil in filters and solid waste landfills. Rainwater is collected throughout a solid waste landfill via a leachate pipe system and pumped to local publicly owned treatment systems in most cases for treatment and release to surface water. Environment Canada completed a Priority Substance List Assessment Report<sup>6</sup> for waste crankcase oils to determine if they are entering the environment in a quantity or concentration or under conditions that are having a harmful effect on the environment. The assessment reached no formal conclusion, but did state that:

*"waste crankcase oils disposed of with large amounts of organic matter are expected to remain with the refuse in the landfill due to adsorption of the constituents to cellulose, hemicellulose, and other organic matter (CH2M HILL ENGINEERING LTD., 1992). In contrast, at sites with little adsorbent material and permeable soils, there is a greater potential for constituents of waste crankcase oils to migrate to groundwater, particularly those constituents and degradation products that are water soluble".*

It is also stated in the report that:

*"Waste crankcase oils disposed of to sewer water initially form a surface film (Hansen, 1975). Laboratory studies suggest that volatile organics, semivolatile organics, and metals partition from the oil phase to the aqueous phase in sewers (Suprenant et al., 1983). In the aqueous phase, metals such as zinc, copper, and cadmium are in dissolved form, while most hydrocarbons are associated with particulate matter (Hunter et al., 1979). Metals and organics can be removed from wastewater treatment plants. Their removal efficiency, however, is dependent upon the type of compound and the specific treatment process (Monteith, 1987)".*

Consider the above report findings in the context of the effect of Wisconsin Act 335 recycling legislation. Many of the absorbents mentioned in the Environment Canada report (paper, wood pallets, etc.) are no longer being added to solid waste landfills. Yet, used oil in filters is still being added at an alarming and very conservative estimate of 270,000 gallons of used oil per year from filters in Wisconsin!<sup>5</sup> It is worth repeating from the Environment Canada report that **"at sites with little absorbent material and permeable soils, there is a greater potential for constituents of waste crankcase oils to migrate to groundwater, particularly those constituents and degradation products that are water soluble".**

### *Also*

In May, 1997, Kimberly Free, a University of Wisconsin Green Bay Intern Student, completed a state university funded study entitled Analysis of Environmental Impacts of Used Oil and Oil Filters in Wisconsin Landfills<sup>1</sup>. This research included analyzing lab results of polycyclic aromatic hydrocarbon (PAH) tests run on leachate from Wisconsin landfills, comparing leachate data to components of used filter crankcase oils for PAHs and investigating characteristics and other sources of potential PAHs in landfills. PAHs were tested in samples of leachate from five different landfills in Wisconsin. The graphic comparison (See attached) of PAH concentrations in Wisconsin landfill leachate samples vs. those found in a used oil filter sample is very alarming. As the saying goes "A picture is worth a thousand words". The study concludes that:

*"The water solubility properties and greater concentrations of 1-Methylnaphthalene, 2-Methylnaphthalene, and naphthalene in landfill leachate and filter oil samples should warrant the state of Wisconsin to conduct further investigation on the impacts of PAHs in leachate."*

