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ABCNEWS

GOOD MORNING AMERICA Show #1529

Air Date: April 23, 1992

Accuracy as to names and speakers is not guaranteed. Not responsible for typographical errors. Only feature segments have been transcribed. News, weather and "bumpers" have been omitted. JS

News Segment: Oil Recycling Deception

MORTON DEAN, ABC News: Several of the nation's leading environmental groups say Americans are being deceived about what happens to their recycled motor oil. The Sierra Club and others claim the oil is not being recycled. ABC's Sheilah Kast explains.

SHEILAH KAST, ABC News: *[voice-over]* Environmental groups charge these ads are deceptive.

ANNOUNCER: *[TV commercial]* Your old motor oil, we'll gladly recycle it for you.

KAST: *[voice-over]* The environmentalists argue it's not recycled, because 90 percent of the oil collected through these oil company programs ends up being burned, not recycled into fresh motor oil.

DANIEL WEISS, Sierra Club: To take used oil, only take the water out, and then burn it isn't recycling, it's pollution, producing thousands of pounds of dangerous lead emissions.

KAST: *[voice-over]* But the small companies which collect used oil from service stations, remove water and some dirt and blend it with other oil, insist that is recycling, because the product can be burned for energy.

BERNARD SNYDER, President, Eastern Oil Company: The oil's going to continue to flow. People are going to change their oil. We've got to do something with it. And right now, the best alternative that I see is recycling it into fuel.

KAST: The argument over what is true recycling is part of a larger debate on Capitol Hill about whether used motor oil should be classified as hazardous waste, which would effectively prevent it from being burned at all.

[voice-over] Environmentalists say burning used oil puts lead into the air. Oil companies say the industries that burn this oil, like Amoco's own Indiana refinery, have smokestacks that capture much of the lead.

JIM BOYAJIAN, Amoco Oil Company: Trace concentrations, if there are any concentrations of lead in that fuel, are undetectable.

KAST: *[voice-over]* The industry claims more regulation would cost so much that more people would dump their used oil illegally, polluting the soil and water. Environmentalists argue America should not have to choose between clean water and clean air. Sheilah Kast, ABC News, Washington.

BUSINESS

FRIDAY, APRIL 24, 1992

Oil Companies' Recycling Ads Called 'Flagrantly Misleading'

Environmentalists Ask FTC to Halt Pitches

By David S. Hilzenrath
Washington Post Staff Writer

An ad from Amoco Corp. shows the environmentally incorrect places to dispose of used motor oil—a sink, a storm drain, a back-yard ditch—as a narrator's voice intones, "Guilty, guilty, guilty. . . ."

"Now there's a way to get rid of used motor oil without feeling guilty about it. Bring it to a participating Amoco station for recycling," the Amoco ad says.

A television advertisement for Mobil 1 motor oil shows an idyllic mountain scene as it urges viewers to "protect the environment" and take their used oil "to an approved used oil collection center."

But those solutions may create environmental problems of their own, the Sierra Club and other environmental activists said yesterday.

Much of the used oil that the oil companies collect is burned in the furnaces of factories, apartments and other buildings, contributing to air pollution, the environmentalists said. Because used motor oil contains elevated levels of lead and other toxic

heavy metals, the resulting air pollution may be more harmful than ordinary fuel emissions, they said.

The Sierra Club, the Natural Resources Defense Council and the Izaak Walton League of America urged the Federal Trade Commission to stop the ads by Amoco and Mobil Corp.—and another by Exxon Corp.—arguing that the companies' environmental message "is flagrantly misleading the American public."

"The oil companies are exploiting consumers' growing concern for protecting the environment by making deceptive 'green marketing' claims," the environmentalists said in their letter to the FTC. An agency spokesman said the agency was reviewing the letter and would study the ads.

The petroleum industry, which is accustomed to criticism from environmental groups, reacted with indignation yesterday when the criticism involved what seemed to be one of its more conscientious efforts to do the right thing for the environment.

"We are not making money on this. We are trying to deal with a problem," said Charles Dibona, president of the

See OIL, C6, Col. 1

Groups Attack Oil Firm Ads

OIL, From C1

American Petroleum Institute, an industry group. Dibona said that all used motor oil burned as fuel must comply with government limits on contaminants such as lead. He said he feared the environmentalists' message would encourage consumers to dump used oil from their cars improperly.

There was consensus on this point: The oil used in the engines of cars and trucks poses a major environmental challenge. The Environmental Protection Agency said 265 million gallons of motor oil were improperly dumped in 1990 in sewers, drains and on land, where it could contaminate water. Another 114 million gallons of oil were re-refined for use as a lubricant and 815 million gallons were burned as fuel, the EPA said.

Repeatedly questioned yesterday on the subject, a Sierra Club representative avoided saying whether motorists would do better to bring their used oil to one of the collection centers he was criticizing or dump it themselves. "People shouldn't be forced to choose between water pollution and air pollution," said Daniel Weiss, Washington director of the Sierra Club's environmental quality program.

Weiss called on the petroleum industry to recycle more used oil for use as a lubricant. That is a relatively unpopular approach for the industry because the "economics of burning it are better than re-refining it," Dibona said.

An Amoco spokeswoman said Amoco sells 11 million gallons of motor oil yearly and collects 1 million gallons of used oil. She said the company burns one third of the used oil it collects and that before it is burned, it is mixed with other oil to reduce its lead content to levels the federal government considers safe.

Environmental Groups Battle Oil Companies

By Roy Furchgott

WASHINGTON—The Sierra Club, the Izaak Walton League of America and the Natural Resources Defense Council have filed a complaint with the Federal Trade Commission charging that Mobil, Amoco and Exxon oil recycling ads are deceptive.

The complaint charges that the ads imply that used oil collected in recycling efforts is treated and turned into new lubricant, when most used oil is burned to fuel refineries. The environmentalists' interpretation of Environmental Protection Agency figures show that burning oil for industry is the largest single source of air pollution in the country, releasing 600,000 pounds of lead into the air annually along with chromium, arsenic, cadmium and other toxins.

Oil companies dispute the environmental groups' interpretation of EPA statistics, adding that burning oil is a government-approved process that is officially recognized as recycling. "Recycling means to use again, and we are recycling [the used oil] into another fuel," said Henry Beathard, an Exxon spokesperson.

"This used oil takes the place of petroleum products that would otherwise be used to refine gasoline," said James Boyajian, general manager of marketing for Amoco.

"Exxon, Amoco and Mobil's recycling ads are misleading because they falsely claim that they are safely recycling used oil," said Daniel J. Weiss, Washington director of environmental quality programs of the Sierra Club. "But the advertised recycling programs do not transform dirty, used oil into clean, new oil products." ■



ONLY ADVERTISING TACTICS?

The Sierra Club, the Izaak Walton League of America and the Natural Resources Defense Council have gone to the Federal Trade Commission to charge oil recycling ads from Mobil, Amoco and Exxon are deceptive. (See page 4)

BusinessWeek

MAY 11, 1992

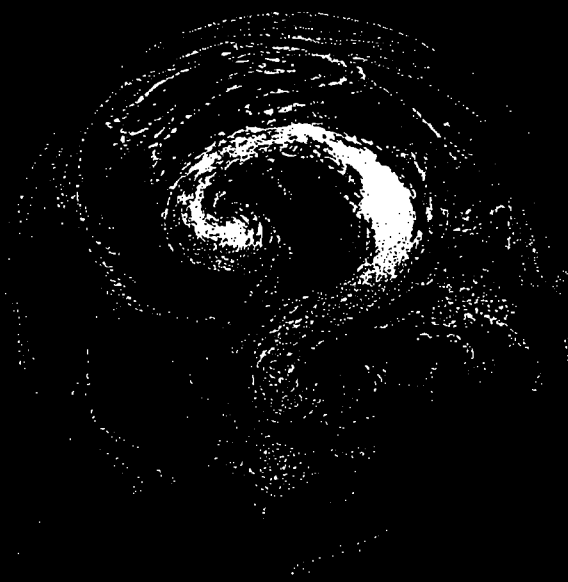
A MCGRAW-HILL PUBLICATION

\$2.50

GROWTH vs. ENVIRONMENT

The Push For Sustainable Development

In Rio next month, world leaders will seek a route to prosperity without environmental degradation.



It's called "sustainable development." The concept is certain to generate plenty of controversy.

PAGE 66

33 BIG OIL'S RECYCLING ACT

Critics charge that it does more harm than good

THROWING BRICKBATS AT BIG OIL'S RECYCLING ACT

American consumers long have lacked an environmentally sound way to dump used motor oil. Many simply send it down storm drains, leave it for the garbageman to take to a landfill, or use it as weed killer—all of which pose threats to groundwater. To solve the problem—and give public relations a boost—Amoco, Mobil, and Exxon lately have been offering to do the public a favor by recycling used oil.

Now, a coalition of environmental groups claims that the oil company ads about the recycling programs are misleading. In a complaint filed with the Federal Trade Commission on Apr. 23, the Sierra Club, the Natural Resources Defense Council, and the Izaak Walton League of America, an environmental group, contend that consumers have been snookered because most of the oil collected is burned as fuel. They say the ads give the impression that the oil will be re-refined into lubricant.

Burning used oil as fuel, the environmentalists say, endangers the public's health by releasing lead and other toxic chemicals into the air. "These companies are using this 'green scam' to clean up their dirty images without changing their filthy behavior," says the Sierra Club's Daniel J. Weiss.

LESS HARMFUL. The companies concede that the oil is burned. But they argue that recycling is recycling—it doesn't matter how the oil is reused. They also maintain that the pollution that results from burning is within legal limits and less harmful than dumping the oil into groundwater. The complaint, the companies say, is a publicity stunt. "It's

fund-raising time for them, and we're their favorite villains," says an oil company executive. "The Republicans use ads with Ted Kennedy, the Democrats use Jesse Helms, and the environmentalists use the oil companies."

Actually, most used oil is collected by used-oil dealers—not the oil companies. They sell it to re-refiners, or as industrial boiler fuel, or home heating oil.

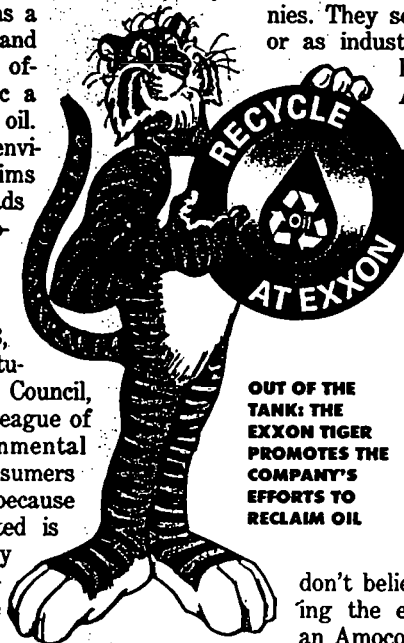
Amoco Corp. collects some of its own oil to fuel its refinery in Whiting, Ind., and mixes the used oil with new oil to dilute the lead. When burned, Amoco says, the quantity of lead in the fuel is 2% of the federal standard for home heating oil. "It's a proper use, and we

don't believe it's at all hurting the environment," says an Amoco spokeswoman.

The FTC complaint actually may be just the start of an environmental campaign that is aimed at eliminating lead from used oil—just as it has been taken out of gasoline. "Your body doesn't excrete lead," says Jacqueline M. Warren, a lawyer for the Natural Resources Defense Council.

Eliminating lead from used oil is no easy job, since there aren't enough re-refineries to handle the task. A tough new law could force Exxon Corp., Amoco, and the rest to remove the lead, but they would resist. For now, environmentalists may have to settle for a tad more truth in advertising.

By Peter Hong in Washington



OUT OF THE TANK: THE EXXON TIGER PROMOTES THE COMPANY'S EFFORTS TO RECLAIM OIL

The New York Times

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NEW YORK, THURSDAY, APRIL 30, 1992

Blowing smoke

We like to think we have a healthy respect for the environment.

That's why we were surprised and puzzled—and, quite frankly, just a little ticked—when a group of self-appointed environmental "experts" recently denounced us for a program that clearly benefits the environment.

Here's what happened: The "experts" called a press conference recently to announce they were complaining to the Federal Trade Commission that Mobil and two other oil companies were engaging in "deceptive trade practices." In their announcement, they said: "Oil companies should not be allowed to advertise used oil recycling programs that only burn used oil."

Fine. We don't. And, as proof, we have offered to make copies of our advertising available to any legitimate news organization. This offer still stands.

The "experts" are trying to mislead consumers both with outright misstatements of fact and language that seems designed to confuse.

FACT: We have clearly and repeatedly called our program what it is—a "used oil collection program." The Environmental Protection Agency (EPA) estimates that some 175 million gallons a year of used oil are poured down drains or in landfills by do-it-yourselfers, and that much of this can be reclaimed and reused. We have been encouraged by the EPA and state agencies to help reclaim this oil, which we do at some 1,500 Mobil stations in the United States. Some of the oil is re-refined, although not by us. But that's beside the point. Under federal and state laws, if used oil is burned as fuel, it is considered "recycled" for its energy value. However,

now we're getting into semantics. Simply put, Mobil collects the used oil for reuse by others.

FACT: Mobil itself does not burn the oil collected at our service stations in our refineries. The used oil is picked up from participating Mobil stations by companies in the reclaiming and recycling business. These companies, in turn, sell some of it to re-refiners for recycling into lubricating oil. Most is sold to be used as industrial fuel. But even when this oil is burned as fuel, it must meet federal environmental standards.

Our critics know this. Instead, they seem more intent on producing a smoke screen of their own. Their letter to the FTC, for example, also states that the programs "are simply revenue-raising gimmicks for the oil companies."

For the record, if any payment is made, it is usually by Mobil stations to the used oil collectors. The used oil program is a financial cost to Mobil and our dealers. Discouraging consumers from bringing used oil to these collection sites is clearly counterproductive. Why would such so-called environmentalists want to kill programs, initiated with the best of intentions, that provide a legitimate remedy to a real environmental concern?

When we make a mistake, we expect the self-appointed environmental watchdogs to get on our case. But when we do something that clearly benefits the environment, is it too much to expect, if not plaudits, at least silence?

Our used oil collection program may not be the only answer to proper disposal of used oil. But it is a well-meaning step in the right direction—which is more than can be said for the recent attempt to discredit it.

THE CINCINNATI POST

Copyright 1992 The Cincinnati Post

DATE: FRIDAY, APRIL 24, 1992

PAGE: 2A

EDITION: METRO

SECTION: NEWS

LENGTH: SHORT

SOURCE: ASSOCIATED PRESS

DATELINE: WASHINGTON

GROUPS TARGET OIL ADS
CHARGE: BURNING IS NOT RECYCLING

Three oil companies are trying to get motorists to recycle their used oil and help the environment, but environmentalists aren't impressed. They say the used oil is collected and burned, releasing toxic chemicals into the air.

The Sierra Club and two other environmental groups complained Thursday to the Federal Trade Commission, claiming that television ads by Amoco, Exxon and Mobil are deceptive because they promote their oil collection programs as being environmentally beneficial.

"Burning used oil is not recycling; it's polluting," said Daniel Weiss of the Sierra Club. The environmentalists were especially concerned about releases of lead, a carcinogen that also may affect the nervous systems of children, when the used oil is burned.

The American Petroleum Institute, an industry trade group, called the complaint to the FTC "completely unfounded." When burned, the used oil has lead levels only one-tenth of the legal limit set by the Environmental Protection Agency, the group said.

Amoco defended its ads and said its oil recycling program keeps motorists from putting used motor oil "in the garbage, down the drain or in the back yard."

"Burning is recycling when it comes to a petroleum product," James Boyajian, Amoco's general manager of marketing, said in a statement the company issued.

FTC spokesman Don Elder said the agency planned no immediate comment.

The environmentalists conceded that the oil companies are not violating any federal or state laws in the way they dispose of the oil. But they contend that the companies should treat the used oil to remove toxic chemicals before burning it or that the oil should be re-refined.

Industry officials said most of the oil collected is diluted with virgin oil and used as industrial fuel in facilities like cement kilns and asphalt plants.

EPA spokeswoman Robin Woods said lead content must be less than 100 parts per million when used oil is burned. "This is fully protective of human health and the environment," she said.

CHARLOTTE OBSERVER

DATE: FRIDAY, April 24, 1992

PAGE: 1A

EDITION: TWO & FOUR

SECTION: MAIN NEWS

LENGTH: Short

SOURCE: Associated Press

DATELINE: WASHINGTON

MEMO: This story also appeared in 1

CLAIMS OF RECYCLED*OIL*JUST SMOKE, GROUPS SAY

Environmentalists on Thursday accused*oil*companies of deceiving the public with claims they are helping the environment by*recycling*oil.*The critics said most of the*oil*is burned, releasing toxic chemicals.

The Sierra Club and two other environmental groups said they planned to file a complaint with the Federal Trade Commission about*oil*recycling*claims made by Exxon, Mobil and Amoco. Each company in television ads has promoted its*recycling*program as being environmentally beneficial.

"Burning used*oil*is not*recycling,*it's polluting," insisted Daniel Weiss of the Sierra Club. He claimed the ads mislead the public into thinking they are contributing to a cleaner environment.

The American Petroleum Institute issued a statement calling the environmentalists' charges "completely unfounded" and said that used*oil* when burned has lead levels of one-tenth of the standard set by the Environmental Protection Agency.

"The goal is to prevent the improper disposal of used*motor*oil*down sewers and in landfills to protect the groundwater," said the*oil*industry

trade group.

KEYWORDS: FUEL ENVIRONMENT

HEADLINE Environmentalists dispute oil recycling ads

Credit: Associated Press

DATE 04/24/92

SOURCE STAR TRIBUNE: NEWSPAPER OF THE TWIN CITIES Mpls.-St. Paul (MSP)

Edition: METRO

Section: NEWS

Page: 07A

Origin: Washington, D.C.

(Copyright 1992)

- * Environmentalists accused oil companies Thursday of deceiving the public with claims that they are helping the environment by
- * recycling oil. The critics said most of the oil is burned, releasing toxic chemicals.

- The Sierra Club and two other groups said they planned to file a
- * complaint with the Federal Trade Commission about oil recycling claims made by Exxon, Mobil and Amoco. Each company in TV ads has
- * promoted its recycling program as being environmentally beneficial.
- * "Burning used oil is not recycling, it's polluting," said Daniel

Weiss of the Sierra Club. He claimed that the ads are deceptive under FTC rules.

- The American Petroleum Institute issued a statement calling the environmentalists' charges "completely unfounded" and said that used
- * oil when burned has lead levels of one-tenth the standard set by the Environmental Protection Agency. "The goal is to prevent the
- * improper disposal of used motor oil down sewers and in landfills to
- * protect the groundwater," said the oil industry trade group. It
- * acknowledged most of the oil collected is used as industrial fuel in such facilities as cement kilns and asphalt plants after it is
- * diluted with virgin oil.
- * The EPA has said that used oil may have a lead content of no more than 100 parts per million when burned.
- * In Chicago, Amoco defended its ads and said its oil recycling
- * program keeps motorists from putting used motor oil "in the garbage,
- * down the drain or in the back yard." "Burning is recycling when it comes to a petroleum product," James Boyajian, Amoco's general manager of marketing, said in a statement.
- * Environmentalists have tried to have used oil classified a hazardous waste because it contains a variety of toxic chemicals

such as lead, arsenic and chromium. The Bush administration recently rejected such a classification, and efforts in Congress have been strongly opposed by the industry.

- * Weiss acknowledged that the oil companies are within the law in
- * burning the used oil collected under their recycling program. But he

- said the advertising is deceptive. "They leave the impression that
- * the companies handle used oil in an environmentally safe manner."
 - * Nearly 800 million gallons of used oil are collected through various means each year and most of it is burned, the environmentalists said. They cited EPA findings that showed
 - * emissions from burning used oil were the leading source of airborne lead pollution from industrial sources in 1989.

End of Story Reached

HEADLINE Oil industry assailed on recycling/Sierra Club says claims misleading

Byline: JONATHAN MOORE

Credit: States News Service

DATE 04/24/92

SOURCE HOUSTON CHRONICLE (HOU)

Edition: 2 STAR

Section: BUSINESS

Page: 2

Origin: WASHINGTON

(Copyright 1992)

- WASHINGTON – Environmental groups said Thursday that ads by
- * major oil companies saying they recycle used motor oil are deceptive because most of it is burned.

- The Sierra Club has filed a false-advertising claim with the Federal Trade Commission against Exxon, Mobil and Amoco for ads
- * that encourage motorists to bring used oil to service stations for
 - * recycling. The group says the TV spots create the impression the
 - * oil is reprocessed into new lubricants.
 - * ""The advertised recycling programs do not transform the

- * dirty, used oil into a clean new product," said Daniel J. Weiss, director of the Sierra Club's environmental quality program.
- * ""Instead, the used oil is burned in refineries, cement kilns and boilers, producing toxic emissions such as lead, chromium and arsenic.

""These companies are using 'greenscam' to clean up their dirty images without changing their filthy behavior," Weiss said.

- A Sierra Club press release, citing the Environmental
- * Protection Agency, said, ""The burning of used oil is the single largest industrial source of airborne lead emissions in the country today, and lead is the No. 1 environmental threat to children."

- The group wants the ads banned and urges passage of a bill
- * that would reclassify the oil as hazardous waste, requiring impurities to be removed before it is burned. The technology exists
 - * to convert the oil into new products, the group said.
 - * The oil giants say burning the oil as fuel for cement kilns or refineries is better for the environment than dumping it down the drain, where it can contaminate ground water. They say they provide a service to communities that have no other way to dispose
 - * of the oil.

- * Burning counts as recycling under a federal law that deals
- * with used motor oil, noted Patricia Wright, a spokeswoman for Amoco in Chicago.

- ""Our advertising is truthful," said Wright. ""Burning is a
- * legitimate recycle of a petroleum product because it saves virgin
 - * oil, which might then be turned into motor oil. We do not burn it

just to get rid of it."

Refiners limit the toxic emissions to within required levels

- * by diluting the used oil with clean fuel before it is burned,
- * Wright said. Amoco lacks the equipment to reprocess the oil, and
- * such recycling is not economical, she said.

End of Story Reached

**NATURAL RESOURCES DEFENSE COUNCIL • HAZARDOUS WASTE TREATMENT
COUNCIL • THE IZAAK WALTON LEAGUE OF AMERICA • THE SIERRA CLUB**

**EMBARGOED UNTIL 10 a.m.
NOVEMBER 13, 1991**

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BURNING USED OIL TAGGED AS TOP SOURCE OF AIRBORNE LEAD EMISSIONS
Report Says Major Health Threat Ignored By Federal Government; Congress Responds

WASHINGTON, D.C. -- The uncontrolled burning of used oil for heat and fuel is the largest industrial source of airborne lead pollution in America, according to a report released today by a group of environmentalists and industry representatives.

The report documents that, unlike lead in paint, plumbing and gasoline, the lead in used oil has been virtually ignored by the federal government. The revelation comes barely one month after Health and Human Services Secretary Louis Sullivan declared lead "the number one environmental threat to children."

-more-

pipes & paint.

USED OIL HAZARDS -- Add one --

Coinciding with the release of the report, the authors announced their support for federal legislation amending the Resource Conservation and Recovery Act of 1984 (RCRA) to designate used oil as a hazardous waste. RCRA is the foundation of the federal government's waste management program.

Such legislation, which is expected to be introduced in the House of Representatives this month, would stand in stark contrast to other bills that already are circulating on Capitol Hill. Those proposals -- two recycling bills in the House and the Senate Energy Bill -- specifically would prohibit the designation of used oil as a hazardous waste.

"Bills which would prohibit the federal government from fighting lead poisoning from the burning of used oil are a 'Nightmare on Main Street' for our children," said Daniel J. Weiss, Washington director of Sierra Club's Environmental Quality Program.

Because it is not designated as a hazardous waste, almost 800 million gallons of used oil loaded with lead are allowed to burn every year in residential and industrial boilers, the study finds. The result is the annual release of almost 600,000 pounds of lead into the air - far above the total produced by any government-monitored source, according to the report.

The report was authored by the Hazardous Waste Treatment Council (HWTC), the Natural Resources Defense Council (NRDC), Sierra Club and Izaak Walton League of America.

"The EPA has ignored this massive source of lead pollution for more than a decade," charged NRDC Senior Attorney Jackie Warren. "It's time for Congress to clear the air."

The report estimates that with EPA's back turned to the danger, barely 5 percent of America's annual 1.4 billion-gallon pool of used oil is rerefined into safe, clean oil. Some 36 percent is dumped in landfills and storm sewers, while 56 percent is blended with other oils and burned to heat schools, hospitals, apartment buildings, offices, ships and factories. Three percent goes to other industrial uses.