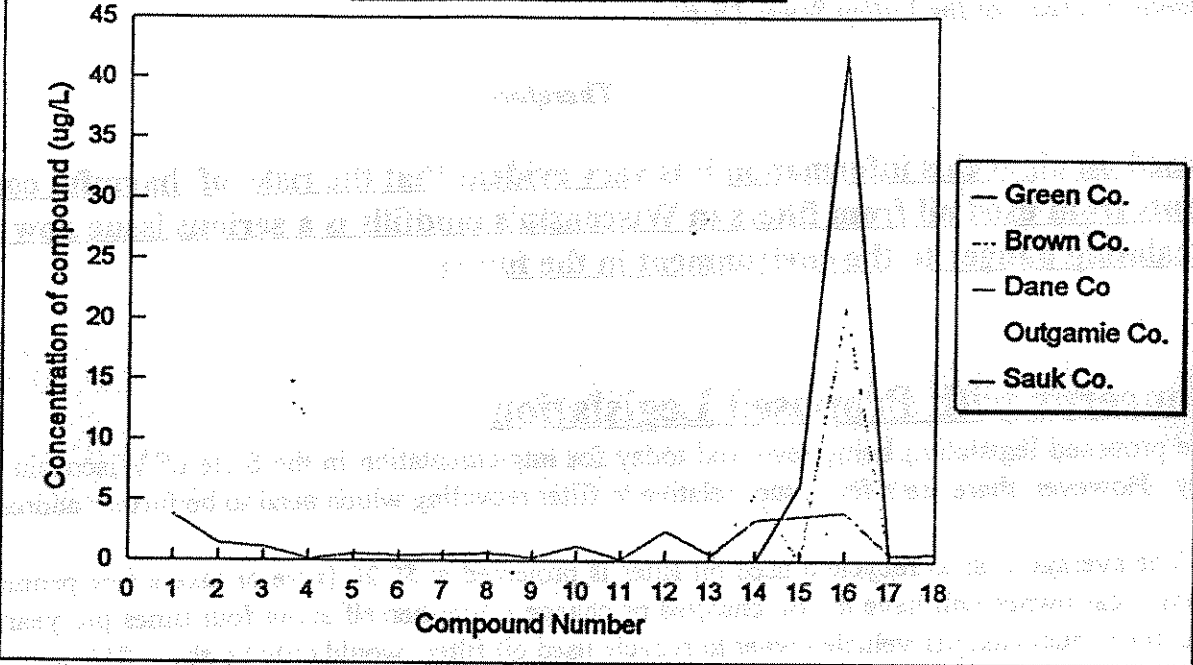
Table 1: Physical Properties of Polycyclic Aromatic Hydrocarbons

Compound	Molecular Weight	Melting Point (Celcius)	Boiling Point (Celcius)	Water Solubility @ 25 C (mg/L)
Acenaphthene	154.21	95	279	3.42
Anthracene	178.24	216	340	0.045
Acenaphthylene	152.2	80-83	280	3.93
Benz (a) anthracene	228	84	—	0.0057
Benz (a) pyrene	252.32	176.5	311	0.0038
Benz (b) fluoranthene	252.32	168	—	0.014
Benz (k) fluoranthene	252.32	217	—	0.0043
Benz (g,h,i) perylene	276.34	—	—	0.00026
Chrysene	228.2	254	488	0.006
Dibenz (a,h) anthracene	278.35	266-267	524	—
Fluoranthene	202.26	107.8	384	0.265
Fluorene	166.22	114.8	295	1.98
Indeno (1,2,3-cd) pyrene	276	164	536	0.00053
1-Methyl naphthalene	142.19	-22	240-243	26-28
2-Methyl naphthalene	142.19	34	241-242	26-28
Napthalene	128.16	80.5	217.9	31.7
Phenanthrene	178.22	100	340	1.277
Pyrene	202.26	149-151	404	0.135