"Burning used oil is not recycling," said Marchant Wentworth, legislative representative for the Izaak Walton League of America. "The airborne lead from this burning settles back to earth to contaminate our rivers, streams and reservoirs."

The report contends that EPA no longer can defend its longstanding position that designating used oil as a hazardous waste stigmatizes it and discourages people from recycling it. That so-called "stigma argument" has been refuted in nine states which individually treat used oil as a hazardous waste, according to the report. In particular, the report notes that California consistently has collected proportionally more used oil than any other state since it first designated it as a hazardous waste in 1978.

In states which do not treat used oil as a hazardous waste, the report finds the lead content in hazardous waste is regulated, while the lead in used oil is not regulated. In those 41 states EPA prohibits the burning of hazardous waste fuels which contain more than 10

. USED OIL HAZARDS -- Add three --

parts per million (ppm) lead, but it allows used oil containing as much as 100 ppm lead to be burned. Studies show used oil contains an average of 100 ppm lead.

Lead is known to cause brain damage and neurological disorders, the coalition report said. In addition to lead, the report found used oil also contains a number of suspected carcinogens, such as arsenic, chromium, cadmium, chlorinated solvents and sometimes PCBs.

"We're taking lead out of paint and pipes, but as long as the EPA permits the burning of dirty used oil, we're not taking it out of our lives," said HWTC Executive Director Richard Fortuna. "Our report makes it clear that legislation to designate used oil as a hazardous waste must be passed. America can no longer afford to handle this hazardous waste with hypocrisy."

#

Post-It™ brand fax transmittal memo 7671 # of pages 1	
To <i>Katie McGinty</i>	From <i>Dan Weiss</i>
Co.	Co.
Dept.	Phone #
Fax # <i>224-0580</i>	Fax # <i>547-6009</i>

THE BUSH ADMINISTRATION OPPOSES USED OIL REGULATION

Re-refiners such as Evergreen remove the toxic metals from used oil before turning it into a lubricant. These companies make a profit by providing a public health benefit. Unfortunately, these "green" companies are forced to compete against Mobil, Amoco, and other big oil companies that burn dirty used oil WITHOUT removing the deadly metals first. Burning dirty used oil exposes the nation's children to deadly and excessive lead emissions. Moreover, the uncontrolled burning of lead-contaminated used oil is the single largest industrial source of lead emissions (588,000 lbs/yr).

Last year, Evergreen testified before Congress that Congress must "get the lead out of fuel oil...[and] get the lead out of recycled oil," because EPA failed to do so. Evergreen concluded that "it is time to take the lead out of EPA's pace in regulating used oil."

The Bush Administration's policies continue to favor the dirty big oil companies over smaller, cleaner environmental entrepreneurs such as Evergreen. EPA's recent regulations PROMOTE the unregulated burning of lead-laced used oil. On May 28, 1992, the Hazardous Waste Treatment Council, a trade associations that Evergreen belongs to, had to sue the Bush Administration over its failure to regulate used oil burning.

President Bush's visit to the Evergreen plant today just adds insult to the public health injury caused by his policy to allow the burning of used oil.

BACKGROUND

Most used oil is so contaminated with poisonous substances that it should be treated as toxic waste, yet the Bush Administration refuses to regulate its unsafe recycling and disposal. Congress enacted laws in 1980, and again in 1984, directing the U.S. Environmental Protection Agency (EPA) to properly regulate used oil. EPA has blatantly violated these laws throughout the Reagan and Bush Administrations. EPA has even ignored court decisions that found EPA's actions illegal. As a result, today used oil is still being dumped into municipal landfills or by being burned in uncontrolled devices, including home heating units. EPA classifies burning used oil as "recycling" even though it produces massive levels of pollution.

In 1985, the U.S. Environmental Protection Agency (EPA) found that used oil "typically and frequently contains significant quantities of lead and other metals, chlorinated solvents," and other toxic contaminants.¹ Many of these toxic ingredients, such as lead, cadmium, chromium, benzene,

¹ U.S. EPA, Proposed Rule to List Used Oil as a Hazardous Waste, 50 Federal Register 49258 (Nov. 29, 1985).

and nitrosamine, cause cancer in humans.² There is a cancer warning on every can of virgin lubricant. Ninety percent (90%) of all used oil that is recycled is merely burned as fuel, not re-refined. This results in the release of 588,000 lbs of additional lead into the atmosphere every year.³ Used oil mismanagement over the years by improper burning, "recycling," and disposal has caused hundreds of contaminated sites throughout the country, 63 of which are on the national "Superfund" list. (See Attachment) The EPA estimates that 1.2 billion gallons of used lube oil from automobiles, trucks, and airplane engines, and industrial oils (cutting, grinding, and cooling oils) require disposal each year.⁴

Despite the severe public health threat posed by used oil, the Bush Administration's EPA has repeatedly failed to identify used oil as a hazardous waste, or to require safe recycling and disposal, in clear violation of the laws that Congress has enacted.⁵ As a result, toxic waste oil is "recycled" by being labeled "fuel oil" for burning in hospitals, schools, apartment complexes, and shopping malls -- often without the knowledge of the building owners. This burning of toxic waste oil as fuel is the largest industrial source of lead poisoning to the air⁶ -- and it is done because the Bush Administration refuses to comply with the law.

CHRONOLOGY

The chronology of the Bush Administration's failure to protect the American public from toxic waste oil is documented on the public record:

² Id.

³ Burning Used Oil: America's Undiscovered Lead Threat, Joint report of NRDC, Sierra Club, Izaak Walton League, Hazardous Waste Treatment Council. November, 1991.

⁴ Franklin Associated, Ltd., Composition and Management of Used Oil Generated in the United States (September 1984).

⁵ In the Used Oil Recycling Act of 1980, Congress directed EPA to promulgate requirements "to protect public health and the environment from hazards associated with recycled oil." 42 U.S.C. § 6935(a). In 1984, Congress enacted the Hazardous and Solid Waste Amendments which directed EPA to make a determination on whether to regulate used oil as a hazardous waste, and to promulgate protective standards for used oil recycling. 42 U.S.C. § 6935(b)-(d). Today EPA has still not complied with these laws.

⁶ Burning Used Oil, November, 1991.

October 15, 1980 Congress enacts the Used Oil Recycling Act. This law directs EPA to issue standards to protect public health from the hazards of used oil recycling, and to report to Congress on whether used oil should be designated a hazardous waste.

October 17, 1981 EPA submits its Report to Congress on the significant hazards of used oil, and its improper disposal and recycling. EPA then does nothing.

November 8, 1984 A frustrated Congress enacts the Hazardous and Solid Waste Amendments, again directing EPA to determine whether to regulate used oil as a hazardous waste and to issue management standards.

November 29, 1985 EPA proposes to list used oil as a hazardous waste under Federal law, because used oil typically and frequently contains toxic and cancer-causing contaminants. EPA also documents the substantial threats to human health and the environment from disposal of used oil in municipal landfills, and from recycling by burning as a substitute fuel.

March 10, 1986 Vice President Bush, as head of the Reagan Administration's Regulatory Reform Task Force, intercedes in EPA's plans to identify used oil as hazardous waste. Because of Vice President Bush's concerns, EPA must reconsider. 51 Fed. Reg. 8206. / K

November 19, 1986 EPA announces its decision not to identify used oil as a hazardous waste, because the "stigma" of calling used oil "hazardous" may adversely affect gas stations and the oil industry.

October 7, 1988 Environmental group and the hazardous waste treatment industry win their lawsuit against EPA. The court rules that EPA's "stigma" decision violated the statute. EPA is ordered by the court to decide "now" whether to regulate used oil as hazardous in accord with the law. Hazardous Waste Treatment Council v. EPA, 861 F.2d 270 (D.C. Cir.).

March 26, 1990 Frustrated with Bush Administration inaction, environmental groups and treatment industry file a new lawsuit seeking a court-ordered deadline for EPA action. Natural Resources Defense Council v. EPA, No. 90-0694 (D.D.C.). EPA enters into a settlement agreement.

June 19, 1991 Evergreen Oil, Inc. testifies before the House Subcommittee on Transportation and Hazardous Materials.

Handwritten notes:
/ an
K
of
Hazardous
Waste
Council
v. EPA

The company strongly urges Congress to prohibit the burning of used oil with lead. Evergreen sharply criticizes EPA's unwillingness to regulate used oil.

- July 29, 1991 EPA issues updated list of National Priority Sites that require cleanup under the Superfund law. Sixty-three sites are the result of unsafe used oil recycling. The estimated cost of cleaning up these used oil sites is \$2.1 billion.
- November 13, 1991 Natural Resources Defense Council, Sierra Club, Izaak Walton League, and Hazardous Waste Treatment Council release Burning Used Oil -- America's Undiscovered Lead Threat. The report documents how EPA allows toxic waste oil with high levels of lead to be burned as fuel oil under the guise of "recycling." Evergreen supports this bill.
- November 26, 1991 Reps. Cardiss Collins (D-IL) and Dennis Hastert (R-IL) introduce the Oil Recycling and Safe Handling Act, H.R. 3956. The bill would drastically limit the levels of lead and other toxic chemicals in used oil before it is burned. It would also establish an effective system for handling used oil. The Bush Administration opposes this bill.
- May 1, 1992 EPA violates the settlement agreement in NRDC v. EPA. Due to Bush Administration direction, EPA fails to regulate used oil as hazardous and fails to issue regulatory standards. However, EPA decides not to list as a hazardous waste even that used oil which is disposed of onto the ground. As a result, today most used oil can still legally be dumped into municipal landfills and sewers. 57 Fed. Reg. 21524 (May 20, 1992).
- May 28, 1992 NRDC, HWTC (Evergreen is a member of HWTC) and the Association of Petroleum Re-Refiners file suit against EPA for violating the settlement agreement in NRDC v. EPA. The three groups asked the federal district court to enforce the agreement and order EPA to make a final decision on recycled oil by July 1992.
- June 18, 1992 President Bush visits Evergreen Oil Company for photo opportunity.
- TODAY The Bush Administration and EPA continue to ignore Congress' laws, court decisions, and the public outcry

5

for more protective Federal standards to control used oil recycling and disposal in this country.

**FACT SHEET EVERGREEN OIL
THE BUSH ADMINISTRATION AND USED OIL REGULATION**

BACKGROUND:

Most used oil is toxic waste, yet the Bush-Quayle Administration refuses to regulate its unsafe recycling and disposal. Congress enacted laws in 1980, and again in 1984, directing the U.S. Environmental Protection Agency to properly regulate used oil. EPA has blatantly violated these laws throughout the Reagan-Bush and Bush-Quayle Administrations. When taken to court, EPA -- following the lead of the Bush-Quayle Administration -- has even ignored court decisions that found the agency's actions to be illegal. As a result, today used oil is still being dumped into municipal landfills or "recycled" by being burned in uncontrolled devices, including home heating units.

The burning of used oil is the single largest industrial source of airborne lead emissions in the country today. According to EPA data, more than 90 percent of all used oil that is "recycled" in the U.S. -- 784 million gallons each year -- is merely burned as fuel. EPA allows such fuel to contain high levels of lead and other toxic metals such as arsenic, cadmium, and chromium. (This results in the release of 588,000 pounds of additional lead into the atmosphere every year.) The EPA itself estimates that used oil burning will cause 3,094 cancer cases across the country.

The Bush-Quayle Administration has blocked, at every turn, efforts to encourage responsible oil recycling, through processes similar to those used at Evergreen. But that didn't stop President Bush from visiting Evergreen on June 17. The very industry Bush praised that day -- used oil re-refining -- is in the process of being put out of business by the actions of the Bush Administration.

CHRONOLOGY

October 15, 1980

Congress enacts the Used Oil Recycling Act. This law directs the EPA to issue standards to protect public health from the hazards of used oil recycling, and to report to Congress on whether used oil should be designated a hazardous waste.

October 17, 1981

EPA submits its Report to Congress on the significant hazards of used oil, and its improper disposal and recycling. EPA then does nothing.

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May 26, 1992

NRDC, HWTC, and the Association of Petroleum Re-Refiners file suit against EPA for violating the settlement agreement in NRDC v. EPA. The three groups asked the federal district court to enforce the agreement and order EPA to make a final decision on recycled oil by July 1992. The court has not yet ruled.

TODAY

The Bush-Quayle Administration and EPA continue to ignore federal laws, court decisions and the public outcry for better standards to control used oil recycling and disposal.

####



Evergreen Oil Inc.

FACT SHEET

Description:

Evergreen Oil recycles used motor oil, returning it to virgin standards. Evergreen is the first modern re-refinery in the United States to use the state-of-the-art hydrogenation technology.

Technology:

✱ Evergreen's oil recycling facility is the only plant in California and one of only two in the United States that re-refines oil back to virgin standards. The re-refining process uses one third the energy of conventional motor oil production.

Products:

Evergreen re-refines motor oil to produce the highest quality lube oil -- better than many virgin oils -- for use as brake, transmission and steering fluids, and industrial lubricants. Lower grade recycled oils produced by other facilities often can only be used as ship or power plant boiler fuel. Because of the high quality of Evergreen's oil, it is fully recycled for return to automobiles.

Capacity:

Evergreen produces 7 million gallons of clean oil each year.

Employees:

One hundred employees are responsible for operating the recycling plant and collecting used oil from throughout Northern California.

Plant History:

Evergreen's plant, located in Newark, California (in the San Francisco Bay Area), came on-line in October 1986. The only oil refinery to be built in California during the last ten years, Evergreen is fully permitted under all appropriate local, regional, state, and federal agencies.

The Future:

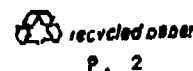
Evergreen Oil is currently searching for an appropriate location to site a second California recycling facility. The planned operation will have three times the capacity as the Newark plant.

Summary:

Evergreen Oil's foundation lies in the Three Es -- Energy, Environment, Economics. The company was founded on the belief that these three goals can be compatible. Evergreen helps to alleviate our country's dependence on foreign sources of energy, provides an environmental solution to the problem of oil disposal, and benefits local and state economies with a strong tax base and stable employment for 100 California citizens.

6860 SMITH AVENUE • NEWARK, CA 94560 • (510) 793-4400 • (800) 972-9284 • FAX: (510) 791-0126

A MEMBER OF THE EVERGREEN GROUP OF COMPANIES DEDICATED TO THE PROTECTION OF THE ENVIRONMENT.



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Facts and Figures:

Approximately 1.4 billion gallons of used lubricating oil are generated each year.

56 percent (784 million gallons) of all used oil is burned.

36 percent (500 million gallons) of all used oil is dumped.

5 percent (67 million gallons) of all used oil is recycled back into motor oil.

3 percent (49 million gallons) of all used oil goes to other industrial uses.

(Source: U.S. EPA)

Approximately 900 million gallons of used oil are collected each year.

Over 90 percent of used oil that is collected for recycling is actually burned.

(Approximately 784 million gallons are burned.)

Less than 10 percent of used oil collected for recycling is recycled back into motor oil.

(Approximately 67 million gallons are re-refined.)

(Source: U.S. EPA)

California's recycling rate is more than double the national rate for used oil from do-it-yourselfer oil changers:

Of the 100 million gallons of used oil generated by do-it-yourself oil changers,
only 10 million gallons of used oil is collected for recycling nationwide. (U.S. EPA)

Evergreen Oil alone collects 2.4 million gallons of do-it-yourselfers' used oil, putting
California's recycling rate 2.5 times higher than the national rate. (HWTC)

AGA - letter

to P per -)

zero target &
principles

Bush Criticized Over Visit to Recycler

By RICHARD L. BERKE
Special to The New York Times

WASHINGTON, June 17 — Days after President Bush angered participants in the Earth Summit at Rio de Janeiro, environmentalists are attacking him again for traveling Thursday

to an oil-recycling company that has criticized the Administration's environmental policies.

On the first stop of a three-day campaign trip to California and Texas, Mr. Bush plans to tour Evergreen Oil Company, in Newark, Calif., which has been praised by environmentalists as being on the cutting edge in recycling used motor oil.

But environmental organizations asserted today that it was hypocritical of Mr. Bush to visit the company because his Administration has not been an advocate of the oil recycling industry. And they say they are surprised that Evergreen is welcoming Mr. Bush because it played an active role last year in a trade group's lawsuit against the Environmental Protection Agency on the issue.

Officials of Evergreen said today that they were pleased about the President's visit and the publicity it would bring. But Richard C. Fortuna, executive director of the Hazardous Waste Treatment Council, a group of high technology companies, of which Evergreen is a member, that sued the E.P.A., called the trip an attempt by Mr. Bush to deflect attention from his environmental record.

"For George Bush to go stand in front of a refinery and preach environmentalism would be like Jimmy Swagart going before the Vatican and preaching infidelity," Mr. Fortuna said.

Dispute Over Lead

The treatment council was a plaintiff in a suit filed in May in the United States District Court for the District of Columbia that accused the E.P.A. of not properly regulating the burning of used oil. Environmentalists say Administration policies encourage burning the oil, which is less costly than purifying it, and thus give big oil companies that burn an advantage over small companies like Evergreen that recycle.

Environmentalists say companies that burn should be required to remove lead from the oil, which would increase their costs, but produce less pollution.

"While Evergreen is trying to clean up used oil, these other companies use it as a fuel," said Daniel J. Weiss, director of the Sierra Club's environmental quality program. "Because the Bush Administration has opposed regulating the lead content in used oil, Evergreen and other green companies have struggled to expand their businesses. This is another example of George Bush as the hypocrisy Presi-

dent, not the environmental President."

In addition to the lawsuit, an Evergreen official, Peter H. Weimer, criticized the E.P.A. in testimony last year before a subcommittee of the House Energy and Commerce Committee, asserting that "it is time to take the lead out of E.P.A.'s pace in regulating used oil."

'Fantastic Press'

But today, Curtis Morgan, chairman of the 100-employee company near San Jose, sought to play down differences with the Administration.

"This gives fantastic press for us and our industry," Mr. Morgan said. "We couldn't be happier. I don't know what the President's agenda is for coming here, but we're very happy he is."

Pressed on the Bush Administration's policies toward his industry, Mr.

Environmental groups call the President's tour of a refinery hypocritical.

Morgan said: "We don't think it's enough, but we think it's a start. Things have been better than they were under the Reagan Administration."

Mr. Morgan said officials planning Mr. Bush's trip were referred to his company by the state Environmental Protection Agency.

Brushing aside the criticism, Torie Clarke, a spokeswoman for the Bush campaign, said: "Some of the environmental groups never miss an opportunity to score a few points. Evergreen happens to be a very good company. They are cleaning up the environment. They are good for the economy. They are on the cutting edge of U.S. industry. And they are very happy to have the President there."

Ms. Clarke said it was "not at all unusual in environmental matters" for companies to take part in suits against the Administration. "These things happen," she said. "It does not take away from the fact that the President is being welcomed."

~~Business~~

~~Business~~

~~Business~~

darken taxes

→ new study out today by WRI
showing that ~ if we act in
concert w/ our competitors &
if we recycle the revenues
back into the economy. then
Positive GNP impact

Chicago Tribune

FOUNDED June 10, 1847

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10 Section 1 ▽

Wednesday, January 15, 1992

Getting the lead out of used oil

The federal government has done a conscientious job of getting the lead out of gasoline, paint and water supplies, but has done very little about the lead that gets into motor oil. This is an environmental problem that gets little publicity but is of such magnitude that it deserves attention in Congress this year.

When oil is circulated through auto engines and machinery, it picks up countless flakes of lead and other contaminants. Some 1.4 billion gallons of used oil are produced each year, and more than half of it ends up being burned to heat schools, apartment buildings, office buildings and factories.

According to a study by four environmental groups—the Izaak Walton League, Sierra Club, National Resources Defense Council and Hazardous Waste Treatment Council—this is the largest single source of airborne lead pollution in the country, more even than metals processing. Almost 600,000 pounds of lead are released by burning annually.

The government has clearly defined lead as a health risk, with Health and Human Services Secretary Louis Sullivan calling it the principal environmental threat to children in the United States. It can cause brain damage, neurological disorders and cancer. Yet the burning of used oil is virtually unregulated, because used oil is not classified as a hazardous waste.

If it were, it would have to be treated as any other

hazardous waste, virtually eliminating the problem: No such waste can be burned if it contains more than 10 parts per million of lead. Used oil typically contains about 100 parts per million, which also happens to be the federal standard for it to be legally burned.

Despite pressure on the Environmental Protection Agency to declare it a hazardous waste and bring it under stringent regulation, the EPA has not done so. Legislation in Congress—sponsored by Chicago Democrat Cardiss Collins and Du Page County Republican J. Dennis Hastert—would do the job for the EPA.

The legislation would amend the Resource Conservation and Recovery Act—the nation's basic law regulating waste disposal—to declare used oil a hazardous waste. The designation would apply after it was picked up for recycling or disposal so that service stations, quick-lube shops and do-it-yourself oil-changers would not be discouraged from handling it for reuse. The effect would be to require the oil to be re-refined, to remove its contaminants before it could be burned or used for any other purpose, such as a lubricant.

Nine states, led by California, now have such laws, and the amount of oil collected in these states for re-refining has increased each year. But that is a piecemeal approach to a pollution problem that does not respect state boundaries. A national standard is needed, and the Hastert-Collins bill provides it.

What Happens to Used Oil?

Of the 1.4 billion gallons generated each year,
only 5 percent is rerefined.

BLENDING & BURNED

784 million gallons (56%) are blended with virgin oil to disguise their lead content. Then they are burned for fuel in schools, apartment buildings, offices and factories. This is the single largest source of airborne lead pollution in America.

REREFINED

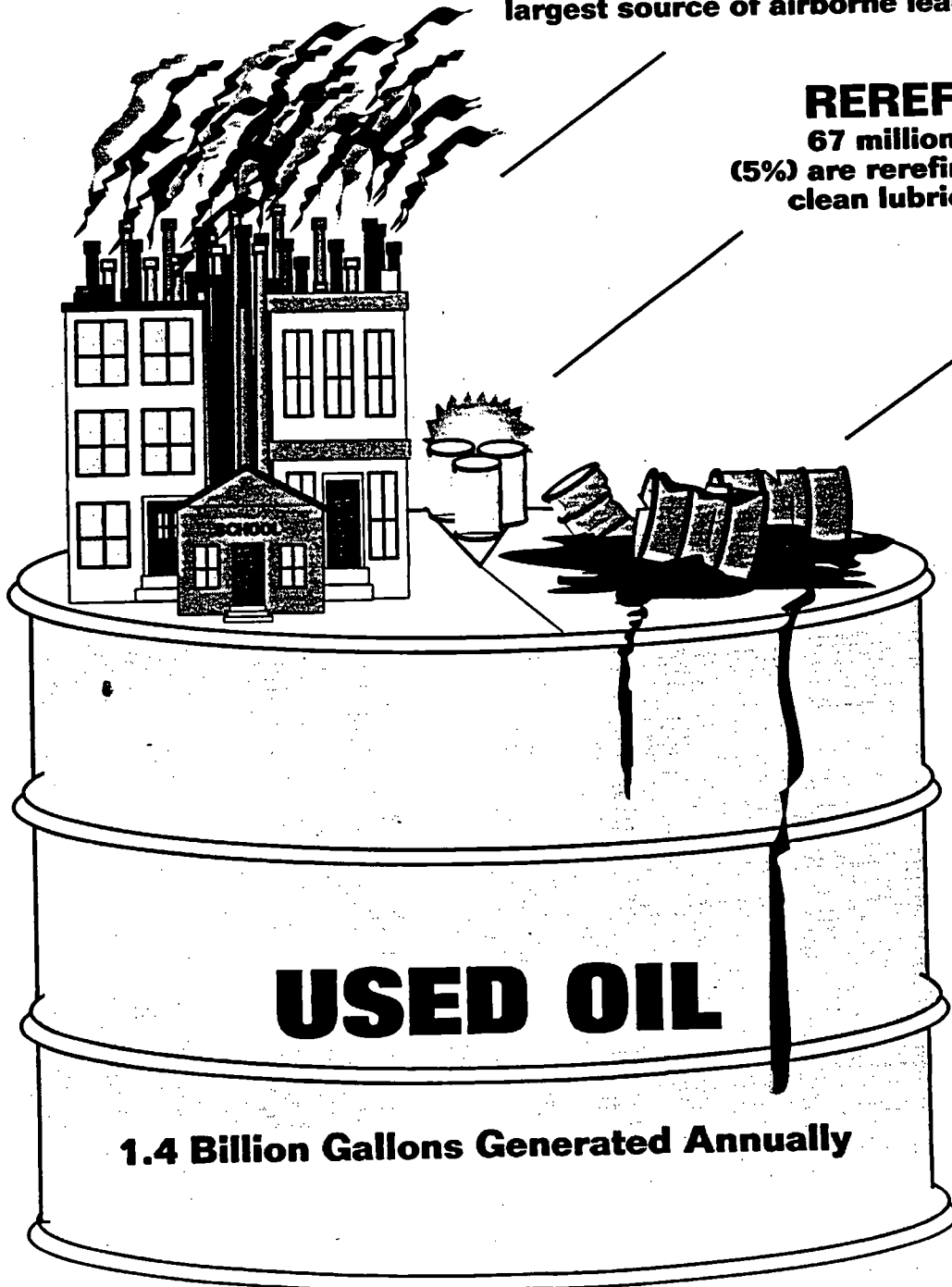
67 million gallons (5%) are rerefined into safe, clean lubricating oil.

DUMPED

Almost 500 million gallons (36%) are dumped in landfills and storm sewers.

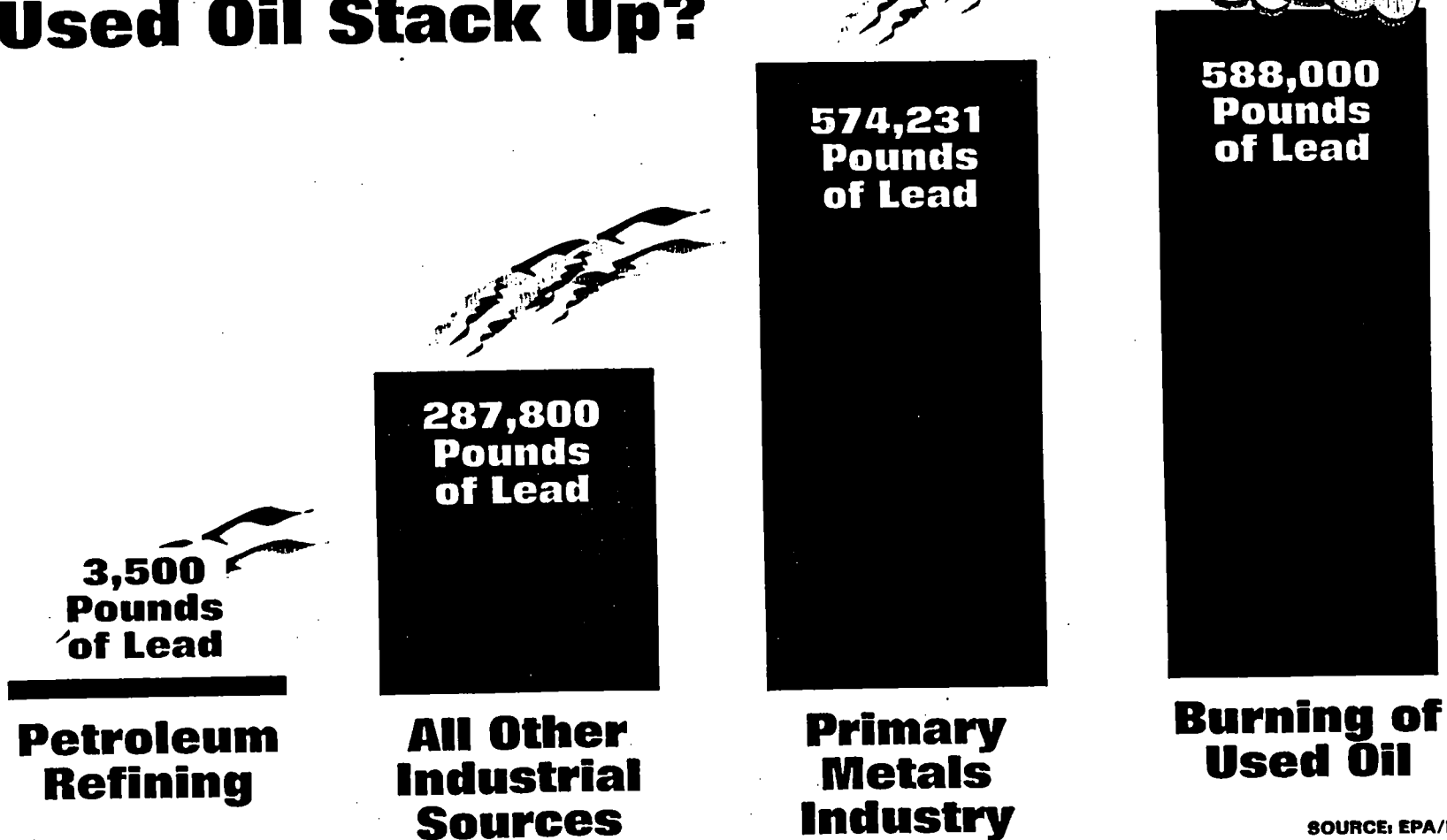
OTHER INDUSTRIAL USES

49 million gallons (3%) go to various other uses.



Annual Airborne Lead Emissions

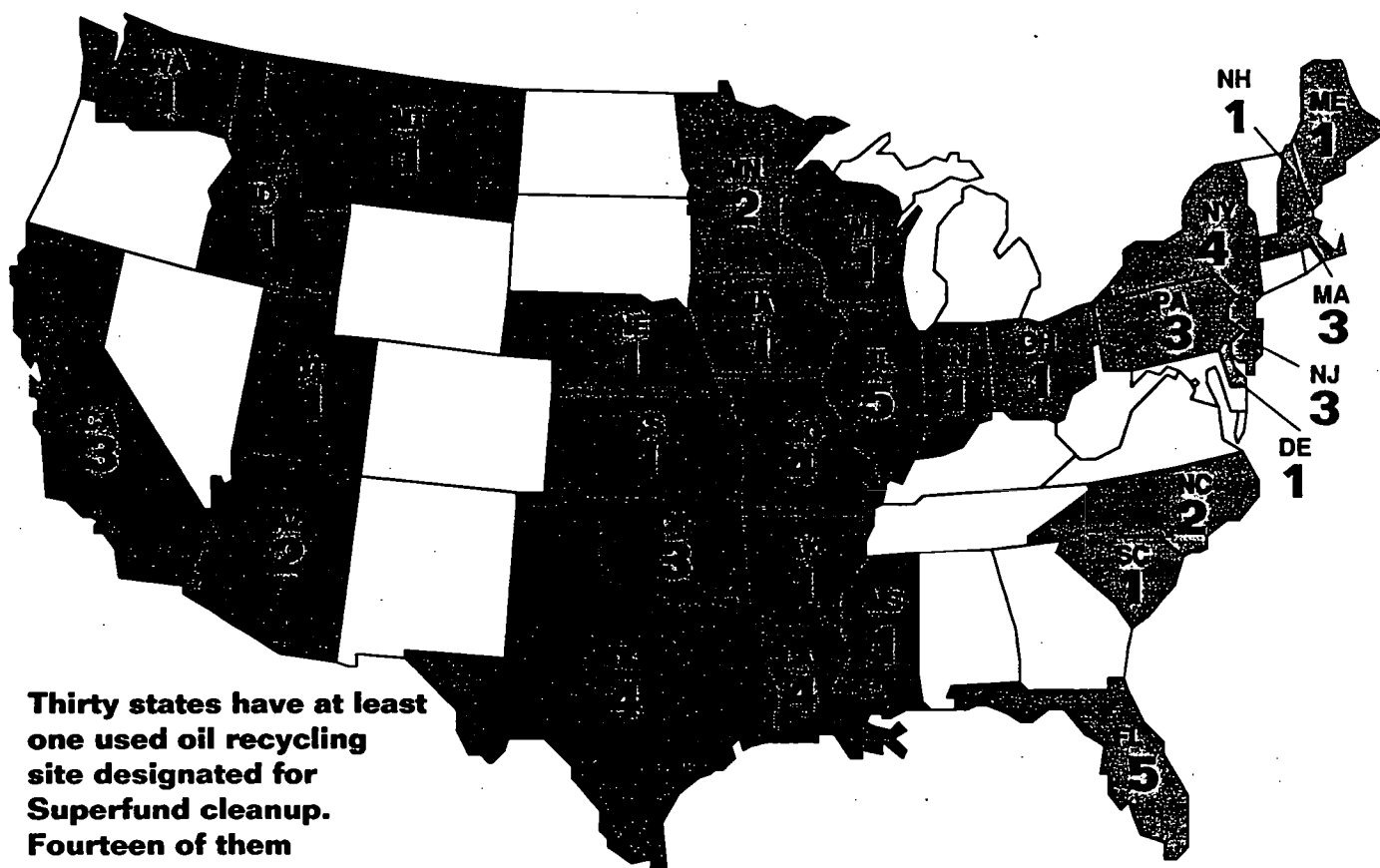
**How Does the Burning
Of Used Oil Stack Up?**



SOURCE: EPA/HWTC

Not All Recycling Is Good

Improper management of used oil turned 63 so-called "recycling" facilities in 30 states into "national priority" hazardous waste sites on the EPA Superfund List. It will cost an estimated \$2 billion to clean them up.



Thirty states have at least one used oil recycling site designated for Superfund cleanup. Fourteen of them have two or more sites.

Source: EPA

63 Former Used Oil "Recycling" Facilities Are Superfund Cleanup Priorities

Arizona - 2 sites

Luke Air Force Base - Glendale
Williams Air Force Base - Chandler

Arkansas - 1 site

Gurley Pit - Edmonson

California - 3 sites

Liquid Gold Oil Corp - Richmond
Purity Oil Sales - Malaga
Treasure Island - San Francisco

Delaware - 1 site

Sealand Limited - Mount Pleasant

Florida - 5 sites

Dubose Oil Co. - Cantoment
Peak Oil Co./Bay Drum Co. - Tampa
Petroleum Products Corp. - Pembroke Park
Tri-City Oil Conservationist - Tampa
Whitehouse Oil Pits - Whitehouse

Idaho - 1 site

Arrcom Corp. (Drexler) - Rathdrum

Illinois - 5 sites

Adams County Quincy Landfills - Quincy
A&F Materials Reclaiming Inc. - Greenup
Ilada Energy Co. - East Cape Girardeau
Interstate Pollution Control - Rockford
Lenz Oil Service - Lemont

Indiana - 1 site

Envirochem Corp. - Zionsville

Iowa - 1 site

Wayne Waste Oil - Columbia City

Kansas - 1 site

John's Sludge Pond - Wichita

Louisiana - 4 sites

Combustion, Inc. - Denham Springs
Dutchtown Treatment Plant - Ascension Parish
Oldinger Oil Refinery - Darrow
PAB Oil & Chemical Service, Inc. - Abbeville

Maine - 1 site

McKin Co. - Gray

Massachusetts - 3 sites

Cannon Engineering Corp. - Bridgewater
PSC Resources - Palmer
Silresim Chemical Corp. - Lowell

Minnesota - 2 sites

Arrowhead Refinery Co. - Hermantown
Oak Grove Landfill - Oak Grove Township

Mississippi - 1 site

Gautier Oil Co., Inc. - Gautier

Missouri - 4 sites

Minker/Stout/Romaine Creek - Imperial
Quail Run Mobile Manor - Gray Summit
Shenandoah Stables - Moscow Hills
Times Beach - Times Beach

Montana - 1 site

Comet Oil - Billings

Nebraska - 1 site

Monroe Auto Equipment - Cozad

New Hampshire - 1 site

Keele Environmental Systems - Epping

New Jersey - 3 sites

Bridgeport Rental - Logan Township
Chemical Control - Elizabeth
Imperial Oil Co. - Morganville

New York - 4 sites

Applied Environmental - Glenwood Landing
General Motors Center Foundry - Massena
Wide Beach Development - Brandt
York Oil - Moira

North Carolina - 2 sites

Charles Macon Lagoon - Cordova
Potter's Septic Tank Services Pits - Maco

Ohio - 1 site

Laskin/Poplar Oil Co. - Jefferson Township

Oklahoma - 3 sites

Double Eagle Refinery Co. - Oklahoma City
Fourth Street Refinery - Oklahoma City
Sand Springs Petrochemical - Sand Springs

Pennsylvania - 3 sites

Avco Lycoming - Williamsport
Bruin Lagoon - Bruin Borough
Douglassville Disposal - Douglassville

South Carolina - 1 site

Geiger/C&M Oil - Rantowles

Texas - 4 sites

Dixie Oil Processors, Inc. - Friendswood
Motco, Inc. - La Marque
Petro-Chemical Systems - Liberty County
United Creosoting Co - Conroe

Utah - 1 site

Petrochem Recycling/Etotek - Salt Lake City

Washington - 1 site

Commencement Bay - Tacoma

Wisconsin - 1 site

Waste Research and Reclamation - Eau Claire

Westin South Coast Plaza
666 Anton Boulevard
Costa Mesa, CA 92626

August 2-3, 1992
(714) 540-2500

STAFF ADVISORY

BAGGAGE:

Bags will be delivered to rooms on Sunday evening.

BAGGAGE CALL- 6:00 a.m. Monday. Please leave baggage outside of room for pickup.

BREAKFAST:

A continental breakfast will be served in the staff room, 1628, starting at 6:00 a.m.

DEPARTURE:

The Motorcade will be loading at 7:30 a.m. at the East Galleria (same as arrival).

DINING:

Please see attachments.

STAFF OFFICE:

Phones, fax and a copy machine are available in Suite 1628. Contact Zach Grace for a key he is staying in the suite. His beeper number is 1-800-225-0256 899680.

STAFF FAX: 1-714-662-6674

HEALTH CLUB:

There is not a club on the premises but the Westin is affiliated with L.A. Fitness. Please make arrangements with the front desk for a shuttle ride. It opens at 5:00 a.m. on Monday and there is a \$10.00 charge to your room.

SENATOR AL GORE STAFF LIST

Albert, Dennis	1617
Gearan, Mark	1625
Gill, Michael	1309
Kroger, John	1304
Mcginty, Katie	1320
Michel, Kyle	1611
Payne, Julia	1308
Pritchard, Beth	1310
Romash, Marla	1624
Silverman, Steve	1301
Simon, Greg	1321

ADVANCE TEAM:		
Lead Advance:	Patrick Morris	428-429
Press Advance:	Jim Loftus	422
Press Advance:	Jim Hickman	411
Site Advance:	Dan Rosenthal	422
Motorcade:	Jeff Schulman	413
Motorcade:	Arie Posin	411
RON Advance:	Zach Grace	1628
RON Advance:	Pam McCurdy	419
RON Advance:	Karen Finney	419

PRESS ROOM LIST

Behrens, Tom	801
Bullard, John	804
Chumley, Them	805
Gugliotta, Guy	809
Holmes, Steve	810
Lambrecht, Bill	814
Leshner, David	714
Marelius, John	716
Marsh, May	724
Nailor, Robert	820
Scott, Traci	729

THE WESTIN SOUTH COAST PLAZA **FOOD & BEVERAGE UPDATE**

THE WESTIN SOUTH COAST PLAZA indisputably has one of the best Sunday Brunches in Southern California and takes reservations from 10:00am - 2:00pm. Enjoy an extensive array of specialties from eggs florentine to sushi...featuring omelettes, pasta dishes, waffles, and exotic salads made to order. Sip free flowing champagne and fresh squeezed orange juice while relaxing to the melody of a strumming harpist. Reservations can be made by contacting **THE GARDEN COURT CAFE** on extension 6694.

* * *

Whether you need to take a break from your busy schedule or if you would just like rest and recreate, there is no better place to do it than at **THE POOLSIDE GRILL**. The menu features a nice array of light lunches to grilled sandwiches as well as sumptuous frozen beverages.

* * *

Waterfalls cascade tableside. Sip aperitifs and savor the enticing cuisine of Northern Italy...*Fettucini Alfredo, Cheese Tortellini with Crab, Angel Hair Pasta with Filet of Beef*...your favorite dishes from *Alfredo's* have been added to the **GARDEN COURT CAFE'S** own unique menu. Before going to The Performing Arts Center, feast on our bountiful *Theatre Buffet*, a complete dinner for just \$13.95.

Lunch at **THE GARDEN COURT CAFE** takes you to a different destination each day with an *Around-The-World Buffet* for \$8.95 beginning at 11:30am weekdays. Let **THE GARDEN COURT CAFE** be your luncheon travel agent by calling extension 6694.

The healthiest breakfast in town begins in **THE GARDEN COURT CAFE**. The *Heart Healthy Buffet* is not only delicious but an excellent way to start your day beginning at 6:30am.

* * *

Soothe your nerves after a busy day in the elegant surroundings of **THE LOBBY LOUNGE**. Complementary hors d'oeuvres are served from 5:00pm - 7:00pm weekdays. Relax amidst the grand piano sounds of the elegant **LOBBY LOUNGE**...a classic ambiance for cordials and quiet conversation.

* * *

Karaoke "Sing-a-Long" is the hit in **TAVERNA** where you can be the singing star that you always wanted to be. Contest for best talent is held every Wednesday and Friday night where you can win up to \$50 or dinner for two. **TAVERNA** is available for private group happy hours Monday through Friday from 5:00pm - 7:00pm and open to the public Tuesday through Thursday from 7:00pm - 12:00 midnight and Friday and Saturday from 7:00pm - 2:00am. For group bookings or information for **TAVERNA** call extension 5257.

NOV 14 1991

BURRELLES

Environmentalists Criticize Burning Of Recycled Oil

WASHINGTON (AP) — Oil that is recycled and burned to heat schools and commercial buildings is releasing dangerous amounts of lead into the air, environmentalists said Wednesday.

"Burning used oil is not recycling," said Marchant Wentworth of the Izaak Walton League. "The airborne lead from this burning settles back to earth to contaminate our rivers, streams and reservoirs."

The conservation group, several other environmental organizations and the Hazardous Waste Treatment Council, an industry trade group, released a study estimating that more than 780 million gallons of used oil is fed into uncontrolled burners each year, putting 600,000 pounds of lead into the air.

Lead is considered a major health threat, especially to children. Many brain disorders and other illnesses are blamed on high levels of exposure.

The groups said the Environmental Protection Agency should consider listing used oil as a hazardous substance, thus requiring lead content to be controlled. Used oil has a special exemption from toxic-substance laws and is not considered a hazardous waste.

The petroleum industry opposes such a listing.

"Experience shows listing discourages and inhibits (used oil) collection and recycling," said the American Petroleum Institute. "Experience in South Carolina and California shows that listing makes used oil collection more costly and difficult, reduces the number of available collection sites and thus invites improper disposal of used oil."

The study examined a sampling of 16 million gallons and estimated that lead levels averaged about 100 parts per million, a level which in other circumstances would be considered toxic and subject to special controls.

California and other states consider used oil as a hazardous waste and limit its lead content. In the remaining states, lead content in used oil is not limited. The EPA requires that lead in hazardous wastes not exceed 10 parts per million.

The petroleum institute said it strives to maximize collection of used oil to reduce improper disposal and the accompanying environmental damage.

VINDICATOR

YOUNGSTOWN, OH
DAILY 88,820

WEDNESDAY
NOV 13 1991

372 BURRELLE'S RC
...bk ...M

LEAD

Burning waste oils emit poison

32581G
■ Environmentalists say the government is ignoring the dangers of lead released from used oil.

CHICAGO TRIBUNE

CHICAGO — Used motor oil burned for heat and fuel each year releases 600,000 pounds of poisonous lead into the air — the largest source of airborne lead pollution in America.

More than half the 1.4 billion gallons of used motor oil discarded each year in the United States is burned, while 5 per

cent is rerefined and reused.

Loophole: These are the key findings of a study released Tuesday reporting that — because of a loophole — the U.S. Environmental Protection Agency allows motor oil highly contaminated with lead to be burned in boilers at schools, hospitals, apartment buildings, offices and factories.

These highly contaminated

waste oils could not be burned in commercial hazardous waste incinerators "because the lead emissions would be too high" under EPA guidelines, said Daniel J. Weiss, director of environmental quality for the Sierra Club. "But it is burned in unlicensed industrial kilns or furnaces."

Amount: It is estimated that 800 gallons of used oil contaminated with lead are burned each year in residential and industrial boilers.

Lead is a hazard to as many as 4 million children from environmental exposures. It causes brain damage that can lead to learning problems.

Reduction: Regulation of lead in paint, plumbing and gasoline has resulted in some major reductions in environmental lead.

However, environmentalists say the lead in used oil has been virtually ignored by the federal government.

NOV 13 1991

BURRELLE'S

Burning recycled oil called health threat

4117
Lead released into air, environmentalists say

FROM OUR NEWS SERVICES

Washington — Massive amounts of recycled oil burned to heat commercial buildings, including schools, are the cause of health concerns because of the release of lead into the air, environmentalists said today.

While oil recycling has been acclaimed as a major goal to curb the release of toxic chemicals into the ground and waterways, the environmental groups said too often such oil only makes its way to commercial burners without controls on its lead content.

"Burning used oil is not recycling. The airborne lead from this burning settles back to earth to contaminate our rivers, streams and reservoirs," said Marchant Wentworth of the Izaak Walton League.

The conservation group, several other environmental organizations, and the Hazardous Waste Treatment Council, an industry trade group, made public a study today estimating that more than 780 million gallons of used oil is fed into uncontrolled burners each year, releasing an estimated 600,000 pounds of lead into the air.

The study examined a sampling of 16 million gallons and estimated that lead levels averaged about 100 parts per mil-

would be considered toxic and subject to special controls.

The groups said the Environmental Protection Agency (EPA) should consider used oil a hazardous substance under the toxic substance control laws, thereby requiring lead content to be controlled. Currently under a special exemption, used oil is not considered a hazardous waste, they said.

Lead is considered a major health threat, especially to children. High levels of exposure can cause brain disorders and other illnesses.

Some states, including California, already consider used oil as a hazardous waste and limit lead content. In the remaining states, lead content in used oil is not limited, although the EPA requires that lead in hazardous wastes not exceed 10 parts per million.

There are several bills before Congress that would prohibit the designation of recycled oil to be declared a hazardous waste because of concerns that such a designation would curtail the acceptability of used oil and put even greater demands on new oil supplies.

But Rep. Cardiss Collins (D-Ill.) said she plans to introduce a bill that would require used oil from collection centers and recycling and disposal sites to be regulated as hazardous.

THE ENVIRONMENT

Used motor oil called key lead source

By Rae Tyson
USA TODAY

Environmentally conscious car owners have unknowingly helped create the nation's largest single source of poisonous lead, says a report out today.

The culprit: used motor oil — much of it from neighborhood collection centers — that ends up as boiler fuel.

"It's outrageous," says Marchant Wentworth of the Izaak Walton League, among four industry and environmental groups preparing the report.

All told, 1.4 billion gallons of waste crankcase oil is replaced annually. More than half is collected and burned in boilers incapable of removing the lead — which causes a variety of health problems, including learning disabilities among children.

"The stuff just comes back to Earth," Wentworth says.

Environmental Protection Agency officials challenge the report's conclusions.

"We are very, very concerned about used oil, but we don't think it is a major contributor of lead into the environment," says the EPA's Marjorie Weidenfeld Buckholtz.

Currently, burning used oil in boilers is legal, except in California, because of a loophole in federal law.

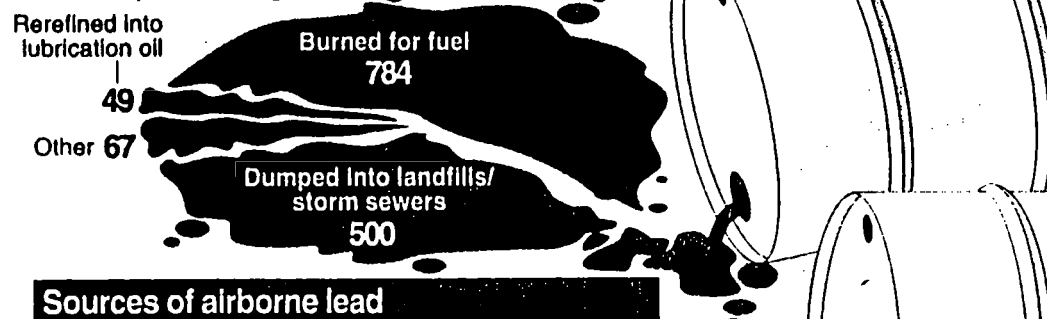
Rep. Cardiss Collins, D-Ill., soon will introduce a bill to close the loophole by classifying

Deadly disposal of waste oil

More than half of the 1.4 billion gallons of waste oil produced in the USA annually is burned for fuel at schools, apartment buildings, offices and factories. Burning waste oil is the leading source of airborne emissions of lead, critics say.

What happens to waste oil

(millions of gallons)



Sources of airborne lead

(pounds)



Source: Environmental Protection Agency; Hazardous Waste Treatment Council

By Sam Ward, USA TODAY

waste oil as hazardous. That would trigger much tighter standards for storage, transportation and disposal. "We must no longer allow the development of our children to be limited because of environmental

recklessness," Collins says.

Meanwhile, concerned motorists are advised to ask if their waste oil will be used as fuel.