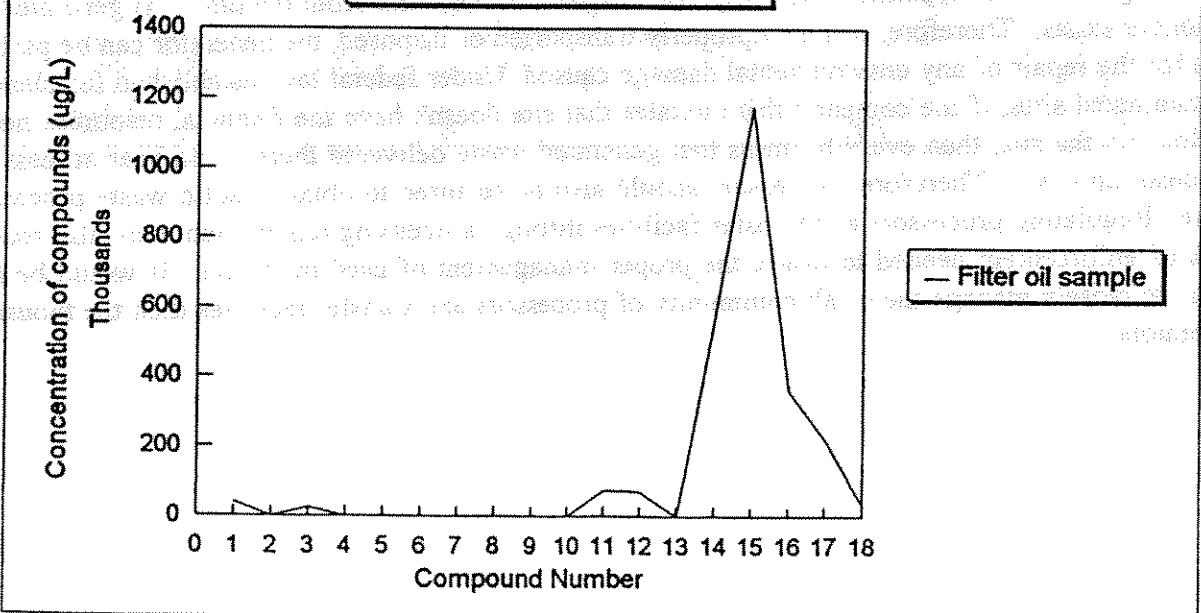
PAH Compound	Brown Co. East South Tank (ug/L)	Dane Co. (Rodefald) (ug/L)	Green Co. (ug/L)	Outgamie Co. (ug/L)	Sauk Co. (ug/L)
1 Acenaphthene	ND	3.8	18	0.9	ND
2 Acenaphthylene	ND	1.4	ND	ND	ND
3 Anthracene	ND	1.1	ND	0.5	ND
4 Benzo (a) anthracene	ND	0.12	ND	ND	ND
5 Benzo (b) fluoranthene	ND	0.51	ND	ND	ND
6 Benzo (k) fluoranthene	ND	0.42	ND	0.1	ND
7 Benzo (a) pyrene	ND	0.46	ND	ND	ND
8 Benzo (ghi) perylene	ND	0.62	ND	ND	ND
9 Chrysene	ND	0.23	ND	ND	ND
10 Dibenzo (a,h) anthracene	ND	1.2	ND	ND	ND
11 Fluoranthene	ND	0.15	ND	ND	ND
12 Fluorene	ND	2.5	ND	ND	ND
13 Indeno (1,2,3-cd) pyrene	ND	0.45	ND	ND	ND
14 1 - Methyl naphthalene	5.5	3.4	2.6	1.3	ND
15 2 - Methyl naphthalene	ND	3.7	3.4	2.4	6.2
16 Naphthalene	21	4	ND	14	42
17 Phenanthrene	ND	0.52	ND	0.6	ND
18 Pyrene	ND	0.62	ND	0.25	ND

PAH Compound	Winnebago Co. (ug/L)	Filter Oil Sample (ug/L)
1 Acenaphthene	ND	39000
2 Acenaphthylene	ND	ND
3 Anthracene	ND	23600
4 Benzo (a) anthracene	ND	ND
5 Benzo (b) fluoranthene	ND	ND
6 Benzo (k) fluoranthene	ND	ND
7 Benzo (a) pyrene	ND	ND
8 Benzo (ghi) perylene	ND	ND
9 Chrysene	ND	ND
10 Dibenzo (a,h) anthracene	ND	ND
11 Fluoranthene	ND	75000
12 Fluorene	ND	72000
13 Indeno (1,2,3-cd) pyrene	ND	ND
14 1 - Methyl naphthalene	ND	570000
15 2 - Methyl naphthalene	ND	1180000
16 Naphthalene	ND	360000
17 Phenanthrene	ND	221000
18 Pyrene	ND	36000

### PAH Concentrations in five Wisconsin landfills



### PAH Concentration in Filter Oil Sample



*And*

It should also be noted that many publicly owned treatment systems are not designed to treat certain waste streams. The Heart of the Valley Treatment System in Outagamie County treatment methods were not designed to handle PAH's or heavy metals such as Chrome or Zinc *per Mark Surwillo, District Manager, Heart of the Valley Sewer District.*

*Therefore*

**Based on all of this information it is very evident that the risks of harmful contaminants from used oil from filters in Wisconsin's landfills is a serious issue now and an escalating danger to the environment in the future!**

### **Concerns with Proposed Legislation**

The proposed legislation being reviewed today for implementation in the State of Wisconsin is necessary. However, there are a few issues relative to filter recycling which need to be further addressed:

a) The average cost to recycle a used oil filter is projected at \$0.20 (give or take a few pennies). The average car owner will have the oil changed or change it him/herself about four times per year. Therefore, the annual cost per vehicle owner to recycle used oil filters would only be about \$1/year.