Opponents of the Collins bill, including the petroleum industry, predict neighborhood col-

lection centers will disappear if used oil is reclassified to be a hazardous waste.

"No one is going to want to take on the liability to take the oil from the homeowner," says Kathryn McWilliams, director



COLLINS: Bill would require stricter waste oil standards.

of the National Oil Recyclers Association in Cleveland.

But that view is contradicted in California, where waste oil already is classified as a hazardous waste. Do-it-yourself car owners are recycling more oil per capita than any other state.

"If people think it is hazardous, they take more care to dispose of it," says Curtis Morgan, president of Evergreen Oil, an oil recycler in Newark, Calif.

The report also cites a related problem: It'll cost \$2 billion to clean up 63 oil recycling sites on the EPA's Superfund list.

"The people who have been handling (waste oil) have not been handling it properly," says Jacqueline Warren of the Natural Resources Defense Council.

Burning Used Oil— America's Undiscovered Lead Threat

Natural Resources Defense Council
Sierra Club
The Izaak Walton League of America
Hazardous Waste Treatment Council

EXECUTIVE SUMMARY

OVERVIEW

The burning of used oil is the single largest industrial source of airborne lead emissions in the country today. According to EPA data, over 90 percent of all used oil that is "recycled" in the U.S.—784 million gallons each year—is merely burned as a "fuel." EPA allows such "fuel" to contain high levels of lead (i.e. 100 parts per million) and other toxic metals such as arsenic, cadmium, and chromium. This report, which includes a study of over 16 million gallons of used oil in commerce today, illustrates that the lead content of used oil still averages 100 parts per million. Consumers are unaware of the contamination, because EPA regulations allow high levels of toxic-metal contamination in used oil "fuels." Lead contaminated fuels are being burned in thousands of unregulated apartment building, school, hospital, and commercial boilers and space heaters.

Shockingly, the Agency itself estimates that used oil burning will cause 3,094 cancer cases across the country. Moreover, EPA has placed 63 used oil "recyclers" on the Superfund toxic sites list, at an estimated cleanup cost of over \$2.1 billion. Despite these findings, the Agency's current proposal to "regulate" used oil would effectively protect the polluters more than it would protect public health. Congress must close the used oil burning loophole by using solutions that have already been tried and tested in California. In California, used oil recycling facilities are fully regulated, lead in used oil burning is controlled, and the used oil collection rate is two-and-a-half times greater than the nationwide average.

USED OIL BURNING AND LEAD EMISSIONS

- The vast majority of "recycled" used oil is simply burned. According to EPA's estimates, over 90 percent of used oil that is "recycled" is merely burned. The popularity of burning is attributable to the lack of restrictions on blend-and-burn activities. While the uncontrolled disposal of Do-It-Yourselfer (DIY) oil may be a problem, the 183 million gallons of unrecycled DIY oil is less than one quarter the size of the 784 million gallons of contaminated used oil fed into uncontrolled burning devices each year.
- This study of over 16 million gallons of used oil shows that, even after years of the lead phase-down in gasoline, used oil being generated today contains 100 ppm lead on average. After two independent 3-month studies of over 16 million gallons of used oil, this study—the largest of its kind in over seven years—has determined that total used oil lead levels average approximately 100 parts per million.

- **Burning used oil releases more lead into the air than any other stationary source.** Lead emissions from burning used oil release more than any industrial source reporting to EPA's Toxics Release Inventory (SARA Title III) database. While in 1989, the primary metals industry reported lead emissions totalling 574,231 pounds of lead, used oil burning alone released 588,000 pounds of lead into the air that same year. In fact, used oil burning released more than twice the airborne lead of all the non-metals industries put together. (Note: EPA does not require some large sources of lead—such as garbage incinerators—to report their emissions.)
- **In fact, unregulated school, apartment building, and industrial boilers are allowed to create higher airborne lead levels than facilities that have permits to burn hazardous waste.** Current EPA regulations allow apartment building, school, and hospital boilers to burn used oil as a fuel that contains up to 100 ppm lead, and other toxic metals (40 CFR 260.40). This level is ten times higher than EPA allows when hazardous waste itself is burned in many *industrial* boilers and furnances. EPA recently issued standards governing the burning of hazardous waste in industrial boilers and furnaces (i.e. the "BIF" Rule). While the adequacy of the BIF Rule limits have been challenged by the environmental community, used oil burning cannot meet the modest BIF Rule limits as they currently stand. Just two space heaters in neighboring homes can create airborne lead levels over the BIF lead limit. One school boiler can create airborne lead levels 2 times the BIF lead limit; an industrial boiler can create airborne lead levels 3 times the BIF lead limit; and an apartment building boiler can create airborne lead levels 9.3 times the BIF lead limit.

HEALTH AND ENVIRONMENTAL EFFECTS

- **Present used oil burning will cause 3,094 cancer cases,** according to EPA's own calculations. The burning of heavy metal-contaminated (i.e. chromium) used oil occurs in school boilers, space heaters, industrial boilers, and apartment buildings. Exposure of urban residents and children is maximized by the fact that this contaminated oil is burned right in our homes—In fact, EPA estimates that approximately 86,000,000 gallons of lead-contaminated fuel is burned in tens of thousands of space heaters each year.
- **Sixty-three Superfund hazardous wastes sites are former unregulated used oil recycling sites.** Shoddy practices by unregulated facilities have released hazardous waste into the environment, adding these 63 sites to the nation's cleanup burden. This report details how most of these sites could have been prevented if RCRA safeguards were in effect.
- **EPA estimates indicate that it will cost over \$2 billion to the Superfund program to evaluate, fund, and administer the cleanup of these 63 used oil**

sites. Although this cost figure does include an estimate of EPA's administrative costs, there is no way to estimate the full costs of enforcement and legal action that will be placed on EPA and industry.

EPA'S INACTION COMPOUNDS THE THREAT

- **Used oil containing 100 parts per million lead can still be burned, without any regulation regarding its labelling or use.** This fuel would flunk the Toxicity Characteristic test (which would declare it as hazardous waste)—but, since used oil is exempted by EPA, 100 ppm lead fuels are not called hazardous wastes, rather they can be burned in homes, apartment buildings, and schools. Such fuels are also allowed to contain significant levels of cadmium, chromium, arsenic, and toxic solvents.
- **There are still no regulations to prevent the creation of more sites.** Since used oil is not listed as a hazardous waste, current used oil operators are still engaging in many of the practices that created the 63 used oil Superfund sites. Keeping hazardous waste in 60-year-old, leaking tanks is normally unthinkable—but with used oil it still goes on today.
- **EPA's proposed rule only encourages blend-and-burn and does nothing to prevent future Superfund sites or continuing lead emissions. Congress must face up to the used oil problem.** EPA's proposed rule would allow facilities to simply dilute large amounts of virgin oil with small amounts of used oil to meet the lead fuel standard. Thus, the total amount of lead emitted into the atmosphere will not decrease because the lead will still be in the fuel and will still be released into the environment when burned. Moreover, the proposed rule "defers" the most basic facility standards, such as secondary containment to control leaks and tank bursts, insurance requirements, and financial responsibility requirements. Worse yet, the proposed rule will encourage those facilities that have to buy new equipment to refine clean gasoline under the new Clean Air Act to instead get into the business of making dirty fuel out of used oil. EPA has not yet begun to attempt to curtail the parade of used oil facilities onto the Superfund National Priorities List.

CALIFORNIA'S REGULATORY MODEL ENCOURAGES COLLECTION, ENSURES PROTECTION

- **The California experience shows that listing used oil as a hazardous waste leads to an increase in the responsible handling of used oil.** Since consumers in California are warned about the hazardous of used oil, responsible collection and recycling are ballooning. Forty-four cities and towns in California have curbside pick-up programs from used oil—the most convenient program possible. Evergreen Oil, which is just one facility in the state, will handle 2.4 million gallons of Do-It-Yourselfer used oil from free collection centers. *This means that California collects nearly 2.5 times more of its Do-It-Yourselfer*

used oil than the nationwide Do-It-Yourselfer collection rate. In 1988, a total of only 10 million gallons of DIY oil were recycled at all facilities in all 50 states, according to EPA estimates. The California law exempted collection centers from its hazardous waste law, a provision that is copied by the modified listing proposal, in order to encourage this growth in do-it-yourselfer collections.

- **California companies are getting in on the act.** Kragen Auto Parts, the largest automotive aftermarket retailer in the country, has just invested in 180-gallon, double-containment tanks for over 200 California stores so they can collect Do-It-Yourselfer used oil under the state's hazardous waste laws. Kragen, in a joint operation with a division of Valvoline, is accepting the used oil for free. Even though California's laws are the model for the modified listing proposal, the stricter laws have caused environmental awareness to grow and DIY used oil collection has skyrocketed. Now Exxon has announced that it will accept used oil for free at its company owned store in California. One California rerefining facility alone has estimated that it will receive 2.4 million gallons of DIY oil this year.

CONGRESS MUST ACT TO STOP UNCONTROLLED BURNING AND EPA APATHY.

- **Congress can close this loophole by declaring used oil to be a hazardous waste under the current regulations.** Both used oil rerefiners and environmental groups have proposed a method of listing used oil as a hazardous waste that would not impact used oil collection. Under the modified listing proposal, used oil would be listed as a hazardous waste only once it is picked up for recycling or disposal. Thus, the Do-It-Yourselfer and the collection center would be exempt and used oil collection would continue to grow unimpeded. Product standards would be set to ensure that recycled used oil products no longer cause the unacceptable threat to public health that they do today. Thus, regulation would focus on the two greatest centers of risk: the uncontrolled recycling facilities that are becoming Superfund sites and the uncontrolled burning of contaminated fuels that are predicted to cause over 3,000 cancer cases.
- **The Johnston-Wallop energy bill proposes that the nation stick its head in the sand about the hazards of used oil.** Despite the cancer and lead poisoning risks of used oil burning, S. 1220 specifically *prohibits* EPA from declaring used oil a hazardous waste, even in situations when the Agency's chemical tests indicate that it is a hazardous waste.
- **By contrast, others are looking to phase out the used oil burning altogether.** This would include requirements that new motor oil contain a certain percentage of rerefined oil, which would create a market to lead toward the total re-distillation of used oil.



Press Release

SIERRA CLUB

CONTACT:

FOR IMMEDIATE RELEASE
April 23, 1992

CONTACT: Roni Lieberman
202/675-7903

OIL COMPANIES DECEIVE PUBLIC WITH USED OIL RECYCLING ADS; SHAM RECYCLING PROGRAMS POUR LEAD INTO THE ENVIRONMENT

WASHINGTON, D.C....Sierra Club and other leading conservation organizations today filed a complaint with the Federal Trade Commission charging three major oil companies with misleading and deceptive environmental claims in advertisements that urge Americans to participate in the companies' used motor oil recycling programs.

"Exxon, Amoco, and Mobil's recycling ads are misleading because they falsely claim that they are safely recycling used oil. The ads create the impression that the companies handle used oil in an environmentally safe manner. But the advertised recycling programs do not transform dirty used oil into clean new oil products. Instead, the used oil is burned in refineries and boilers, producing toxic emissions," said Daniel J. Weiss, Washington Director of the Environment Quality Program of Sierra Club. Also signing the complaint were Natural Resources Defense Council and Izaak Walton League of America.

"Burning used oil is not recycling -- it's pollution, said Weiss. Used oil is contaminated with lead, chromium, arsenic and other toxic chemicals that are released into the air when used oil is burned."

The specific advertisements sited in the complaint use generic "green" symbols such as the "arrows" recycling emblem and wilderness scenes of trees and rivers to create the impression that their used oil recycling programs safely handle the problem. The ads fail to mention burning oil. They also don't mention that companies other than those named in the ads often handle the actual disposal of used oil. The effect on viewers, the complainants charge, is people are persuaded to believe the oil companies recycle used oil safely.

"These companies are using this 'green scam' to clean up their dirty images, without changing their filthy behavior. Their used oil programs provide public relations benefits, not environmental protection," Weiss noted.

(more)

"The same companies that crow about their fake used oil recycling programs are pressuring Congress to kill legislation which would establish real recycling programs to get the lead out of used oil," noted Weiss. "Congress must protect our children from lead produced by burning used oil. The best way to do this is to enact the Oil Recycling and Safe Handling Act."

The Oil Recycling and Safe Handling Act, H.R. 3956, sponsored by Representatives Cardiss Collins (D-IL) and Dennis Hastert (R-IL). H.R. 3956 would ensure that lead and other toxic chemicals are removed from used oil before it is burned. The bill enjoys broad-based support from environmental, industry, child welfare, parent/teacher and retail groups.

The Oil Recycling and Safe Handling Act encourages the collection and safe rerefining of used oil. This proposal is very similar to the successful used oil program working in California. Oil companies and other special interests strongly oppose this bill.

The Environmental Protection Agency estimates that burning used oil causes over three thousand cancer cases across the country each year. The burning of used oil is the single largest industrial source of airborne lead emissions in the country today, and lead is the number one environmental threat to children. Lead causes brain damage, neurological disorders and impair children's learning ability.

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file - Evergreen

CONTRASTING CLINTON AND ADMINISTRATION POSITIONS ON USED OIL REGULATIONS

BACKGROUND

Clinton-Gore believe that used oil recycling exemplifies the differences between the two campaigns on environmental issues. Properly conducted recycling represents the best of all possible worlds: conservation of resources, protection of the environment, and creation of quality jobs. However, recycling, just like every other form of hazardous waste management, has the potential for serious environmental damage if left uncontrolled. Twenty percent (20%) or 229 of the Superfund NPL sites are due in whole or in part to unregulated recycling. Recycling cannot be allowed to become a new password for polluters that seek to merely shift pollution from one media to the next. Technology-based solutions that allow us to conserve resources, while protecting the environment and creating a new base for quality jobs must be encouraged, rather than held back by the lowest common denominator of past practices.

CLINTON-GORE POSITION

In the case of used oil we must ensure a level environmental and competitive playing field for all recycling technologies, irrespective of whether we re-refine used oil into new lubricant or burn it as a fuel. First and foremost, we must put an end to the lead pollution caused by the uncontrolled burning of used oil as a fuel. We no longer allow lead to be burned in gasoline, placed into paint or used in drinking water pipe. We cannot allow the burning of used oil to be the largest industrial source of lead emissions. This can be accomplished through a combination of restrictions on the lead content of used oil burned as a fuel, and control on burning devices to ensure that and residual lead content is removed, rather than emitted from the stack. In addition, safeguards must be imposed on storage practices, the emissions from oil recycling facilities and their financial stability to ensure that today's "recycler" does not become tomorrow's abandoned and leaking site. These targeted controls will encourage reputable operations to enter or re-enter the field, and to expand existing capacity without the fear of being undercut by corner-cutting competition. Whether used oil is specifically "listed" as hazardous, or whether it is designated as hazardous by "characteristic" is of less significance than the substantive controls.

BUSH POSITION

The Bush position perpetuates the "blend and burn" practices of the status quo on both accounts: first, it allows high lead content used oil fuels to be burned in apartment, residential and industrial boilers without controls, and second, it allows recycling facilities to operate without financial reserves to cleanup spills and releases, and sanctions the use of rusted, even leaking tanks (provided the leakage is not "visible") for the blending of used oil fuels. The Fairfax County tank farm petroleum

leak that caused the condemnation of several neighboring homes was never "visible," despite the massive damage it caused, and as such would be permissible under these regulations. The Bush Administration is simply pandering the polluting practices of the past, and helping the oil industry maintain its monopoly on lube manufacture, rather than moving us forward into a more dynamic and competitive marketplace that employs a new generation of American technology and workers. If we do not seize this opportunity, the Japanese and Germans certainly will.



Evergreen Holdings Inc.

Katie

October 2, 1992

The Honorable Al Gore
The United States Senate
Washington, D.C. 20510

Dear Senator Gore:

You were recently kind enough to visit our re-refinery at Newark, California. Since then, we have tested your contention that environmental industries create jobs and income. Let me give you the results of our macro U.S. studies.

Some 1.1 billion gallons per year of drain oil now burned or lost in the U.S. can be re-refined in 29 regional re-refineries each producing 25 million gallons of high quality base lube oil. Total investment of \$900 million is available from private sources to build the plants, buy up existing "blend and burn" operators, and buy new trucks. 26,000 new high-paying jobs are created. Government and state taxes on profits (after debt service) is \$120 million/year. Tons of lead, cadmium, chrome, barium and phosphorous are removed from the air.

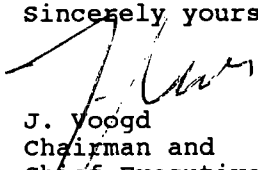
What is needed is:

1. Declaration of used oil as a hazardous waste.
2. A tax on shelf motor oil of 4 cents/quart (as in California) to discourage do-it-yourself oil changers, the principal polluters.
3. U.S. government, military, states and cities must buy re-refined oil.
4. If a carbon import tax is imposed, then it should be scaled up for high-paraffinic crudes which are most valuable for virgin lube production.

The attached letter to the Washington Post gives more detail on the basis for these conclusions.

Thus, in conclusion, your statements are correct as far as our fledgling industry is concerned.

Sincerely yours,


J. Voogd
Chairman and
Chief Executive Officer

JV:ac

Attachment

cc: Dr. H. Brown
Dr. D. Bennet

Evergreen Holdings Inc.

BY TELEFAX - (202) 334-5451

October 2, 1992

Mr. Michael Weisskopf
The Washington Post
1150 15th Street, N.W.
Washington, D.C. 20071

Dear Michael:

Our discussion prompted me to look more carefully at the Gore proposition that improved environmental technology, like the hydrogen re-refining of spent lube oil we have patiently developed since 1986 at Evergreen Oil, can produce additional jobs and income.

On a macro basis, we now burn 800 million gallons per year of "drain oil" from cars with all the nasties in it. Another 300 million gallons per year are disposed of in vacant lots, garbage bags and sewers by do-it-yourself oil changers. Total: 1,100,000 gallons/year. Yield is 65%, giving 715 million gallons/year of new high-quality base lube stock versus an annual U.S. consumption of virgin oil of 2,400 million gallons per year - thus, 30% of our needs are potentially available from true recycling by state-of-the-art re-refining as practiced at Evergreen.

Investment for the regional re-refineries required is \$1/gallon of base oil. Thus \$715 million gross. An average plant produces 25 million gallons, and therefore, 29 new plants are required, each employing 75 direct people as operators, administrators and management. These are high paying jobs averaging \$35,000/year. Total direct re-refining employment is thus 2,175. The multiplier for refineries is six to one. Six jobs are created in local support services and construction for every direct job. Thus, total new employment is some 15,000 jobs, each one a tax payer.

Michael Weisskopf - Page Two
October 2, 1992

The 800 million gallons now being "recycled" (read: burned) is already collected by some 1000 different collection firms including many one-truck gypsies. These are bought up by the local re-refinery at the going rate of 15 cents/annual gallon, thus, a total additional investment of \$120 million. (Note: A capital gains tax reduction would facilitate this consolidation.)

The 300 million gallons of DIY oil would require roughly 600 new collection and transporter trucks with drivers for an additional investment of \$30-50 million. The DIY generator would be charged for his indiscretions by way of a tax on shelf motor oil such as is now starting in California. The proceeds of this tax are used to collect the DIY oil at approved stations or centers supported by public education.

Each re-refinery generates a profit of \$12 million after debt repayment and before tax. At a 40% national and state tax rate, the government coffers are enriched by \$140 million/year plus taxes paid by 15,000 new employees in re-refining, driving and support services. The total investment of roughly \$900 million is readily available from the investment community because of the high return on each re-refinery.

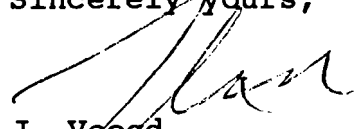
What would be required is:

1. EPA declares drain oil a national hazardous waste which cannot be burned because of lead and other metal.
2. A tax of 4 cents/quart is placed on every quart of shelf oil made from virgin oil.
3. U.S. Government, military, states and cities buy only re-refined oil.
4. If a tax on imported crude oil is imposed, then it should be graduated for paraffin content which is the valuable lube oil component in crude.

Michael Weisskopf - Page Three
October 2, 1992

This macro calculation supports the Gore position that environmental technology is an important economic growth factor. In addition, we remove vast amounts of lead, chrome, cadmium and barium from the air.

Sincerely yours,

A handwritten signature in dark ink, appearing to read 'J. Voogd', is written over the typed name.

J. Voogd
Chairman and
Chief Executive Officer

JV:ac

cc: Dr. H. Brown
Dr. D. Bennet

Evergreen

5000 BIRCH STREET, SUITE 500
NEWPORT BEACH, CALIFORNIA 92660 U.S.A.



The Honorable Al Gore
The U.S. Senate
Washington, D.C. 20510



LEAD IN USED OIL STUDY

LEAD, ORGANICS & USED OIL: Newest Data Shows No Problem Today

By Carolyn J. Mullins

To avoid bias, this article uses only data collected by independent private and government laboratories. However, my company's data, collected directly from vehicles and machinery, is consistent with the independent research data.

In 1991 a Hazardous Waste Treatment Council (HWTC) report alleged that lead was a major used-oil contaminant, averaging at least 100 ppm/gallon; that used oil's lead no longer comes from gasoline; that 100 percent of lead became airborne if the oil were burned; and that burning used oil was the main source of airborne lead. It alleged serious problems with other contaminants as well. New research and reanalysis of HWTC's data offer different conclusions.

Briefly, using 1989 data, the Environmental Protection Agency (EPA) found that used vehicle and piston-engine aircraft oil contain the greatest amount of lead. The source is gasoline, leaded and unleaded. Samples taken in 10/91 showed an average of only 15 ppm/gallon in liquid used oil, not 100. The EPA tests also show that used-oil-fired space heaters emit an average of only 15 percent of the lead in used oil, or 2.25 ppm, not 100.

The HWTC's data was produced and analyzed by Dennis Brinkman, then manager of oil, technology and technical development for Safety-Kleen/Bres-lube; and Bill Rondeau, lab manager for Evergreen, are acknowledged for data collection and analysis, but their employers are not listed. The three coauthors (Sierra Club, National Resources Defense Council and Izaak Walton League) had no part in collection, analysis or writing.

Burning used oil to recover energy removes raw materials and the fees refiners can charge for hauling hazardous waste. Both the *Wall Street Journal*

and *Automotive Week* have noted re-refiners' profit potential if used oil is declared hazardous. Given re-refiners' involvement and vested interest in HWTC's data, we have to ask whether HWTC's data is recent, random and representative:

- **Sample dates.** Given the decline in leaded gasoline (see chart) and parallel drop in ppm of lead in used oil, the year and month of collection are critical. Appendix E shows two dates: 1985 and 1986. Our only other clue is Dennis Brinkman's speech (12/90, Used-Oil Conference) about the airborne lead crisis, supposedly from used oil. On questioning he said that his data was from the early 1980s, when more than half of the United States' gasoline was leaded, and allowable lead contents were higher.

- **Source.** Re-refineries usually separate on-spec (nontoxic) waste from off-spec.

Appendix A shows non-consecutive sample numbers, suggesting nonrandom choice. Were samples chosen for high lead levels? Or only from vehicles using leaded gasoline?

- **Contaminated?** Haulers pick up many loads in the same truck. Any sample may contaminate previous and future loads.

- **Presence of zinc or calcium compounds.** These may make lead levels appear higher than they are (Recycled Oil Program, National Bureau of Standards, 8/80).

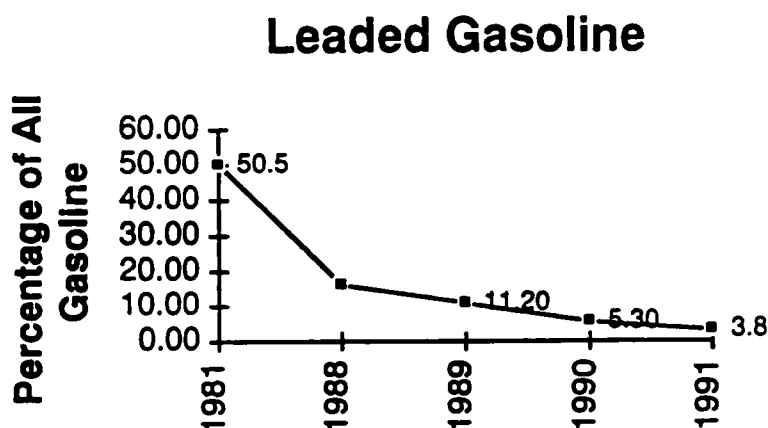
Richard Fortuna, executive director of the HWTC, stated (National Petroleum News, 1/92 pg. 20) that its researchers examined 16 million gallons of oil—certainly possible if the samples were taken from tankers. Appendix A lists only "Source 1" (58 samples) and "Source 2" (106 samples). The appendix does not say whether these samples are gallons or some other measure, such as a tank load. Was each sample taken from a different source? Samples from race cars or piston-engine aircraft show high lead

content because these fuels may contain up to 2g of lead/gallon in contrast to .09g/gallon in regular leaded gasoline and .005 in unleaded.