It is strongly recommended that the proposed legislation include those used oil filters generated by commercial oil change facilities, the do-it-yourself market and industry such that no one group is unfairly burdened and awareness of the problem occurs across all market sectors.

#### b) Licensing Requirements

A waste generator is responsible for the proper disposal of the waste from the time it is generated until it no longer exists. Therefore, if it is improperly transported or disposed, the generator can be partially liable for the repair of any environmental damage caused. Under federal law, established for cleaning up contaminated sites, if the company that operates that site doesn't have the financial resources necessary to clean up the site, then every business that generated waste delivered there could bear at least part of the clean up costs. Therefore, processors should also be required to obtain a solid waste processing license. Regulating processors and transfer facilities through a licensing requirement may also reduce the level of enforcement needed to insure the proper management of used oil filters. It would be far less costly to closely manage the small community of processors and transfer facilities than the thousands of generators.

State of Wisconsin  
Public Hearing - A.B. 701  
U.S. Oil Co. Inc. - Comments  
Support Documents

1. *Analysis of Environmental Impacts of Used Oil and Oil Filters in Wisconsin Landfills*  
Kimberly Ann Free, University of Wisconsin - Green Bay, Spring, 1997
2. *Used Oil Filter Recycling Surveys - Determining Development for Needed Recycling Infrastructure*  
Stephanie Johnson, University of Wisconsin - Green Bay, May, 1997
3. *Motor Vehicle Oil Filter Recycling Demonstration Project*  
John L. Konefes, Iowa Waste Reduction Center, University of Northern Iowa, 1992
4. *Motor Vehicle Oil Filter Recycling - Revisited*  
James A. Olson, Iowa Waste Reduction Center, University of Northern Iowa, 1992
5. *Used Oil Filter Impact Brochure and Recycling Fact Sheet*  
U.S. Oil Company, Inc., 1998
6. *Fact Sheet #3: Oil and Oil Filter Management (Online)*  
Environment Canada  
Available: <http://www.cciw.ca/glimr/data/federal-programs-division/environmental-products/factsheet3-pub.html>
7. *National Used Oil Collection Study*  
American Petroleum Institute, May, 1996
8. *Priority Substance List Assessment Report - Waste Crankcase Oils*  
Environment Canada, 1994
9. *Used Oil Management Standards*  
Wisconsin Administrative Code, Chapter NR590
10. *Improve Groundwater Protection by Sharing Information, 1995 Continuing Education Program*  
Wisconsin Water Well Association and Wisconsin Department of Natural Resources
11. *No Hazardous Waste Listing for Used Oil that is Being Disposed*  
Environmental Protection Agency, Environmental Fact Sheet, May, 1992
12. *Summary of Superfund Sites with Used Oil Damages*  
Science Applications International Corporation, August 3, 1992



02/16/98

**Proposed State of Wisconsin Legislation  
Landfill Ban on Used Oil Filters  
U.S. Oil Co., Inc. Comments - Public Hearing  
Sue Gau- Marketing Development, Waste Oil To Energy**

U.S. Oil has submitted a variety of documents to your committee clerk which will be referenced throughout our discussion. We hope you will all have the opportunity to review them.

### **The Problem**

There is substantial and credible information available that strongly indicates that the landfill disposal of used oil filters can pose a significant threat to our surface and groundwaters from the residual oil which remains in used oil filters. Groundwater provides 97% of all rural drinking water, 50% of all U.S. drinking water and 25% of all U.S. fresh water according to the National Rural Water Association. Landfill disposal of used oil filters also results in a loss of natural resources, including high grade steel and used oil.

Existing regulations governing the disposal of used oil filters in the State of Wisconsin, included in Chapter NR590 of the Wisconsin Administrative Code, states "the Department encourages that solid waste material from which oil is removed, such as used oil filters that *have* been drained in accordance with NR605.05 be recycled. If the material cannot be recycled, it should be properly characterized and disposed of in accordance with the requirements of chs. NR500 to 520 and NR 600 to 685." Federal regulations also encourage the recycling of material from which oil is removed. Evidence of this is provided in the EPA Environmental Fact Sheet<sup>11</sup>, dated May 1992, which states, "*EPA continues to encourage recycling of used oil removed from filters, and recycling of the filters and their components.*" Encouraging filter recycling doesn't appear to be enough, since the majority of the filters generated in Wisconsin are landfilled. It has been commented that since the EPA did not list oil filters as a hazardous waste, they must not pose a threat to the environment. This couldn't be further from the truth. Used oil itself is not a listed hazardous waste, yet it cannot be landfilled and if not properly managed can threaten our environment. Additionally, The EPA's ruling regarding a hazardous waste listing is based on adequate draining of the used oil in used oil filters as stated in the Federal Register, Vol. 57, No. 98 dated Wednesday, May 20, 1992 pg. 21532.

### **Exactly how much oil is in a drained filter?**

This exact question is investigated in a very thorough study completed by the University of Iowa Waste Reduction Center, entitled "*Motor Vehicle Oil Filter Recycling Demonstration Project*" published in 1990 and revisited in 1992!<sup>3,4</sup> This study evaluated the volume of oil which remains in a used oil filter after several methods of oil removal are used including draining over time, draining and puncturing for 24 hours, and crushing. The study indicates that the volume of used oil remaining in an average filter in Iowa after puncturing and a 24 hour draining period is 5.6 fluid ounces (290,000 gal/6.6 million filters). If the filter was drained for 24 hours but not punctured this volume increased about 25% for a medium size filter. This volume increased to over 11 ounces or 590,000 gallons of remaining oil in the filter if only drained for 5 minutes. Alternately, 81% up to 98% of the used oil in a filter could be

recovered if the filter was crushed at forces from 16,000 lbs up to 100,000 lbs (heavy duty commercial press). The study concluded that due to the adverse health and environmental effects attributed to improper disposal of used oil and its contaminants, alternative disposal and/or implementation of oil filter recycling opportunities appear warranted.

## **The Sum is Different Than the Parts?**

In 1990, the Wisconsin Legislature passed Wisconsin Act 335, the most comprehensive recycling legislation in the nation. These regulations banned a list of recyclable materials from landfill disposal. Since the implementation of this legislation, a large volume of recyclable material has been successfully diverted from landfills. As noted previously, these materials, when present in the landfill, served as an adsorbent for the oil residue contained in landfilled filters. In addition to this impact is the following illogical and ironic result of the exemption for disposal of used oil filters in landfills. The State of Wisconsin does not allow the landfill disposal of paper, used oil or steel containers. Yet, when these three components are combined together in a used oil filter, it is exempt and can be disposed in a landfill. Used oil has been banned from Wisconsin landfills for many years, yet it continues to be landfilled, encapsulated in the used filters.

Based on data obtained from the Wisconsin Department of Transportation, the Filter Manufacturer's Council, and the Iowa Waste Reduction Center, there are over 10 million filters generated each year in Wisconsin. Please note this only includes vehicle filters, and does not include filters generated by industrial facilities. Only 23% of these filters are estimated to be recycled, leaving over 7.8 million filters being disposed in Wisconsin landfills. It is estimated that these 7.8 million filters contain almost 5,000,000 pounds of high grade steel containers, 101,250 cubic feet of oil saturated paper and 270,000 gallons of used oil.

## **What do the Markets think about this issue?**

In May, 1997, Stephanie Johnson, a University of Wisconsin Green Bay Intern Student completed a study entitled "*Used Oil Filter Recycling Surveys - Determining Development for Needed Recycling Infrastructure*"<sup>2</sup>. Three surveys were completed as part of the study, including end users, filter processors and collectors, and used oil filter generators; of significance in the surveys is the responses of commercial generators. The survey results of the commercial generators (83 generator responses) indicated that only 23% of the used oil filter generators are currently recycling used filters. Many liability conscious individuals and companies already recycle used oil filters. They realize the risks associated with landfilling filters and know they could incur future liability costs if they landfill filters. There have been over 60 contaminated sites introduced into the SuperFund program that involved used oil contamination<sup>12</sup>.