Two further comments: First, Safety-Kleen's brochure states that some of its used oil is burned as fuel. If burning is safe for Safety-Kleen and its customers, why not for others? Second, Safety-Kleen's handling has cost it millions in fines since 1990. The most recent violations occurred at its new East Chicago,

- The top three airborne lead sources are vehicle emissions, lead smelting and paint.

In its 1991 proposal (9/23/91, Federal Register), the EPA reaffirmed its incentives for small, used-oil fired space heaters. It had many reasons. First as the chart shows, the amount of leaded gasoline has dropped dramatically. Overall, lead emissions from leaded gasoline alone have dropped from 418 million pounds in 1970 to 121 million pounds in 1981, to less than a million in 1991. Today, leaded gasoline averages .09g of lead/gallon; unleaded averages .005g/gallon. Second, according to the EPA, 90 percent of lead in gasoline enters the air through vehicle exhausts. Combined, vehicle lead emissions



IN plant. In this context, readers need to know that most of the EPA's used-oil-related Superfund sites were caused by re-refiners who went out of business. For example Oklahoma City generators who gave the Double Eagle Refinery used oil as far back as the 1950s are now being held liable for the damage caused by residues.

EPA Tests For Lead

The EPA tested more than 115 1989 used-oil samples for lead. These came from automotive and diesel-powered trucks, industrial engines, marine engines, electrical insulation, airplane engines, and such. For each, the EPA collected oil (1) directly from engines and (2) from storage tanks. The measure used was the "Health-Based-Number," or HBN—a bit puzzling because it reflects likely harm to humans if drunk daily (as in water) for 70 years. In 1985 (Federal Register), the EPA reported extensive tests on used-oil heaters. From these studies the EPA concluded:

- Burning used oil, particularly in space heaters, does not contribute significantly to airborne lead.

form the tallest column in Chart 2.

Third, the sharp drop in gasoline lead has had a predictable effect on used oil. Again, according to the EPA, only 8 percent of gasoline lead enters the oil. When the EPA tested used oil in 1983, 2,000 ppm/gallon was not unusual. By October 1991, when Herguth Petroleum Laboratories took and analyzed 100 randomly chosen samples of automotive used oil, it found a range from 2 ppm (5 samples) to 48 (one sample) with an average of only 15 ppm (Oilscan Analysis/Herguth, 1991). These figures will continue declining naturally as lead in gasoline phases out completely.

Additional data: At the EPA used-oil hearings in Washington, D.C., October 24-25, 1991, representatives of several organizations reported much lower, insignificant amounts of lead in their used-oil samples than the EPA had found—about the same as those Herguth reported. The difference is the dates of collection:

- Used oil collected in 1991 will have less lead/gallon simply because leaded

Please turn to page 42

Lead

Continued from page 23

gasoline dropped from 11.2 percent of all gasoline in 1989 (more than 2 million pounds of lead emitted from automobile exhausts) to 3.8 percent in 1991.

Fourth, in 1983, the EPA tests of used-oil space heaters showed very low emission levels (the smallest column in Chart 2). Chemical Analysis of Waste Crankcase Oil Combustion Samples (EPA-600/7-83-026, pp. 40, B-7) shows the amount of lead in used oil and the amount emitted by the worst-performing heater. Measures by dilution tunnel showed that these heaters emit as little as .2 percent of the lead in used oil, with an average of 15 percent. The worst-performing heater, tested with a different method, showed 26 percent lead emissions. To summarize:

A. Only 8 percent of lead in gasoline enters the crankcase oil.

B. The average heater tested emitted only 15 percent of the 8 percent.

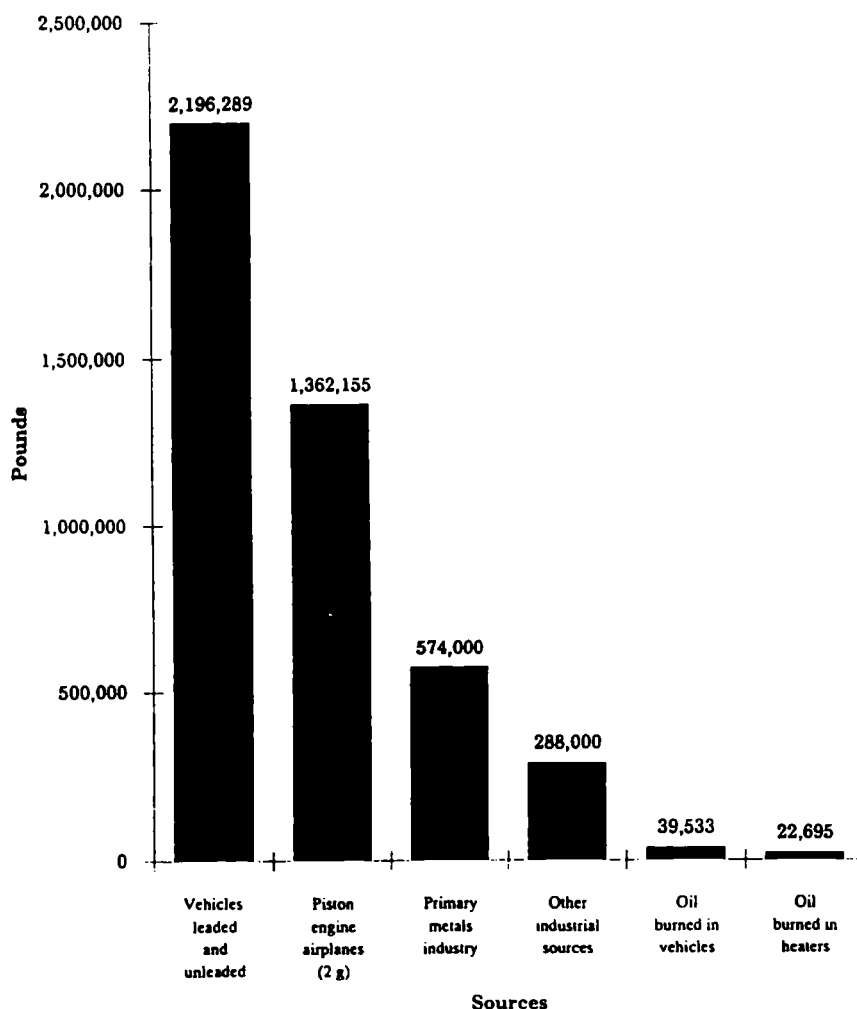
C. 15 percent of 8 percent equals 1.2 percent, which rounds to 1 percent; .2 percent x 8 percent equals .016 percent, which rounds to .02 percent.

D. The worst heater showed lead emissions of roughly 26 percent. If *all* used motor oil were burned in it (none managed any other way) the highest possible emissions level (shown in the chart) is 22,695 pounds.

The more likely case is the 15 percent average emission level, in which case less than 13,000 pounds of lead would be emitted. And .02 percent would, of course, yield less than 1,000 pounds. Those figures contrast starkly with the HWTC's *assumption* (1991, p. 1-7) that "100 percent of the lead in used oil is available for release." If we use Herguth's 10/91 data (average 15 ppm lead in used motor oil), with the EPA's 1983 data, space heaters emit only 2.25 ppm/gallon burned. If the EPA repeated its tests on today's better technology, emissions would be even lower.

In contrast, cars using leaded gasoline emit around 20 ppm of lead/gallon of gasoline burned. Cars using unleaded

1990 Lead Air Emissions



© 1991 Robert Sun Co. Data obtained from EPA, DOE and FHA. Details available upon request.

gasoline emit only 1.125 ppm/gallon. Every 8,000 to 12,000 miles, vehicles using unleaded gasoline emit 20.25 ppm of lead from used oil burned in the engine. In short, as Chart 2 shows:

•The problem isn't lead in used oil but lead in gasoline emitted through the exhaust.

Other metals pose no risk in most used lubricants from vehicles. The EPA's 1983 Survey of the Waste Oil Industry and Waste Oil Composition (PEDCo) found no arsenic in car or truck used oil. No sample's cadmium level exceeded that in commercial fuel oil. Only one sample's chromium exceeded levels in commercial oil.

Finally, used oil may not be much dirtier than virgin #2 fuel oil. The EPA's 1991 proposal reported lead in 1/6 of virgin fuel samples and cadmium in 1/3 of those samples. Fuel Oil News (8/91) reported that "distillate fuel often (becomes) contaminated in transit from the refinery or in storage at distribution points." The researchers noted rust, corrosion debris and trace metals due to metal tank corrosion or metallic wear (especially in older tanks). Dirt, clay and sand were also found. Tanks 10 or more years old had more sludge problems.

The EPA has expressed more concern about organic compounds than about lead. Organics include hydrocarbons (benzene, naphthalene, and toluene occur in gasoline and diesel fuel), chlorinated

degreasing solvents, and polynuclear aromatic hydrocarbons (PNAs or PAHs) and may occur in used oil. Because they can cause cancer and smog, they endanger public health as long as the oil is unprocessed—probably one reason why the EPA encourages used-oil space heaters. When used oil is recycled on site, organic compounds break down into CO₂ and water.

The EPA's 1991 proposal reported that 84 percent of its oil samples were free of organics; even the remaining 16 percent need not harm anyone. Atomizing space heaters destroy organic contaminants, including chlorinated solvents, "at 99.9 percent efficiency" (EPA, 1/11/85 Federal Register).

What's Really at Stake?

Of all used motor oil, 215 million gallons burn in vehicle engines; 180 million or more never return from do-it-yourself (DIY) oil changers. Only 386 million gallons is recovered. In California, where state law made used oil hazardous, DIY collection has dropped dramatically. However, many other states have made great strides in collecting used oil. As a result, at least 22 states have asked the EPA and legislators not to declare used oil hazardous because it would harm their collection efforts, and one gallon of used oil can wipe out a million gallons of water.

While some generators produce either genuinely toxic oil or so much used oil that some off-site management is essential, the procedures are risky. On-site management is the better choice because it protects drinking water. It is also the preferred choice of used-oil generators because it enables them to substitute waste for virgin fuel they would otherwise have to buy, thereby lowering their overhead.

Legislation

In sum, if burning used oil were hazardous, the EPA would regulate it as it has gasoline—the lead phase-down has dramatically reduced lead in gasoline and thus used oil. Because used oil causes harm only when it leaves its original site, many have urged the EPA to use the TC (toxicity characteristics) test to evaluate used oil removed from site and list it only if it fails the test. The EPA has already decided to put stricter standards on used-oil collectors, equipment and refiners. This would not penalize generators of nontoxic used oil or generators who recycle on site. It would also protect our water supplies, enhance used-oil collection efforts, and increase business profits.

Critical legislation is currently pending in the U.S. Congress. Representative Ike Skelton sponsors HR 1411, which would safeguard used oil's current classification as non-hazardous. Representatives Cardiss Collins and Dennis Hastert have proposed HR 3956, whose provisions oppose Skelton's. Hastert's district includes Elgin, IL, Safety-Kleen's headquarters. Collins' district abuts Hastert's.

Representative Al Swift chairs the Subcommittee on Transportation and Hazardous Materials, Committee on Energy and Commerce, which is charged with re-authorization of the Resource Conservation and Recovery Act (RCRA). Collins and Hastert sit on his committee, which is also pondering the status of used oil. To express your opinion, write these legislators and to your own representatives at the U.S. House of Representatives, Washington, D.C., 20515.

Carolyn J. Mullins is Vice President of Black Gold/Robert Sun, a manufacturer of used-oil systems, and oversees press relations and advertising, and monitors changing regulations. She has published nine books and hundreds of articles and is a frequent public speaker on topics related to used oil management.



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CIRCLE NO.32

LEVELS OF LEAD PRESENTLY FOUND IN AUTOMOTIVE CRANKCASE OIL

(All Sampling And Testing Was Done In October Of 1991)

Oilscan Analysis is an automotive crankcase oil testing service provided by the California State Automobile Association to it's members. The oil testing is done by Herguth Petroleum Laboratories, Inc., P.O. Box B, Vallejo, California 94590. The obvious purpose of this testing service is to provide the automobile owner timely information relative to engine wear rates and other important information relative to the operating condition of the automobile.

One hundred randomly selected samples of automotive crankcase oil tests, run for the Oilscan Analysis program, show lead levels in automotive crankcase oil to average 15 PPM with a maximum level of 48 PPM and a minimum level of 2 PPM. Test results are reported to the nearest PPM and are listed below.

<u>SAMPLE</u>	<u>LEAD PPM</u>	<u>SAMPLE</u>	<u>LEAD PPM</u>	<u>SAMPLE</u>	<u>LEAD PPM</u>
1	22	34	17	67	31
2	34	35	6	68	11
3	20	36	44	69	23
4	4	37	25	70	16
5	31	38	3	71	31
6	6	39	3	72	23
7	12	40	24	73	6
8	2	41	3	74	12
9	12	42	7	75	10
10	4	43	25	76	11
11	26	44	11	77	14
12	28	45	8	78	2
13	35	46	25	79	13
14	5	47	2	80	25
15	24	48	18	81	7
16	16	49	9	82	10
17	27	50	17	83	17
18	30	51	29	84	8
19	12	52	9	85	2
20	13	53	5	86	8
21	19	54	30	87	6
22	6	55	32	88	7
23	24	56	48	89	15
24	19	57	20	90	5
25	14	58	16	91	12
26	21	59	19	92	8
27	6	60	13	93	12
28	12	61	11	94	11
29	9	62	13	95	9
30	29	63	5	96	11
31	10	64	22	97	2
32	7	65	19	98	8
33	18	66	17	99	6
				100	6



P.O. BOX 2304 • MOBILE, ALABAMA 36652 • PHONE 666-8143

To: The Generators of Used Oil/Mobile Alabama:

Ref. Lead Analysis On Used Oil:

October 1991

The following charts show lead analysis results from test performed on used oil from various automobiles and used oil generating facilities from the Mobile Alabama area. (Including bulk storage tanks)

Appendix 1: Show the lead results in automobiles that had the oil changed every three thousand miles and only burned unleaded gas with a maximum lead content of 17 PPM.

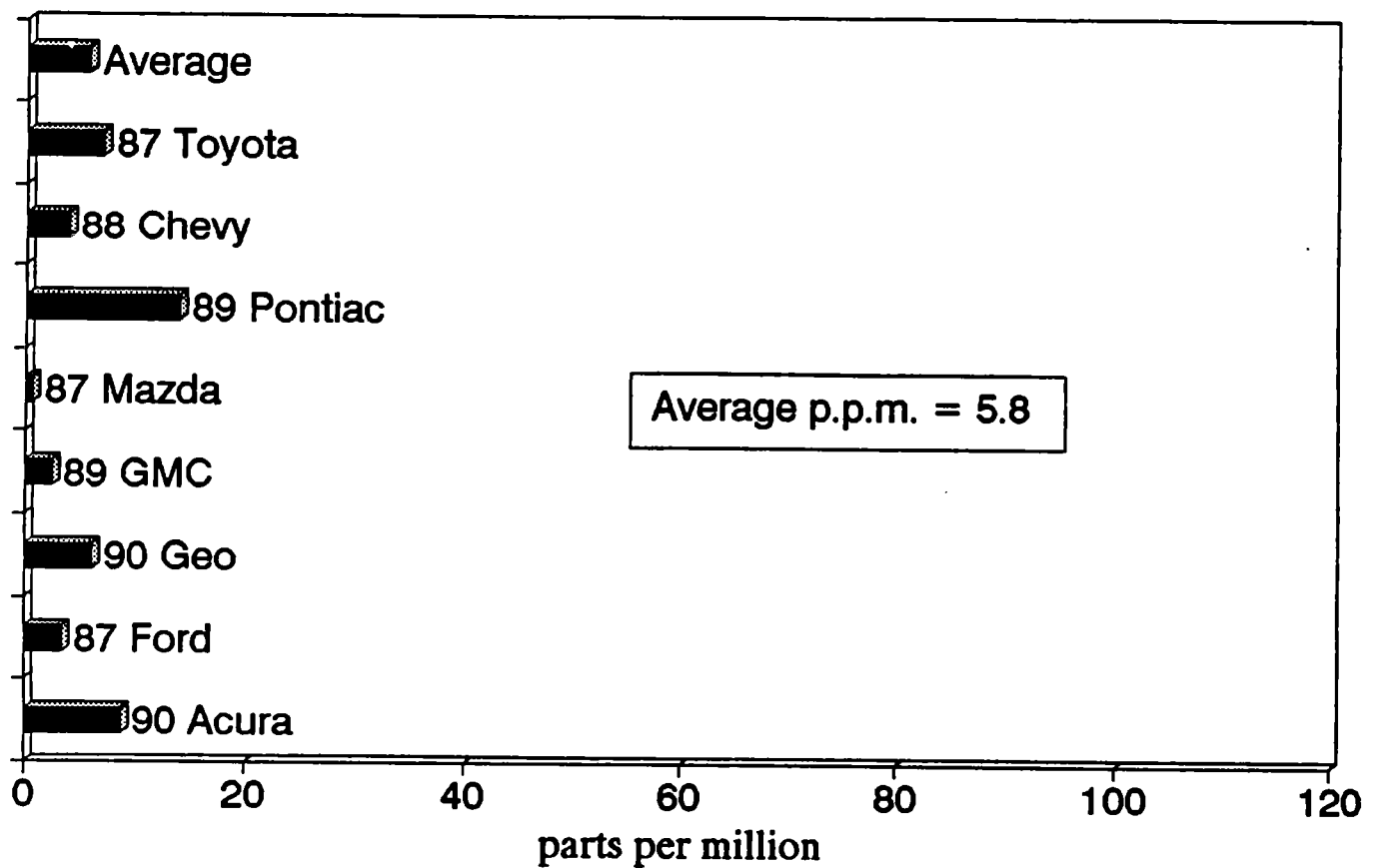
Appendix 2: Show the lead results from samples of used oil taken from various types of used oil generator bulk storage tanks. All tanks sampled were tanks that had only been in service for the last year.

What we are intending to show in these analysis, is that used oil currently being generated in and around the Mobile Alabama service area of **Aaron Oil Company**, is well within the EPA limits of at or below 100 PPM, set fourth in 40 CFR parts 266 subpart (e).

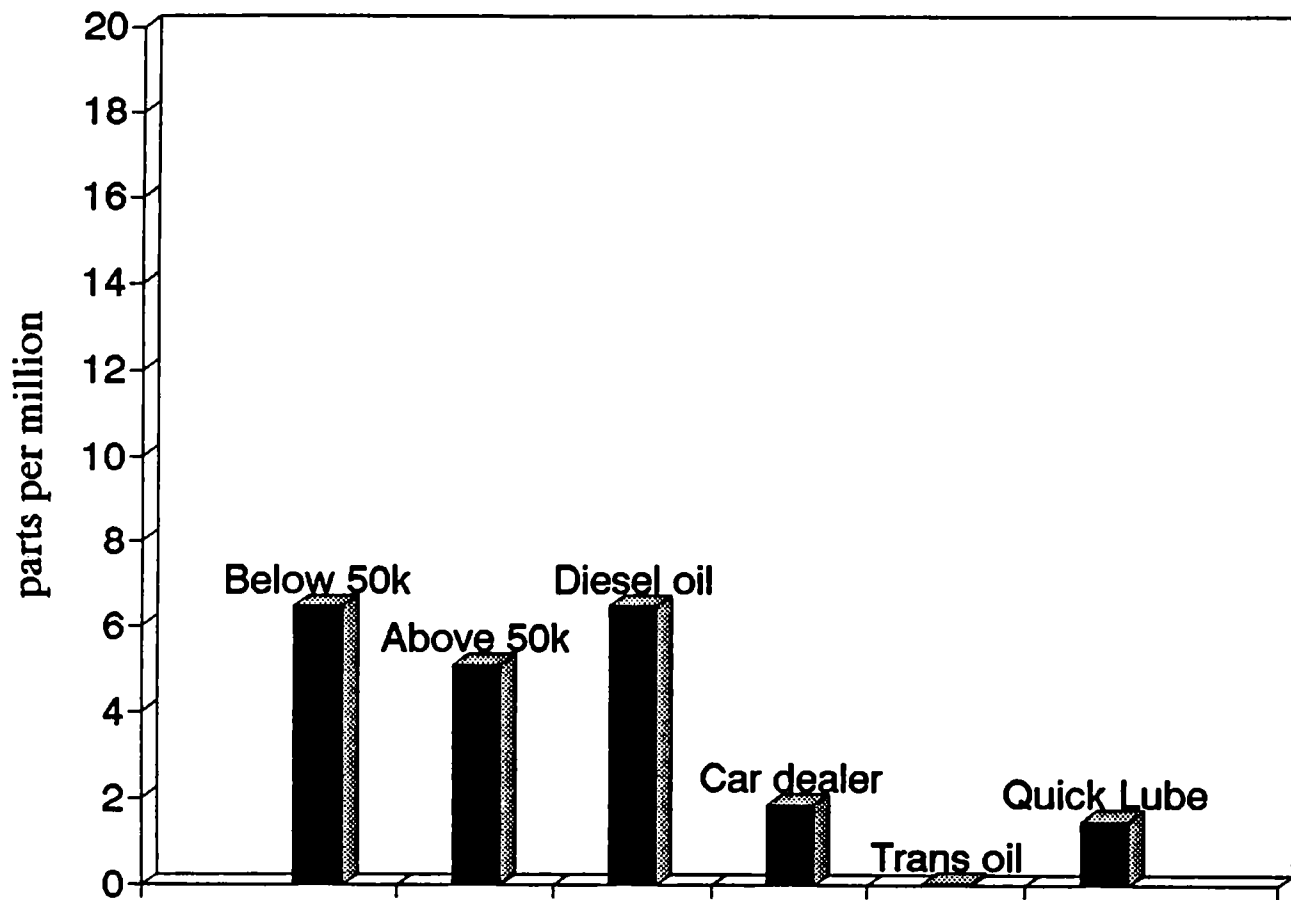
These analysis were performed by an independent laboratory at the request of **Aaron Oil Company, Inc.**

Questions regarding our study should be directed to Dan Cowart at (205) 666-8143:

Lead Content in Crankcase Oil



Lead Content in Crankcase Oil



USED OIL

THE REAL STORY

Ralph G. Higgins, Jr.
198 Ellington Drive
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(803) 576-0311

March 9, 1992

USED OIL - THE REAL STORY

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(803) 576-0311

OVERVIEW:

EPA estimates of used oil activity in the United States has been well publicized. About 56% of the 2.5 billion gallons of lubricants sold each year ends up as used oil. Approximately 900 million gallons, of the 1.4 billion generated, finds its way into some form of recycling, leaving 500 million gallons of unaccounted for used oil.

Much of this 500 million gallons is believed to be do-it-yourselfer used oil. This belief is based on the fact the EPA and State regulatory agencies have relatively good accounting of the quantity and disposition of used oil generated by industry, garages, oil change facilities etc.. Getting this annual 500 million gallons of "unaccounted for" used oil into a safe and controlled recycling system is a real contamination problem needing solution.

The best method of recycling argument has been going on for over 10 years. There has been and still is two opposing sides on this issue. One side believes that classifying all used oil a RCRA hazardous waste and re-refining all used oil into lube stock is the technical and environmental answer. The other side believes not classifying all used oil a RCRA hazardous waste and burning properly reprocessed used oil for energy recovery is the most economically advantageous and practical answer, which has been proven to be environmentally safe. These advocates of not listing say, the EPA estimate of 90 per cent of all recycled used oil being burned for energy recovery is testimony to the fact that the practice of recycling used oil into fuel was born and has grown because it fills a need.

The purpose of this paper is to furnish a comparison of the claims of both sides of this issue and to provide substantiated, relative information for the benefit of those who must deal with and make an informed final decision on how used oil will be handled in the United States.

A: USED OIL BURNING AND LEAD EMISSIONS.

Re-refining Advocates

"784 million gallons of contaminated used oil is fed into uncontrolled burning devices each year."

Burning Advocates

The 784 million gallons figure for used oil burned each year, is very likely accurate. However, the recycling and burning systems records, mandated by 40 CFR Part 260-266, serve to refute any claim that this used oil is contaminated or burned in uncontrolled burning devices. In reality, EPA and some state regulations begin with the generator and continue with collector/transporters. These regulations govern all aspects of the used oil recycling operation and marketing of their finished products. In addition to these federal regulations, burners are regulated by state permits. Any change from the burners restrictions must be approved and a new permit issued. To ensure environmental compliance with these regulations and burning controls, many used oil to fuel companies have found it necessary to dedicate at least one full time employee to this job.

Appendix A shows some of the types of regulations with which the used oil to fuel recycling system is required to comply.

Re-refining Advocates

"Burning Used Oil--America's Undiscovered Lead Threat". After two independent 3-month studies of over 16 million gallons of used oil, this study---the largest of its kind in over seven years--has determined that total used oil lead levels average approximately 100 parts per million. Burning used oil releases more lead into the air than any other stationary source. Lead emissions from burning used oil release more than any industrial source reporting to EPA's Toxics Inventory (Sara Title III) database. While in 1989, the primary metals industry reported lead emissions totalling 574,231 pounds of lead, used oil burning alone released 588,000 pounds of lead into the air that same year. In fact, used oil burning released more than twice the airborne lead of all non-metal industries put together. (Note: EPA does not require some large sources of lead--such as garbage incinerators--to report their emissions.)".

"In fact, unregulated school, apartment building, and industrial boilers are allowed to create higher airborne lead levels than facilities that have permits to burn hazardous

waste. Current EPA regulations allow apartment building, school, and hospital boilers to burn used oil as a fuel that contains up to 100 ppm lead, and other toxic metals (40 CFR 260.40). This level is ten times higher than EPA allows when hazardous waste itself is burned in many industrial boilers and furnaces. EPA recently issued standards governing the burning of hazardous waste in industrial boilers and furnaces (i.e. the "BIF" rule). While the adequacy of the BIF Rule limits have been challenged by the environmental community, used oil burning cannot meet the modest BIF Rule limits as they currently stand. Just two space heaters in neighboring homes can create airborne lead levels 2 times the BIF lead limit; an industrial boiler can create airborne lead levels 3 times the BIF lead limit; and an apartment building boiler can create airborne lead levels 9.3 times the BIF lead limit."

Burning Advocates

Total lead emissions from burning 784 million gallons of used oil fuel is nearer 103,000 pounds per year or only 17.5% of the above claimed 588,000 pounds. The re-refining advocates have overstated lead emissions by a factor of 5.7 times the actual. Such incorrect information and overstatement makes it impossible, for those with knowledge of the real facts, to accomplish any agreement with the re-refining advocates. It is most unfortunate for the United States that such inaccurate information has been publicized in the media. Apparently the media has no idea of the real facts and evidently does not employ technical expertise or take the time necessary to confirm the accuracy of the information they publish.

Re-refining Advocates

"16 Million Gallon Study -- Largest of its kind in seven years -- Determines total lead level to be 100 ppm."

Burning Advocates

This 16 million gallon study, of an unidentified source, is neither the largest one in seven years nor does it establish the accurate current total lead level in used oil.

Appendix B shows a 1991 fuel survey of National Oil Recyclers Association (NORA) members. The average lead content of 263 million incoming gallons of used oil was 42.95 ppm.

Appendix B, page 2 shows a level of lead in unblended used oil fuel of 59 ppm on 2.9 million outgoing gallons from Ecogard in

Lexington, Kentucky. Appendix B, pages 3 & 4 shows wear and additive metals testing in used oil, covering a period from 1983 to October 15, 1991, summarized as follows:

<u>ENGINE FUEL TYPE</u>	<u>NUMBER OF SAMPLES</u>	<u>AVERAGE LEAD CONTENT (PPM)</u>
Butane	12	21.3
Diesel	260,528	14.0
Gasoline (83-89)	17,890	253.7
Gasoline (90-91)	13,143	82.0
Pump Driven	3,500	11.5

Re-refining Advocates

"Burning Releases More Lead In The Air Than Any Other Point Source And Exceeds EPA BIF Rule."

Burning Advocates

EPA monitors our air at 189 sites spread over the United States. These monitoring sites measure a wide range of pollutants, including lead. The results of this monitoring is published by EPA in the National Air Quality and Emission Trends Report. Page two (2) of Appendix C shows monitored lead air quality. In 1989 the national average of lead level in the atmosphere was less than 1.67% of the 1.5 ug/m³ National Ambient Air Quality Standard (NAAQS) EPA established as being protective to the public health and the environment. Page three (3) of Appendix C, shows the drastic decrease in lead emissions from 1980 to 1989. Reduced lead in gasoline caused this drastic decrease and continues this effect to the present. It is reasonable to believe that the lead in air decrease is even more significant through 1991.

The only locations where lead was at issue, as far back as 1989, were point sources where lead smelters and lead mining operations were practiced. It is reasonable to believe that this remains to be the case.

Why the large discrepancy between the actual EPA monitored data and the information the re-refining advocates have furnished the media? Mobil Research and Development Corporations' comments on the Hazardous Waste Treatment

Councils' SCREEN model are found in Appendix C, Pages 5 through 9. EPA waste oil combustion information is shown in Appendix C, pages 10 through 17. This information provides the factual answer. Their SCREEN model was run with incorrect information. Following is a list of some of the faulty information used to run their SCREEN model:

- (a) Furnaces were claimed to burn more fuel than they do.
- (b) No emission control equipment was considered.
- (c) A smoke stack shorter than the building it serves was used. This is ridiculous as well as illegal.
- (d) Used oil fuel was claimed to average 100 ppm lead which is not accurate. Approximately half this amount is accurate.

With this much and type faulty data there is little wonder that their SCREEN emission projection produced a very faulty conclusion.

As the report correctly states, EPA recently promulgated the BIF Rule for industrial furnaces and boilers burning hazardous waste. In the Federal Register of February 21, 1991, EPA states; "Other commenters directed their comments exclusively to lead, indicating the lead Reference Air Concentration (RAC) was arbitrary. EPA has based the lead RAC on the National Ambient Air Quality Standard (NAAQS). This was done in part because no reference dose or cancer potency slope is currently available for this metal. The final rule uses 10% rather than 25%, as is used for other compounds, as an apportionment factor (as proposed) because the Agency is particularly concerned with; (1) The possible high concentration of lead exposure by indirect pathways, particularly in urban environments; and (2) the growing concern of low level lead exposure in children since the lead NAAQS was established. (The Agency currently plans to propose to readjust the lead NAAQS in 1991)". Several points in these statements are noteworthy;

- (a) Lead got especially conservative consideration and was allowed only 40% of the RAC (Reference Air Concentration) other metals were allowed.
- (b) There is no reference dose or cancer slope currently available for lead.
- (c) The growing concern of low level exposure in children since NAAQS was established.

- (d) The Agency currently plans to readjust the lead NAAQS (for lead) in 1991.

EPA's BIF Rule is concerned with lead levels in urban areas from burning hazardous waste in industrial furnaces and boilers, not clean used oil. This EPA BIF Rule was designed to allocate the portion of the acceptable annual lead exposure of 0.9 ug/m^3 the hazardous waste combustion facilities would be allowed to contribute. The BIF Rule allows these facilities 10% leaving 90% for other lead sources and indirect pathways such as deposition from burning used oil. With this understanding it is evident that any comparison of used oil emissions to the BIF Rule should be compared to the 0.9 ug/m^3 level of acceptable annual exposure. Page 20 of Appendix C shows a properly run EPA SCREEN emission model of used oil burning sources the re-refining advocates claim are polluting our air. None of these used oil burning sources exceeds more than 23% of their allowed portion of the BIF 0.9 ug/m^3 acceptable annual lead level. The re-refining advocates claim that used oil burning is exceeding the BIF Rule is not true.

EPA SCREEN models were correctly run to determine the validity of the re-refining advocates BIF statements. These EPA SCREEN models show the re-refining advocates are guilty of gross overstatement, even if their faulty data is used.

Appendix C, pages 18,19 & 20 show correctly run EPA Screen emission models run on various burning sources with 0 to 100 ppm lead content in used oil fuel.

Page 18 of Appendix C shows emission projections using the incorrect assumptions of the re-refining advocates. Even with re-refining advocates faulty input data, used oil containing up to 100 ppm lead would meet the BIF Rules annual average of 0.9 ug/m^3 for lead, in all used oil burning sources.

Page 20 of Appendix C shows burning sources, the re-refining advocates claim are polluting the atmosphere with lead. The correct data shown on page 19 was used to run this SCREEN model. No burning source with fuel containing up to 100 ppm lead exceeds more than 23 % of the BIF Annual Average Lead Guidelines. A 50 ppm lead level is approximately the level being currently verified in unblended used oil fuel. NORA members report an average of 34.35 ppm in over 263 million unblended gallons and Ecogard reports and average of 59 ppm in 2.9 million gallons of unblended used oil fuel. With used oil at this verified 50 ppm level, no source exceeds over 11% of the BIF Annual Average Lead Guidelines.

The re-refining advocates claim that burning used oil is polluting the atmosphere is not supported by EPA monitoring data for actual lead found in the atmosphere in 1989. The

re-refining advocates have furnished no data, only statements. Based on 1989 actual maximum quarterly average ambient air concentrations of lead, the NAAQS average quarterly limit would have to be reduced by 86.6% for lead levels in the air to equal or exceed the NAAQS.

Clearly the public and the media have been encouraged to become alarmed about a lead in the air problem which, in reality, does not exist.

B: HEALTH AND ENVIRONMENTAL EFFECT.

Re-refining Advocates

"Present Used Oil Burning Will Cause 3,094 Cancer Cases, According To EPA's Calculations."

Burning Advocates

It is assumed that the quoted figure of 3,094 cancer cases is for a one (1) year period. This EPA estimate predicts that 1 person in every 81,000 people in the United States may contact cancer during a year from burning used oil. Apply this statistical analysis to just about any activity, such as taking a sleeping pill, and the cancer risk number will be as high as that of used oil. Dr. Bruce N. Ames, the father of carcinogenic testing, informs us that taking one sleeping pill puts us at 4,000 times the cancer risk of drinking one liter of solvent contaminated water. Understanding some risk information requires specific technical knowledge.

Re-refining Advocates

"Sixty-three Superfund Hazardous Waste Sites Are Former Unregulated Used Oil Recycling Sites."

Burning Advocates

In the Federal Register of September 23, 1991 EPA stated the following; "Of the 445 National Priority List (NPL) facilities having documented Records of Decision, 185 (43%) have had used oils co-dispersed with other hazardous industrial solid waste. These oils included used motor oil, cooling/cutting oil and transformer oil. Of the 185 facilities, 30 are used oil recyclers (6.7%) of the total number of facilities. At several

of these recyclers sites, contaminants other than those expected to be in used oil were found, indicating that mixing occurred either prior to receipt of the used oil or at the facility." The type mixing that created these 30 used oil NPL sites was prohibited by regulation in 1985. These sites were created prior to that regulation.

6.7% of the documented identified superfund sites are used oil sites and 93.3% of the identified superfund sites are regulated RCRA hazardous waste sites.

The re-refiner advocates claim that making used oil a RCRA hazardous waste is necessary to prevent creation of future Superfund sites, is not supported by fact. EPA records show that hazardous waste facilities are 14 times more likely to become superfund sites than used oil recycling facilities.

Re-refining Advocates

Re-refining Advocates Express Concern For The Cost To Clean Up Superfund Sites.

Burning Advocates

Since a large part of the re-refining advocate groups associates created 93.3% or \$1,866,000,000 plus of the estimated \$2 billion plus cost for clean up, their cost concern is justified.

Re-refining Advocates

"EPA's INACTION COMPOUNDS THE THREAT." "Used Oil Containing 100 Parts Per Million Lead Can Still Be Burned, Without Any Regulation Regarding Its Labelling Or Use."

Burning Advocates

Not mentioned is the fact that EPA ran many extensive and expensive burning tests, in highly urban areas, and in 1985 determined that oil containing 100 ppm lead could be burned anywhere and present no danger to the human health and environment. The re-refining advocates do not mention the fact that approximately 17% of the production of re-refining is fuel which they either burn or sell to be burned.

In order to honestly state that used oil fuel is not regulated, regarding its labelling or use, one must be totally oblivious of the requirements of EPA regulation 40 CFR Part 266. This is EPA's regulation for the burning of used oil for energy recovery, with which used oil to fuel recyclers comply.

Re-refining Advocates

"This Fuel Would Flunk The Toxicity Characteristic Test (which would declare it a hazardous waste) --But, Since Used Oil Is Exempted By EPA, 100 PPM Lead Fuels Are Not Called Hazardous Wastes, Rather They Can Be Burned In Homes, Apartment Buildings And Schools."

Burning Advocates

In the final TCLP Rule published in the Federal Register of March 29, 1990, EPA stated; "Under today's rule, used oil will be regulated as a hazardous waste only; (1) If it exhibits one or more of the hazardous waste characteristics defined in Subpart C of 40 CFR part 261 (including the TC as finalized today) and (2) if it is disposed of (rather than (sic) recycled). On the other hand, used oil that exhibits one or more of the hazardous waste characteristics and is recycled is exempt from regulation (see 40 CFR 262.6(a)(3)(iii)) except as provided in subpart E of 40 CFR part 266. "Used oil that is re-refined enjoys this same exemption. The reason the major re-refining advocate is a permitted hazardous waste facility is that it handles hazardous waste in addition to used oil.

The Toxicity Characteristic Leachate Test (referred to as TC or TCLP test) was designed to identify and control wastes that can leach into and contaminate drinking water. The burning advocates are not suggesting that we drink used oil or allow it to contaminate drinking water. Like EPA, we know that burning of properly recycled used oil or re-refining used oil is not related to the purpose of TCLP testing. To claim air will be polluted based on a leachate testing procedure designed to detect levels of pollutants that will pollute water is ludicrous.

Although properly recycled "on specification" used oil is safe to be burned in the sources mentioned by the re-refining advocates. Their claim that it is happening does not establish this is a fact. Appendix A, a survey of NORA members, shows none of their used oil is sold to residential customers. Even if it were, EPA emission testing data as well as EPA SCREEN model studies prove the results would not be those claimed by the re-refining advocates. See Appendix C, page 20.

The re-refining advocates consider the allowable limits for cadmium, arsenic, chromium and toxic solvents (total halogen) in EPA regulation 40 CFR Part 266, Subpart E, to be significant. In 1985, EPA relied on fact and not opinion to establish safe levels for these constituents. The allowed levels were based on extensive burn testing in highly urban areas, which the re-refining advocates claim are effected. Opinions should not be allowed to influence action until such time as EPA facts are refuted with factual data. No one has produced any testing information to refute EPA's 1985 test burn data.

Re-refining Advocates

"There Are Still No Regulations To Prevent The Creation Of More Superfund Sites."

Burning Advocates

The EPA Superfund facts speak for themselves. RCRA regulated hazardous waste sites have created 93.3% of the existing Record of Decision Superfund sites. Factual past history indicates that RCRA regulated sites are 14 times more likely to create future Superfund sites than are used oil recycling facilities. The solution to this problem is not in the wastes name, but how the operators play the game. Burning advocates were pleased, when in 1985, EPA established specifications for used oil fuel to be burned for energy recovery. They did not agree with all the levels of the specifications. They did not attempt to carry EPA to court to have their way. Instead they spent their time and efforts in developing ways to enforce and comply with these specifications and have accomplished this task. Just as they were pleased to have burning specifications in 1985, the burning advocates are anxious to have reasonable management standards for used oil become a reality. See Appendix D for the type of management standards that the National Oil Recyclers Association (NORA) suggested as far back as March 1990, as well as compatible management standards that have been suggested by others.

Court actions and other lobbying efforts, by the re-refining advocates, on the used oil listing and lead content issues have prolonged EPA's effort to develop and promulgate management standards.

Re-refining Advocates

"EPA's Proposed Rule Only Encourages Blend-And-Burn And Does Nothing To Prevent Superfund Sites Or Continuing Lead Emissions."

Burning Advocates

Superfund sites and lead emissions have already been adequately addressed. However, a comment about blending is appropriate.

In the Federal Register of November 29, 1985, EPA states; "Although blending does not reduce (in theory) mass-emissions in an urban area, blending of used oil to meet specification reduces the risk to the most exposed individuals. Finally, and most significantly, we believe that blending can pose no greater hazard than dirty virgin fuel oil. For these reasons, today's final rule allows blending."

Is there a more sensible justification for blending than that above?

C: CALIFORNIA'S REGULATORY MODEL.

Re-refining Advocates

"California Collection And Recycling Are Ballooning."

Burning Advocates

If California collection is ballooning, it is doing it with 66% less collection centers than it had before used oil was designated as a hazardous waste in that state. The following information is provided by the California Integrated Waste Management Board. California had 2,400 collection facilities in 1981 this number had dropped to 1,200 in 1988 and in November of 1991 had dropped to 779 facilities. A total loss of 1,621 collection facilities since 1981 and a loss of 421 collection facilities in the last three years. This does not sound like a model to be recommended.

The California Waste Management Board report, which was evidently the source of the re-refining advocates California collection data, is mathematically flawed. When both the California collection rate and the national average collection rate are calculated on the same basis, California's do-it-

yourselfer collection rate comes up to be 26% versus the national rate of 29%. California is 3% short of the national average which is nothing to brag about.

A random survey of Sacramento, San Francisco and Alameda Counties of California revealed that it is expensive for the do-it-yourselfer to deliver his used oil to a collection center. Collection facilities are charging from \$1 to \$2 per gallon to accept this used oil.

The California model could stand some re-modeling.

Re-refining Advocates

"One California Re-refining Facility Alone Has Estimated That It Will Receive 2,4 Million Gallons Of DIY Oil This Year."

Burning Advocates

This companies DIY efforts is supported and applauded. This is 2.4 million gallons of California used oil that will not pollute the California environment. Now all California has to worry about is recycling the remaining 237.6 million gallons of used oil it generates annually.

Re-refining Advocates

"Congress Must Act To Stop Uncontrolled Burning And EPA Apathy."

Burning Advocates

Congress and EPA are aware of their authority and responsibility for the entire country. They must act on facts, not opinions and faulty information. To be sure of the facts takes some time. This accusation of apathy and hypocrisy is unfounded and opinionated. The court actions, lobbying efforts and media campaigns of those making the accusations have been the most significant deterrent to the passage of proper legislation and issuance of reasonable management standards to insure proper handling of used oil.

Re-refining Advocates

"The Johnston-Wallop Energy Bill Proposes That The Nation Stick Its Head In The Sand About The Hazards Of Used Oil."

Burning Advocates

A very pious message. Re-refining advocates evidently believe they know all there is to know about used oil. If someone does not agree with them he is dumb like an ostrich. We hardly believe the Senators and over 100 supporters of the "no listing" and "leave the specifications alone" position can all be as dumb as an ostrich. These over 100 supporters are listed in Appendix E.

Re-refining Advocates

"Others Are Looking To Phase Out The Used Oil Burning Altogether."

Burning Advocates

We are not told who others are, but the real objective finally surfaces in the words "create a market to lead toward the total re-distillation of used oil."

The re-refining advocates finally admit that their recycling system, without Congressional help, will not capture enough markets to allow them to handle the used oil recycling needs of the entire country. Subtle as it may be, this is also an admission that they can not economically compete with the safe practice of burning used oil for fuel, which with sensible regulation, can handle the recycling needs of the entire country.

D: THE REMAINDER OF THE RE-REFINING ADVOCATES REPORT.

Burning Advocates

The rest of the re-refining advocates report, following the Executive Summary, is redundant. It illustrates, repeats and attempts to support the misinformation and subjects that have been addressed above. Parts of the report cast accusing remarks and false statements about the burning advocates, their present recycling practices and facilities. The temptation to participate in such a low level discussion will be resisted. The accused recyclers are not in hiding and invite all who wish to visit to do so. They are welcomed to investigate and judge for themselves.

**E: CONTRARY TO WHAT SOME HAVE IMPLIED,
NO FORM OF RECYCLING DESTROYS LEAD.**

We should all be aware of the fact that burning or re-refining used oil does not destroy lead. Where does lead in oil go?

One law of physics is that matter is neither created or destroyed. If this law of physics is true, to "get the lead out", as Representative Cardiss Collins strongly suggests, is not the complete answer to controlling lead. Following is where the lead goes:

Lead In Used Oil That is Burned:

- (1) From 10 to 50% of the lead is emitted to the atmosphere, depending on the burning source, the presence or absence and type of emission control devices. Some of the lead emitted later settles back to earth.
- (2) Some of the lead attaches itself to the equipment in which it is burned.
- (3) Approximately 50% of the lead in used oil fuel ends up in the ash residue resulting from burning.

Lead In used Oil That Is Re-refined Into Lube Stock:

Practically all of the lead in this used oil ends up in the bottom residue of the distillation equipment.

Where Does The Lead Containing Residues Go?

- (1) The approximately 50% of the lead that was in used oil fuel, ending up in the ash from burning, is removed periodically from the burning source. This ash must be tested and depending on test results either goes to a hazardous waste facility or is buried in a approved landfill.
- (2) The lead concentrated residues from re-refining used oil into lube stock go to iron making blast furnaces, cement and lime kilns and aggregate dryers to be burned. These processes incorporate 95 to 99% of the lead into the dry products produced. The remaining 1 to 5% lead is removed in air pollution control devices (bag houses or scrubbers). The residue from these collection systems must receive EPA approved treatment or be put in an approved landfill, depending on test results.

Eventually all the lead in used oil goes back to the earth from where it came. The choices are;

- (1) Let a very small part of it get into the atmosphere before it comes back to earth, or
- (2) Put it into cement and asphalt where we will slow down, but not prevent, its' leaching back to the earth, or
- (3) Put it into lime and spread it out over the earth?

Either way, short of nuclear fission, the lead eventually ends up in or on the earth. We do not get the choice of whether lead will return to the earth. We only have the choice of which method of return we will employ. Mans law can not supersede mother natures law.

F: CONCLUSION.

The issues of listing or not listing used oil and the allowable lead content in recycled used oil have become entangled in the complicated political process. These issues are too important to the economy and environment of this country to be caught up in the wheeling and dealing that is normal in this governmental process. If the desire to appear to be "wearing the white hat" is allowed to influence the passing of laws and regulations more technically restrictive than used oil can meet under normally generated conditions, it will be a costly error. American Industry and the taxpayers will initially pay the price for this error. However, as is always true, those who make the errors, in the end, are identified and get their just rewards. It is the nature of men and the media to forget the good things men do and to dwell only on their mistakes.

The authors of this paper do not presume to tell Congress what it must do. They willingly offer their knowledge and expertise to provide factual information needed by Congress to make a wise decision that will benefit all Americans.

The real goal is to encourage any safe means of recycling and to protect the public health and environment with as little disruption of the economy as possible. The uncomplicated guidelines are:

- (1) Maintain the already successful burning and specification rules of 40 CFR Part 260-266.
- (2) Let nothing interfere with the promulgation of adequate management standards that are economical. Costly RCRA standards would be disastrous.

- (3) Support education of the public to the desirability and need to recycle used oil.
- (4) Pass no laws and regulations the will create unnecessary liability and be economically prohibitive.
- (5) Encourage and support industry, business, private organizations and governmental entities that seek to install successful programs for the collection of DIY used oil.

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APPENDIX A

REGULATIONS REQUIRED OF RECYCLERS
(An Abbreviated List)

ALL PARTICIPANTS IN RECYCLING USED OIL ARE SUBJECT TO THE APPLICABLE PROVISIONS OF U. S. EPA 40 CFR 260 - 266.

OTHER REQUIRED REGULATIONS LISTED BY CATEGORY:

COLLECTORS:	SPCC OSHA UST/AGST SARA III NFPA-30
TRANSPORTERS:	SPCC OSHA UST/AGST SARA III NFPA-30
RECYCLING FACILITIES:	SPCC OSHA UST/AGST NPDES SARA III STATE AIR PERMIT NFPA-30 POTW PERMIT
END USER:	SPCC OSHA UST/AGST NPDES SARA III STATE AIR PERMIT NFPA-30

NOTE: See page 2 of this appendix for glossary of abbreviations.

APPENDIX A

SPCC	Spill Prevention, Control, and Countermeasures requires, among many other things: * Employee spill response training * Dikes/Secondary containment to contain spills * Operation procedure guides to prevent spills
OSHA	Occupational Safety and Health Administration covers many safety aspects * Right-to know training covers employee training about workplace hazards
UST/AGST	Storage Tank Regulations * Requires leak testing and/or groundwater testing * Financial responsibility for storage tanks and spills is required
SARA III	* Requires community notification * Identifies hazards during an emergency
NFPA-30	Fire Safety Guidelines * Governs much of safe plant application and construction
40 CFR 260-266	Solid Waste Regulations * Governs every type of waste generated
State Air Permit	Furnaces over certain minimum sizes (varies by state) are required to have a permit which specifies fuel and emission control equipment. Storage and recycling facilities also have requirements for vapor recovery.
NPDES	Permit for storm water run-off required for all industrial locations. * Monthly testing of storm water and oil/water separator discharges for several parameters. * Semi-annual toxicity testing, including live fish tests to check for trace contamination. * Groundwater testing
POTW Permit	Process water discharge permit * Covers many parameters of waste discharge, including metals and priority pollutants.