Those generators surveyed who indicated that they don't recycle oil filters (77%) were asked if they would support the recycling of oil filters if mandated. 55% indicated that they would support a landfill ban on used oil filters. The surveyed generators that already recycle filters (23%) would likely support a landfill ban on filters. If so, it is estimated that up to 78% of the surveyed generators would support legislation banning used oil filters from landfill disposal. The overwhelming positive response to a mandated ban is due to the elimination of cost disadvantages incurred by those that recycle filters to those competitors that choose not to in the absence of regulation. Upon further review of this survey, it can be seen that of those surveyed that responded to the question regarding draining practices, 40% responded that they do not currently puncture filters prior to disposal.

Five states, including Minnesota, Texas, Rhode Island, California and Florida, have established regulations which require used oil filters to be recycled or managed as a hazardous waste. Legislation regulating the disposal of used oil filters was also recently introduced in the State of Massachusetts.

The National Used Oil Collection Study<sup>7</sup>, which was released by the American Petroleum Institute in May, 1996, discusses a survey conducted by the Motor and Equipment Manufacturers Association and the Car Care Council which found that "many consumers are willing to recycle both used oil and filters. The survey was conducted at maintenance check points in 14 states in October, 1994. Of the 900 participants completing survey questions, 42% indicated they take used oil filters to service outlets or government-operated recycling centers, as opposed to disposing of the filters as solid waste. These survey respondents showed even a higher tendency to return used oil to service outlets or government-operated collection centers at 85%".

## **Concerns with Proposed Legislation**

The proposed legislation being reviewed today for implementation in the State of Wisconsin is necessary. However, there are a few issues relative to filter recycling which need to be further addressed:

### **a. Definition of used oil filter**

The proposed legislation specifies used automotive filters. There are a variety of other used oil filters which can be recycled that are not generated by an automobile. A used oil filter is simply a device which is an integral part of an oil flow system, the primary purpose of which is to remove contaminants and as a result of use has become contaminated and unsuitable for its original purpose. This definition will include used oil filters generated from motor vehicles as well as filters generated by industry. (Show example of industrial filter).

### **b. Registration Requirements**

Requiring collectors and transporters to register with the State will provide valuable data on the amount of filters being collected and where they are being stored and processed.

### **c. Funding**

Based on comments U.S. Oil has received from communities in Northeast Wisconsin, funding of used oil filter recycling seems to be an issue which may need to be addressed. There are a few options for funding these efforts already in place in other states. In Minnesota, filter manufacturers and retailers are responsible for managing portions of the recycling program. Other states implemented a tax on the sale of new oil to fund used oil filters recycling. Another option involves establishing a public/private partnership. In the State of California, automotive parts stores are teaming up with local government to provide collection of used oil filters at their stores.

Providing no funding mechanism is also an option. Other unfunded landfill bans in the State of Wisconsin include appliances, used oil, anti-freeze, lead acid batteries and commercially generated tires. Many landfills have already implemented disposal fees for the disposal of these unfunded banned items. For example, one landfill in northeast Wisconsin charges \$0.75 to dispose of used anti-freeze. Another landfill charges \$10 to accept a used appliance for recycling.

## Conclusion

In conclusion, used oil filters have the potential for causing damage to our environment if they continue to be disposed in Wisconsin landfills. Environmentally responsible opportunities are already available for used oil filter disposal. However, not all generators choose to recycle because it is not required, it is not convenient, the cost to recycle vs. landfill, or they lack the information needed to make the decision to recycle.

If the 7.8 million filters being landfilled in Wisconsin were recycled at a cost of \$0.20 per filter, it would cost about \$1,560,000 to recycle them all. Now apply that same dollar amount to cleaning up one community's contaminated water supply system. How far would it go? If the landfill disposal of used oil filters continues to be allowed, we may find out.

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