APPENDIX - B

SUMMARY OF NORA FUEL SURVEY

February 21, 1992

Respondents: 48

Total Gals. (1991) = 263,480,000

Total On-Spec.* = 239,940,000 (91%)

Total Off-Spec.* = 23,540,000 (9%)

Lead Level Incoming = 42.95 ppm

Lead level Outgoing = 34.35 ppm

USED OIL END USE

<u>TYPE CUSTOMER</u>	<u>GALLONS/YEAR</u>	<u>PER CENT</u>
Industrial Furnaces*	111,060,000	42.1
Industrial Boilers*	66,580,000	25.3
Institutional	350,000	0.1
Residential	-0-	0.0
Blenders - Off Site	23,250,000	8.8
Other Commercial & Industrial Burners *	<u>4,920,000</u>	<u>1.9</u>
Fuel Total =	206,480,000	78.2
Non-Fuel Total =	<u>57,320,000</u>	<u>21.8</u>
Grand Total =	263,480,000	100.0

* = Meeting the requirements of 40 CFR Part 260 - 266.

APPENDIX B

MEMORANDUM

DATE: February 24, 1992

TO: Ralph Higgins
FROM: M. J. Duffy
SUBJECT: Used Oil Lead Data

Confirming our telephone conversation, Ecogard has lead concentration data associated with specific volumes of used oil fuel as sold covering a total of 2.9 million gallons. These data represent eight shipments and hence eight data points with an average lead concentrations of 59 ppm. These data do not include any blending with virgin fuel oil.

Additionally, we have a series of samples used to document that used oil fuel met specification, but, unfortunately we do not have volume data readily available. These data, consisting of a total of 86 samples yield an average lead concentration of 57 ppm.

Attached is the data generated by the Dryden Oil Company, Inc. from the analysis of crankcase samples as a part of their customer service program.

MJD/ksk

Attachment(s)

APPENDIX B
Dryden Oil Company, Inc.

Wear and Additive Metal Sample Counts

Thru October 15, 1991

Fuel Type	Compartment	Year	Si	Fe	Cu	Al	Cr	Pb
Butane	Engine	83	5	5	5	5	4	5
		87	8	7	7	8	4	7
Diesel	Transmission	Total	11	12	12	11	8	12
		88	5	5	5	5	3	5
	Engine	83	604	661	661	583	556	650
		84	2,157	2,662	2,836	1,924	2,084	2,319
		85	4,512	6,521	8,325	4,816	4,878	5,850
		86	13,866	13,863	13,342	12,714	9,881	12,802
		87	20,052	28,040	25,598	24,990	20,690	25,197
		88	43,256	43,302	43,073	41,407	38,384	41,662
		89	65,252	65,344	65,220	64,446	60,279	59,009
		90	69,273	70,001	69,529	67,553	61,574	63,863
		91	51,877	51,962	51,024	50,071	42,904	49,057
	Total		278,849	280,356	277,408	269,304	239,348	260,520
Gasoline	Final Drive	87	4	4	4	4	3	4
	Hydraulic	88	3	3	3	2	2	3
	New Oil	87	4	4	3	4	1	1
	Transmission	83	1	1	1	1	-	1
	Engine	83	69	90	80	88	69	1
		84	327	307	378	321	320	11
		85	930	838	880	812	803	230
		86	1,784	1,788	1,712	1,760	1,489	1,248
		87	3,353	3,354	3,208	3,337	2,968	3,340
		88	5,046	5,047	5,022	5,026	4,593	5,025
		89	8,137	8,135	8,126	8,128	7,768	8,018
		90	8,189	8,220	8,193	8,144	7,501	7,992
		91	5,195	5,198	5,166	5,158	4,651	5,151
	Total		33,056	33,154	32,881	32,770	30,153	31,033
Other	Pump Drive	84	3	3	3	3	3	3
		85	30	30	29	22	9	25
		86	101	101	100	163	70	103
		87	407	407	420	417	180	409
		88	909	909	902	911	510	680
		89	1,214	1,214	1,207	1,185	848	702
		90	1,292	1,280	1,250	1,210	917	878
	Total		4,877	4,877	4,839	4,531	3,082	3,500

Dryden Oil Company, Inc.

Wear and Additive Metal Averages

Thru October 15, 1991

Fuel Type	Compartment	Year	Si	Fe	Cu	Al	Cr	Pb
Butane	Engine	86	28.8	108.2	9.6	27.0	7.8	18.4
		87	43.3	133.1	139.6	43.3	6.3	22.6
		Total	36.7	122.8	65.4	35.9	7.0	21.3
Diesel	Transmission	88	23.4	1,135.4	114.2	180.0	17.3	44.4
		89	11.0	50.9	33.4	5.0	3.4	20.3
	Engine	84	5.5	48.9	29.5	4.0	3.3	13.0
		85	6.5	44.2	23.0	5.0	3.7	28.8
		86	6.6	46.4	20.3	5.1	4.1	10.9
		87	9.9	52.0	20.0	4.0	4.2	10.1
		88	10.1	50.4	20.8	4.7	4.2	12.8
		89	13.4	59.1	21.1	5.5	5.2	18.3
		90	11.8	55.3	19.0	5.0	5.1	14.7
		91	11.1	50.8	17.3	4.7	4.7	12.4
		Total	11.3	53.5	19.8	5.0	4.7	14.0
Gasoline	Final Drive	87	20.8	50.5	30.8	6.3	2.0	62.3
	Hydraulic	88	9.0	13.3	15.3	4.5	2.5	6.7
	New Oil	87	17.0	8.5	30.3	2.8	1.0	105.0
	Transmission	88	10.0	180.0	402.0	7.0	-	243.0
	Engine	83	13.1	81.0	10.4	6.9	5.4	17.0
		84	13.2	90.4	15.5	7.7	5.8	216.5
		85	15.5	108.7	19.7	9.9	8.1	830.0
		86	19.5	91.0	34.5	10.8	5.4	450.9
		87	23.2	104.6	37.0	11.4	5.6	461.5
		88	26.2	98.0	33.1	10.8	5.3	235.6
		89	31.9	121.2	35.3	13.3	6.0	154.8
		90	30.5	100.8	38.8	12.3	6.7	83.3
		91	28.7	56.4	32.7	11.4	5.3	60.8
		Total	28.0	106.8	34.3	11.9	5.8	185.4
Other	Pump Drive	84	23.0	53.3	6.7	3.0	1.3	3.7
		85	31.2	38.3	8.9	3.0	1.0	30.9
		86	21.4	62.8	17.3	4.3	1.9	19.9
		87	13.2	74.1	10.6	3.0	1.8	8.0
		88	17.1	66.4	12.8	5.2	1.8	4.9
		89	20.5	127.4	18.5	8.8	2.2	11.3
		90	22.3	141.7	15.0	5.8	2.3	10.1
		91	20.4	169.6	22.7	6.7	2.8	7.3
		Total	21.3	120.7	15.5	5.7	2.2	11.5

United States
Environmental
Protection
Agency

Office of Air Quality
Planning and Standards
Technical Support Division
Research Triangle Park NC 27711

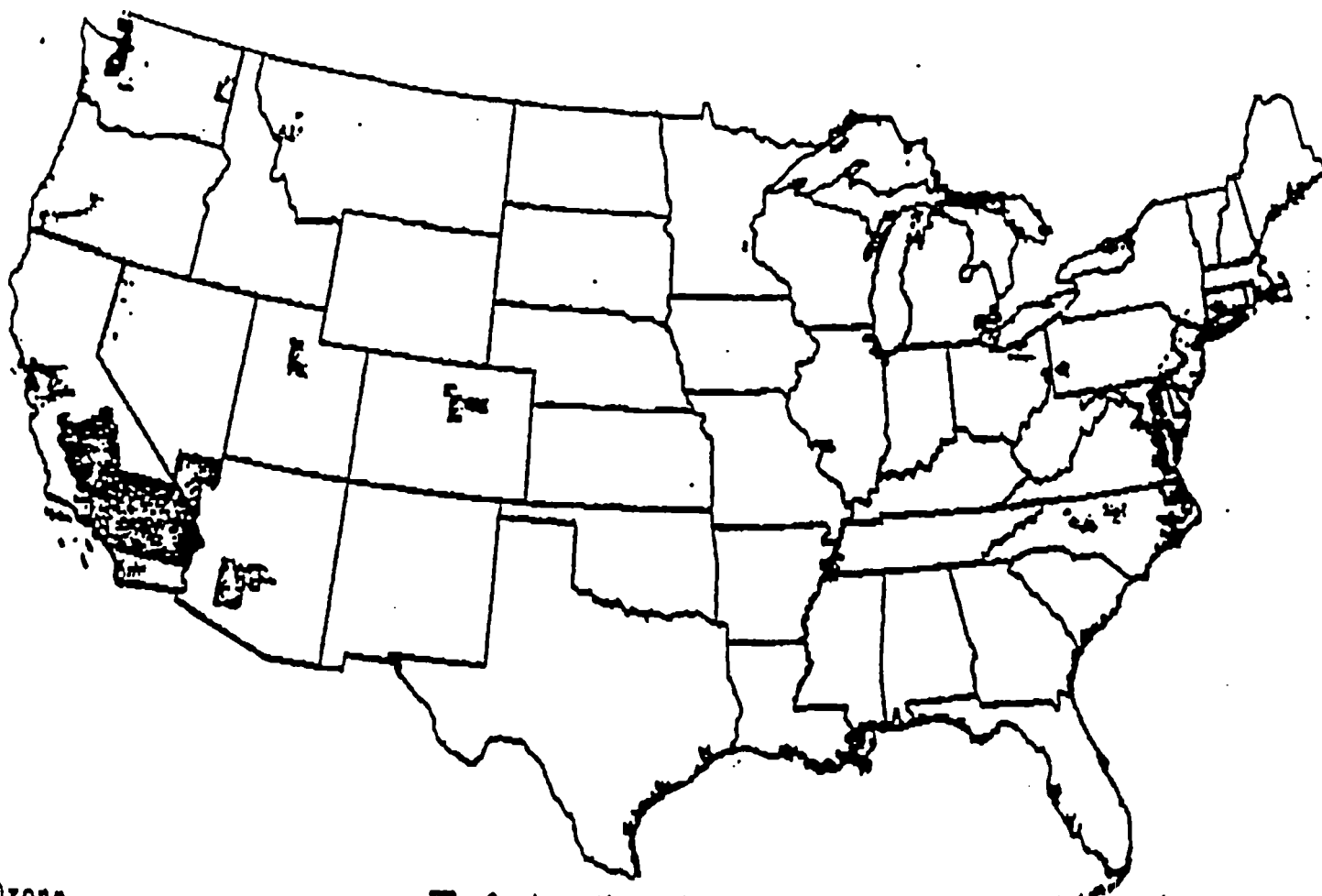
EPA-450/4-91-003
February 1991

AIR

PD91-172247



National Air Quality and Emissions Trends Report, 1989



Ozone

Ozone - Carbon Monoxide

Carbon Monoxide

Ozone - PM₁₀

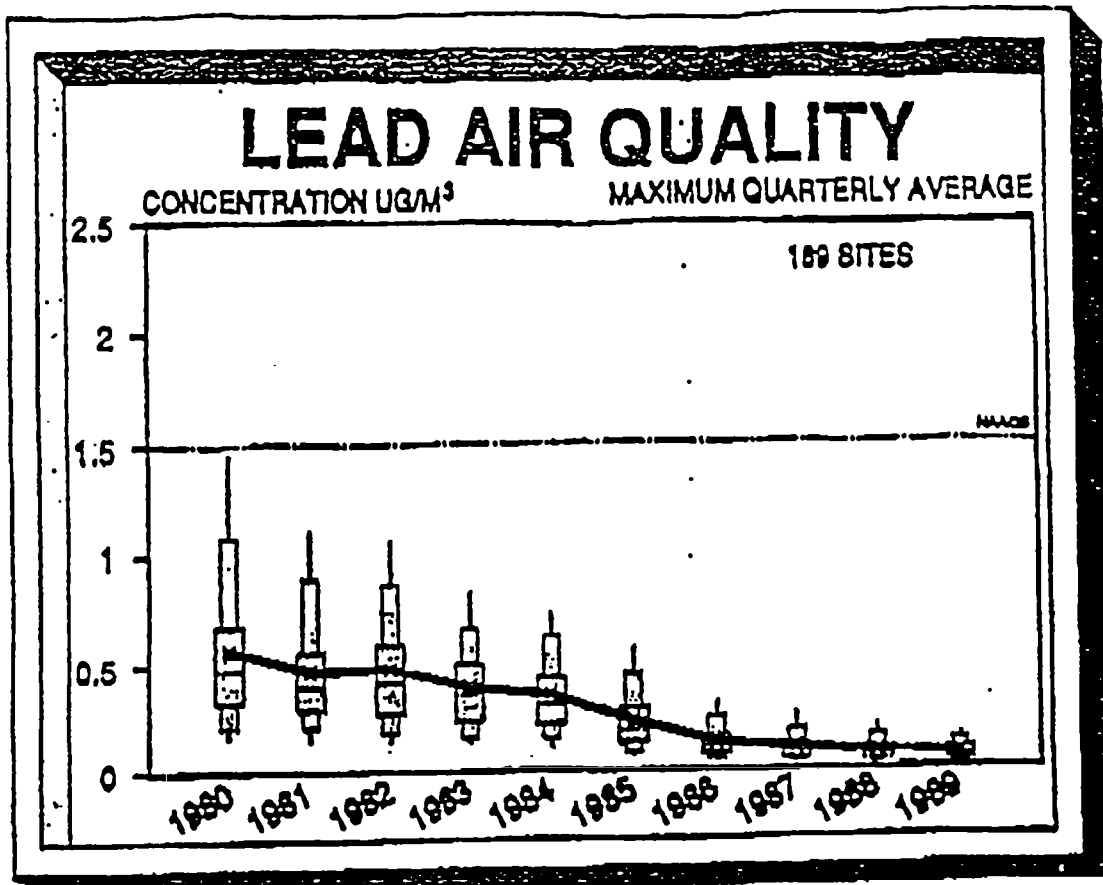
Ozone - Carbon Monoxide - PM₁₀

PM₁₀

Carbon Monoxide - PM₁₀

Areas Not Meeting Ozone, CO or PM₁₀ NAAQS

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WORTH NOTING

Ambient lead (Pb) concentrations in urban areas throughout the country have shown major improvement in 1989. Unleaded gasoline sales accounted for 89 percent of the total gasoline market, up from 82 percent in 1988. The drop in Pb consumption and subsequent Pb emissions since 1980 was brought about by the increased use of unleaded gasoline in catalyst equipped cars and the reduced Pb content in gasoline. The largest single year drop in average lead concentrations, 42 percent, occurs as expected between 1985 and 1986, because of the shift of the lead content in leaded gasoline in those years.

APPENDIX C

AIR QUALITY

1980-89: maximum quarterly average: 87 percent decrease (189 sites)

1985-89: maximum quarterly average: 14 percent decrease (245 sites)

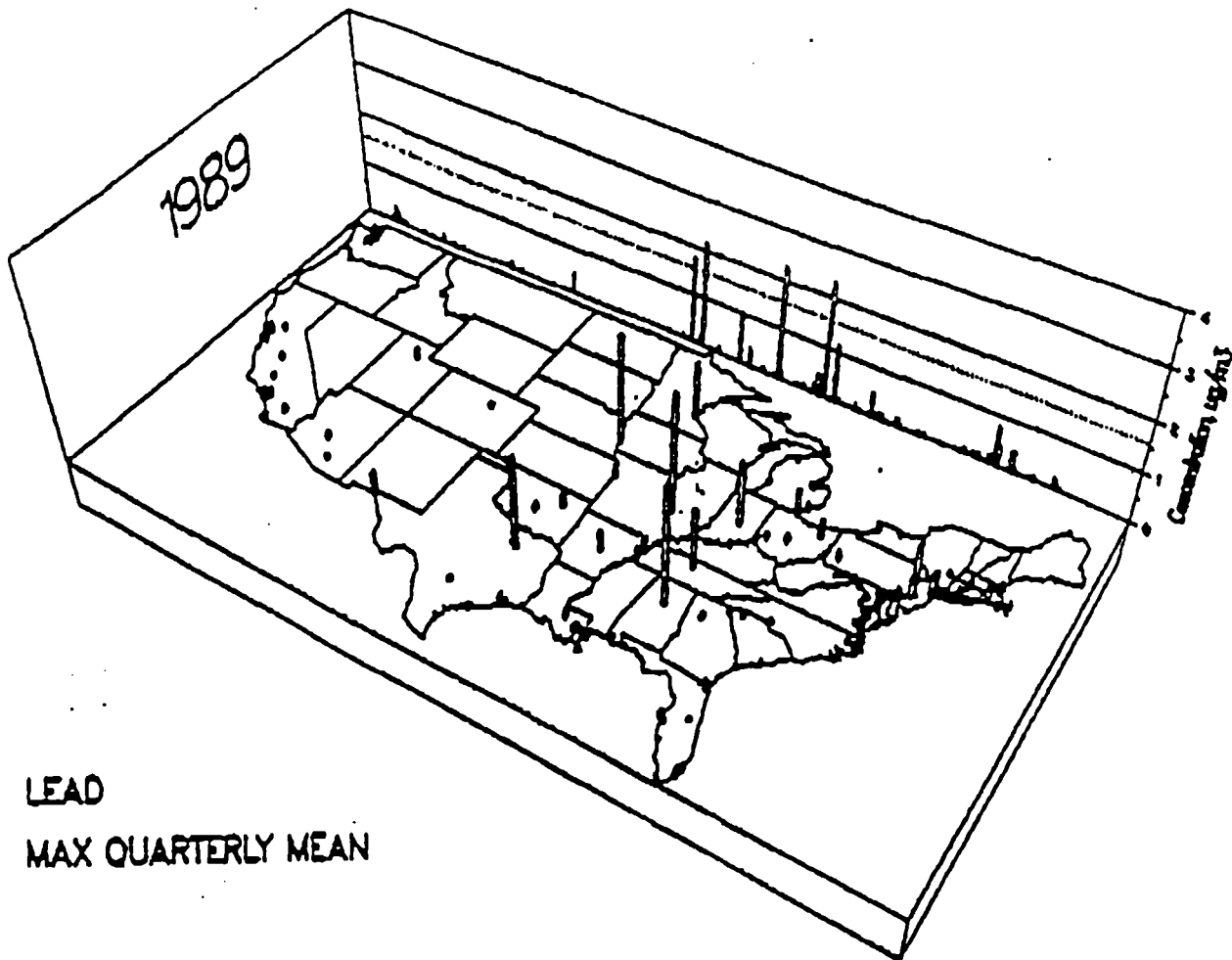
EMISSIONS

1980-89: 90 percent decrease in total lead emissions

1988-89: 5 percent decrease in total lead emissions. (15 percent decrease in lead emissions from transportation sources)

COMMENTS

The ambient lead trends presented here primarily represent general urban conditions predominantly reflecting automotive sources. Ambient trends are also presented for a small number of lead monitoring sites (19) in the vicinity of point sources of lead such as primary and secondary lead smelters.



LEAD

MAX QUARTERLY MEAN

Figure 4-11. United States map of the highest maximum quarterly average lead concentration by MSA, 1989.

The map for Pb displays maximum quarterly average concentrations in the nations largest metropolitan areas. Exceedances of the Pb NAAQS are found in four areas in the vicinity of nonferrous smelters or other point sources of lead. The two highest concentrations are found at a site near a primary lead smelter in Herculaneum, MO (St. Louis MSA) and at a site in Leeds, AL (Birmingham, MSA). Because of the switch to unleaded gasoline, areas primarily affected by automotive lead emissions show levels below the current standard of 1.5 ug/m^3 .

MOBIL RESEARCH AND DEVELOPMENT CORPORATION

RESEARCH DEPARTMENT
Paulsboro Research Laboratory
Products R&TS Division
Paulsboro, New Jersey 08066

November 21, 1991

File: 455

C. F. Gerster
USM&R - Fairfax

cc:
F. B. Fitch
P. E. Fowles
A. M. Horowitz
W. J. Koehl

COMMENTS ON USED OIL BURNING REPORT

We have reviewed the used oil burning report that you faxed to us on November 15. The report concludes that ambient air concentrations of lead in urban areas caused by the combustion of used oil in one school, industrial, or apartment building boiler (or two adjacent residential space heaters) can exceed the lead level that the U.S. EPA has set for boilers and industrial furnaces firing hazardous waste. Our key findings, discussed in detail in this memorandum, can be summarized as follows:

- The foundation of the lead emission estimates, i.e., the assumption that typical lead concentrations in used oil burned in urban boilers approach 100 ppm, is not corroborated in the report.
- The authors applied the wrong air dispersion model in their analysis.
- EPA never intended the lead limits in the Boiler and Industrial Furnace (BIF) Rule to be used in the context developed by the authors.

The detailed comments below are grouped into three areas: comments on the lead emissions estimates and stack data assumptions, comments on the modeling methodology, and miscellaneous comments.

Lead Emissions Estimates and Stack Data Assumptions

1. Lead emissions are estimated for the "four typical urban boilers that burn used oil", i.e., school boilers, industrial boilers, apartment building boilers, and residential space heaters. These estimates rely heavily on the assumption that the lead concentration in the used oil fired in these boilers is 100 ppm. The authors present lead concentration data for used oil received at used oil re-refiners and imply that this unreferenced

"industry data" confirms their assumption of 100 ppm. These data do not support their assumption because the re-refiners blend virgin oil with the used oil that they receive before selling the mixture as used oil fuel. Therefore, the "industry data" would not reflect the lead concentrations in the used oil fuel which is typically burned in urban boilers. As you requested, Attachment A presents ambient air lead concentrations versus used oil lead concentrations for each of the four boiler types, using the assumptions and modeling methodology presented in the report.

2. The authors assume that 100% of the lead in the used oil fuel is emitted from the stack. Even with no air pollution control equipment, a portion of the lead should remain inside the combustion source as part of the combustion residue.
3. In addition to their unsubstantiated assumption of a 100 ppm lead concentration, the authors base their emission estimates on the following parameters:

Used Oil Heating Value = 143,000 Btu/gallon
 Flue Gas Rate = 1876 ft³/gallon of oil
 Used Oil Density = 7.5 lbs/gallon

Specific references for these assumptions were not provided. The heating value and density appear reasonable. The flue gas rate is high relative to F factor data provided in EPA's stationary source stack sampling regulations (40 CFR 60, Appendix A, Method 19). A higher flue gas rate will cause lower model-predicted concentrations due to a higher plume rise.

4. The unit size data and stack data used in the report are reasonable.
5. The apartment boiler scenario assumes that the boiler stack exit is flush with the top of the building. This is not realistic, but, increasing the stack height results in higher SCREEN-predicted lead impacts. The nearby building that was actually modeled under the space heater scenario was 25 feet, not the 30 feet listed in Table I-B.

Modeling Methodology

6. The authors compare the model-predicted ambient air lead concentrations to the Boiler and Industrial Furnace (BIF) Rule Limit for lead, i.e., 0.09 $\mu\text{g}/\text{m}^3$. This EPA rule applies to boilers and industrial furnaces burning hazardous waste and is codified at 40 CFR 266. The rule was promulgated in a February 21, 1991 Federal Register notice (56 FR 7134). In the rule, EPA has defined reference air concentrations (RACs) for various noncarcinogenic compounds, including the lead RAC of 0.09 $\mu\text{g}/\text{m}^3$.

EPA developed the lead RAC by taking 10% of the National Ambient Air Quality Standard (NAAQS) for lead which results in a concentration of 0.15 $\mu\text{g}/\text{m}^3$. Because the lead NAAQS is based on a quarterly average, EPA assumes that an equivalent annual exposure is 0.09 $\mu\text{g}/\text{m}^3$. In essence, the hazardous waste combustion facility can contribute up to 10% (or 0.09 $\mu\text{g}/\text{m}^3$) of the acceptable annual lead exposure of 0.9 $\mu\text{g}/\text{m}^3$. The remaining 90% is reserved for other other lead sources and indirect pathways such as deposition of lead on gardens.

On page 7166 of the February 21 Federal Register notice, EPA specifically states that it "does not intend for RACs to be used as a means for setting air quality standards in other contexts" and that the "RAC methodology does not imply a decision to supplant standards established under the Clean Air Act."

Given the above, we do not believe that the model-predicted lead concentrations should be compared to the lead RAC under the BIF Rule. Instead, the report authors should be comparing the urban boiler impacts to the National Ambient Air Quality Standard (NAAQS) for lead which is presently $1.5 \mu\text{g}/\text{m}^3$ on a quarterly average basis. As an alternative, the EPA annual lead exposure guideline of $0.9 \mu\text{g}/\text{m}^3$ found in the BIF Rule could be employed.

EPA has been developing a proposal to lower the lead NAAQS, perhaps by as much as 50% (2/21/91 Federal Register, p. 7174).

7. The authors used EPA's SCREEN model which is a computerized version of screening procedures used to calculate conservative short-term ambient air concentrations from stationary air pollution sources. Short-term and annual average screening procedures are provided in a document entitled Screening Procedures For Estimating The Air Quality Impact Of Stationary Sources. They used SCREEN to calculate worst-case 1-hour concentrations then applied a factor of 0.10 to convert the 1-hour values to annual averages. There is no solid basis for the use of this factor and it probably overestimates annual concentrations. More importantly, in its Screening Procedures, EPA recommends the use of location-specific meteorological data with a more refined model, the Industrial Source Complex Long-Term (ISCLT) model, to estimate annual average air pollution concentrations. If the authors had used the recommended methodology, the predicted ambient lead levels would have been less.

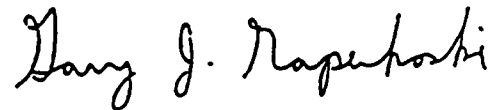
The screening procedures are applied to determine if a source poses a potential threat to air quality. A large degree of "conservatism" has been incorporated into the procedures. If the source flunks the screening test then a more refined model is used. The authors should not be basing their conclusions on a screening modeling tool. They should examine actual sources using location-specific meteorological data before making such claims.

8. On page 1-12, the authors discuss overlapping sources. They imply that the lead impact from one source can be multiplied by the number of sources to arrive at an aggregate impact for all sources. This is not correct. Used oil combustion sources in an urban area will be scattered over many blocks. Lead emissions will be vented through stacks of varying heights. These stacks will be located on or near buildings of varying lateral dimensions and heights. The SCREEN results in Appendix C of the report show that maximum lead impacts are predicted to occur at distances ranging from 23 to 122 meters from the stack. If you consider all these factors plus the variability of wind speed and direction over a year or even a quarter, the practice of multiplying the impact from one source by the number of sources to arrive at a total lead impact is simply not realistic.

Miscellaneous Comments

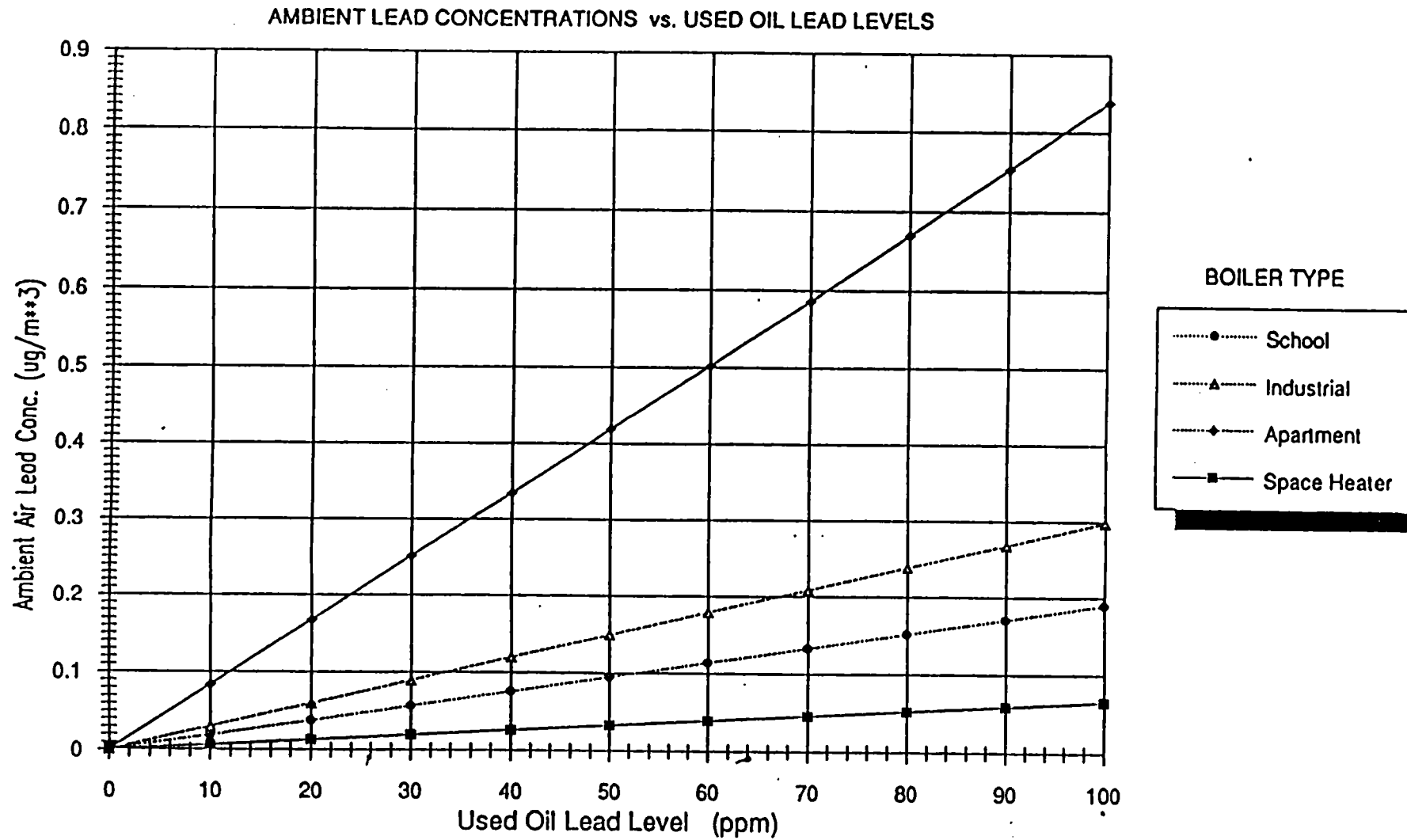
9. On page 1-5, the authors note that used oil burning has been on the rise since 1984. If this is true, and ambient lead impacts from used oil burning in urban areas is a problem, then one would expect this to be reflected in EPA's ambient lead monitoring data for sites located in urban areas. An analysis of these data may be useful.
10. The EPA has not proposed used oil combustion as a source category under Title III of the 1990 Clean Air Act Amendments (June 21, 1991 Federal Register). If EPA believed that used oil combustion was a significant source of air toxics, it would have been proposed as a source category.

If you have questions regarding the above comments, feel free to contact me at 433-2692.



G. J. Napierkoski

jlt/H4101
Attachment



MOBIL RESEARCH AND DEVELOPMENT CORPORATION

RESEARCH DEPARTMENT
Paulsboro Research Laboratory
Products R&TS Division
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November 26, 1991

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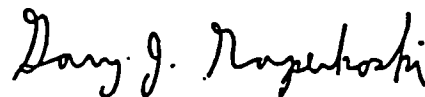
cc:
F. B. Fitch
P. E. Fowles
A. M. Horowitz
W. J. Koehl

USED OIL COMBUSTION - LEAD CONTROL EFFICIENCIES

As a follow-up to our comments on the report dealing with ambient air impacts of lead from used oil combustion, you requested information on the lead removal efficiencies of wet scrubbers and fabric filters installed at asphalt batch plants and on cement kilns and industrial boilers. I have reviewed a limited amount of information that was available from my files. The only useful source of information on the subject was EPA's Compilation Of Air Pollutant Emission Factors (AP-42) which has a section devoted to waste oil combustion, Section 1.11. Attached is Section 1.11 with the relevant points underlined.

Additional information on lead control efficiencies can be obtained through research of EPA reports and other literature. This research would take time and would be most effective if it were conducted by someone with an in-depth knowledge of combustion sources and air pollution control equipment.

As you indicated on November 25, you will notify us if you need any further assistance from us or from the Engineering Department concerning the above. I can be reached at BM 433-2692 or (609) 224-2692.



G. J. Napierkoski

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APPENDIX C

1.11 WASTE OIL COMBUSTION

1.11.1 General

"Waste oil" or "used oil" refers to spent lubricating and other industrial oils that are recovered for reuse as fuels, road oils and processed oils. The principal type of waste oil is used vehicle crankcase oil recovered by automobile service stations and waste oil collection depots. Other types of waste oil include metal working lubricants, heavy hydrocarbon fuels, animal and vegetable oils and fats, and industrial oils, including those used as transformer and other heat transfer fluids. Common contaminants in waste oils include metals, halogens, various volatile organic compounds (VOC) and solvents, and sulfur. Lead is found in appreciable quantities in used crankcase oil because of the use of tetraalkyllead gasoline additives. Many other metals and sulfur are introduced directly during formulation of lubricating oils as components of additives. Also, metals can be introduced through abrasion and wear of lubricated parts and surfaces. Halogens are introduced from the use of organic halides as lead scavengers in gasoline, or through commingling of waste oils and cleaning solvents such as perchloroethylene. Commingling of used oil and other organic compounds during collection and storage appears to be a common occurrence, as evidenced by the large number of relatively low molecular weight organics frequently found in used oils but not present in the original oils.¹

In 1983, over 8.7 billion liters (2.3 billion gallons) of automotive and industrial lubricating oils and other industrial oils were sold.¹⁻² Of this total, 4.6 billion liters (1.2 billion gallons) were recovered as used oil and subsequently reused or disposed of. The remainder was lost through engine breakdown during engine operation, end use application, leakage and handling. Waste oil combustion consumed 2.2 billion liters (0.59 billion gallons), or roughly half of the recovered total, up appreciably from 1970 estimates because of higher fuel costs, past fuel shortages, and the decline of other outlets for used oil, such as road oilant or base stock for re-refining.³

Waste oil may be burned alone or mixed with other fuel oil, in most conventional oil burning combustion systems. Several problems are associated with waste oil combustion, including reduced combustion efficiency and the corrosion and erosion of system components. However, these problems are not felt to be serious, and they can be reduced if the waste oil is blended with fuel oil or if the used oil is treated to reduce sediment, water, light end and metal content.⁴ Metal emissions can be reduced if a vaporizing burner rather than an atomizing burner is used in small waste oil space heaters.

1.11.2 Emissions

Emission factors for uncontrolled waste oil combustion are presented in Table 1.11-1. Lead emissions depend on the oil's lead content and on boiler and burner design and operating conditions. Because of greatly decreased use of lead in gasoline, the lead content of waste oil has dropped significantly, falling from 10,000 parts per million in 1970 to 1,100 parts per million in 1982-83 and to 300 - 500 parts per million in 1985.²⁻³ While further decreases

TABLE 1.11-1. EMISSION FACTORS FOR UNCONTROLLED WASTE OIL COMBUSTION^a

Pollutant	Ort diameter (um)	Commercial/Industrial boiler			Space heater ^b				
		Emissions		Emission Factor Rating	Air atomizing burner		Emission Factor Rating	Evaporative burner	
		(kg/m ³)	(lb/10 ³ gal)		(kg/m ³)	(lb/10 ³ gal)		(kg/m ³)	(lb/10 ³ gal)
PM ₁₀ ^c	0.625	3.3(A)	27(A)	C	3.8(A)	33(A)	E	NA	NA
	1.0	3.9(A)	32(A)		3.7(A)	31(A)			
	1.33	4.3(A)	33(A)		4.1(A)	34(A)			
	2.5	4.9(A)	41(A)		5.2(A)	44(A)			
	5.0	5.7(A)	48(A)		6.3(A)	52(A)			
	10.0	6.1(A)	51(A)		6.8(A)	57(A)			
	15.0	6.4(A)	54(A)		7.0(A)	58(A)			
Total particulates ^d		7.3(A)	61(A)	C	7.7(A)	64(A)	D	0.3(A)	2.4(A)
Lead ^e		3.0(F)	42(F)	C	6.1(F)	51(F)	D	0.07(F)	0.4(F)
Sulfur dioxide ^f		18(S)	147(S)	C	18(S)	147(S)	D	18(S)	147(S)
Nitrogen oxides ^g		2.4	20	C	2.4	20	D	2.4	20
Carbon monoxide ^h		0.6	5	C	0.6	5	D	0.6	5
Volatile organic compounds ⁱ		0.12	1	D	0.11	1	D	0.11	1
Hydrochloric acid ^j		8(C)	64(C)	C	NA	NA		NA	NA

^aFactors are for unblended and untreated waste oil. Blending with fuel oil will reduce Pb, particulate, SO₂, and HCl emissions, directly related to fuel ash, Pb, and Cl contents, respectively. SO₂ emissions may be reduced if overall fuel N is reduced by blending. Most "untreated" fuel oils will have undergone sedimentation to remove most bottom sediment and water. Filtration or centrifugation can reduce ash and Pb up to 30% and reduce particulate and Pb emissions accordingly. However, pretreatment will have little or no effect on emissions of other pollutants.

^bReferences 3,10-12.

^cReference 3,8. Expressed as aerodynamic equivalent diameter. Based on overall particulate emission factors of 7.3(A) kg/m³ [61(A) lb/10³ gal] for commercial/industrial boilers and 7.7(A) kg/m³ [64(A) lb/10³ gal] for air atomizing space heaters.

^dReferences 3,6-12. Defined as that material collected by EPA Method 5 (first half catch). (A) is weight % of ash in oil, and should be multiplied by value given. A typical concentration of ash in waste oil is 0.63%.

^eReferences 3,6-12. Defined as elemental portion of particulate collected by EPA Method 5 (first half catch). (F) is weight % of Pb in oil, and should be multiplied by value given. A typical concentration of Pb in waste oil was 0.04% in January 1980, expected to decrease over time.

^fReference 9-10. (S) is weight % of S in oil, and should be multiplied by value given. A typical concentration of S in waste oil is 0.32%. Represents 98% transfer of S (as SO₂) from oil to flue gas, for oil with density of 100 kg/m³ (7.5 lb/gal).

^gReference 9-10. Expressed as SO₂. Data are not sufficient to relate emissions to boiler type or fuel S content.

^hReference 9-10.

ⁱReference 9-11.

^jReference 6. (C) is weight % of Cl in oil, and should be multiplied by value given.

1.11-2

EMISSION FACTORS

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This has appreciably changed since this 1988 report.
See Appendix B pages 1 & 4.

are forecast, the current lead content is still appreciably higher than the up to 100 parts per million levels found in conventional fuels. Typically, 50 percent or more of the lead in waste oil is emitted with flue gas during combustion, with the remainder deposited on internal surfaces.^{3,5-10} However, in small space heaters employing vaporizing burners, less than 5 percent of the lead in the waste oil is emitted.³

Cumulative size distribution data and size specific emission factors for uncontrolled particulate emissions from waste oil combustion in commercial or industrial boilers and air atomizing space heaters are presented in Tables 1.11-2 and 1.11-3. Uncontrolled size specific emission factors are presented in Figures 1.11-1 and 1.11-2. Particulate emissions are based on the ash content of the fuel. Because the ash content of waste oil is generally higher than that found in refined oils, emissions from waste oil combustion will be greater.

Emissions of other pollutants, such as sulfur dioxide (SO_x) and hydrochloric acid (HCl), will depend on the respective sulfur and chlorine levels in the oil. Because levels of these precursor materials are generally greater in waste oils than in refined fuel oils, particularly distillate oil, waste oil combustion will produce more emissions of SO_x and HCl . In contrast, emissions of nitrogen oxides (NO_x), carbon monoxide (CO) and VOCs are similar for both waste and refined fuels.

1.11.3 Controls

Pretreatment - Most waste oil now sold as a fuel receives some sort of physical pretreatment (e. g., sedimentation, filtration, centrifugation, water and light end distillation). Lead and other trace element concentrations and the ash content of the waste oil generally will be lowered somewhat by some of these pretreatments, probably less than 30 percent. While lead and ash content reduction will reduce emissions of lead and particulate matter proportionately, its purpose is to reduce water, sediment and low boiling components. This provides a safely handled fuel with combustion properties similar to those of conventional fuels and with physical properties resembling a No. 4 fuel.³ Thus, criteria pollutant emissions primarily affected by overall combustion efficiency (carbon monoxide and VOCs) will be similar to those from conventional fuels.⁶

Other criteria pollutants, such as sulfur and NO_x which depend either totally or partially on the fuel sulfur and nitrogen contents, will be emitted at levels consistent with those concentrations. Fuel sulfur and nitrogen levels generally do not decline with pretreatment. Because waste oil sulfur usually contains more sulfur than does distillate oil, emission factors for its combustion will be proportionally higher. Similarly, the higher nitrogen content of the waste oil can be expected to result in higher nitrogen oxide emissions. Emissions of chloride will be directly related to the chlorine content of the fuel, with 80 to 90 percent of the chlorine emitted as HCl .⁸⁻⁹ Many chlorinated organics, such as the low molecular weight chlorinated solvents, will be removed during pretreatments employing light end distillation. However, chlorine bearing compounds with vapor pressures similar to those of the virgin base stock (e. g., polychlorinated biphenyls) will not be removed by this pretreatment. Expensive hydrofinishing, or possibly clay contacting operations, must be used to remove such chlorine.

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External Combustion Sources

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TABLE 1.11-2. CUMULATIVE SIZE DISTRIBUTION FOR UNCONTROLLED PARTICULATE EMISSIONS AND SIZE SPECIFIC EMISSION FACTORS FOR COMMERCIAL/INDUSTRIAL BOILERS FIRING WASTE OIL^a

Particle size ^b (μm)	Cumulative mass % $\leq$ stated size	Emission factor ^c (kg/m^3) (lb/10 ³ gal)	
15	88	6.4(A)	54(A)
10	84	6.1(A)	51(A)
6	78	5.7(A)	48(A)
2.5	67	4.9(A)	41(A)
1.25	57	4.2(A)	35(A)
1.00	53	3.9(A)	32(A)
0.625	45	3.3(A)	27(A)

^aReference 1. A = ash content in fuel.

^bExpressed as aerodynamic equivalent diameter.

^cBased on an overall particulate emission factor of 7.3(A) kg/m^3 [61(A) lb/10³ gal].

TABLE 1.11-3. CUMULATIVE SIZE DISTRIBUTION FOR UNCONTROLLED PARTICULATE EMISSIONS AND SIZE SPECIFIC EMISSION FACTORS FOR AN AIR ATOMIZING SPACE HEATER UNIT FIRING WASTE OIL^a

Particle size ^b (μm)	Cumulative mass % $\leq$ stated size	Emission factor ^c (kg/m^3) (lb/10 ³ gal)	
15	91	7.0(A)	58(A)
10	89	6.8(A)	57(A)
6	82	6.3(A)	52(A)
2.5	68	5.2(A)	44(A)
1.25	53	4.1(A)	34(A)
1.00	48	3.7(A)	31(A)
0.625	39	3.0(A)	25(A)

^aReference 5. A = ash content in fuel.

^bExpressed as aerodynamic equivalent diameter.

^cBased on an overall particulate emission factor of 7.7(A) kg/m^3 [64(A) lb/10³ gal].

1.11-4

EMISSION FACTORS

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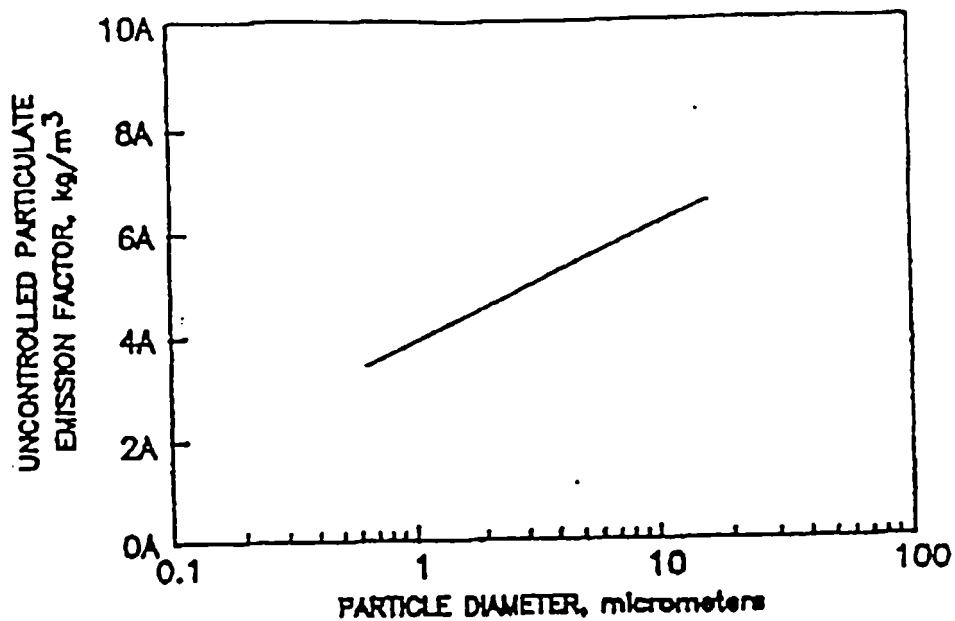
APPENDIX C

Figure 1.11-1. Cumulative size specific particulate emission factors for commercial/industrial boilers firing waste oil.

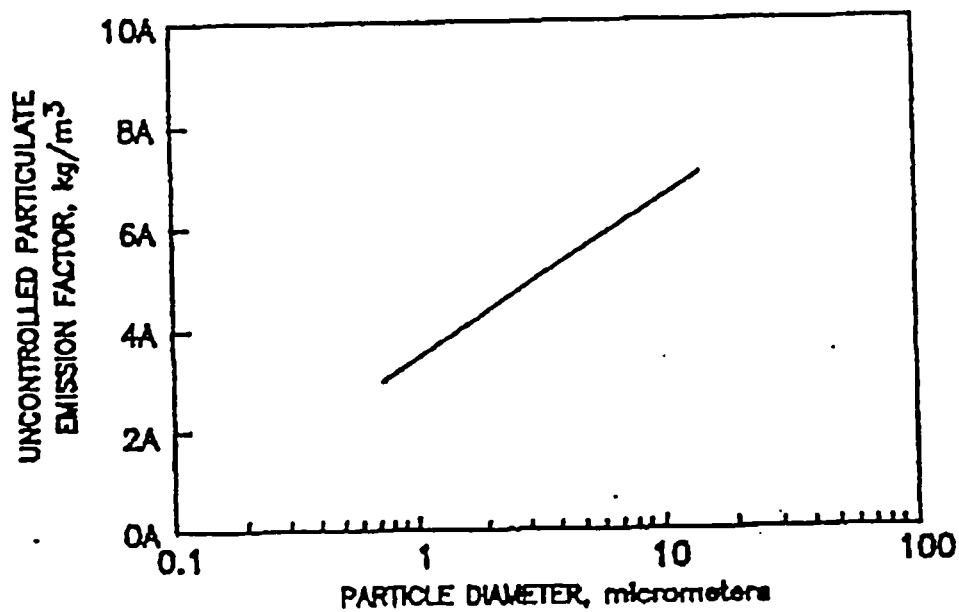


Figure 1.11-2. Cumulative size specific particulate emission factors for an air atomizing space heater unit firing waste oil.

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Blending - Blending waste fuel and virgin fuel oil generally will reduce emissions of lead, particulate, sulfur dioxide and hydrochloric acid. Emissions of these pollutants will be approximately proportional to the respective concentrations of lead, ash, sulfur and chlorine in the blended fuel. NO_x emissions may also be reduced, although available data do not support a reduction estimate. Emissions of VOC and carbon monoxide, which depend on combustion efficiency, will not be significantly affected by blending.

Unit Design - There has been an increase in the use of waste oil as a fuel in small space heaters (those with less than 250,000 British Thermal Units per hour input).^{8,10} Two types of burners are employed in these combustion systems, air atomizing and vaporizing. The conventional air atomizer injects aerosolized oil vapor into the combustion chamber, whereas the vaporizing burner operates through volatilization of heated oil. In the latter, the vapors are burned, and a residue is left behind in the vaporizing pot. The atomizing units emit at least an order of magnitude more particulate, lead and trace elements than do the vaporizing units. Although levels of VOC and other unburned combustible emissions appear comparable from both types of units, limited data suggest a significantly higher level of polycyclic organic matter emitted from vaporizing burners.

Control Equipment - Apart from the measure of control introduced by pretreatment, blending or the use of vaporizing burners, no additional controls are being applied to waste oil combustion. Waste oils are usually burned in small devices, for which controls are virtually nonexistent. Because greater than 80 percent of the lead bearing particulate is submicron in diameter, only high efficiency control devices such as fabric filters can provide significant control. Mechanical collectors will achieve little if any measurable control, either of lead emissions or of the submicron fraction of the particulate (about 55 percent) emitted in flue gas.⁸

References for Section 1.11

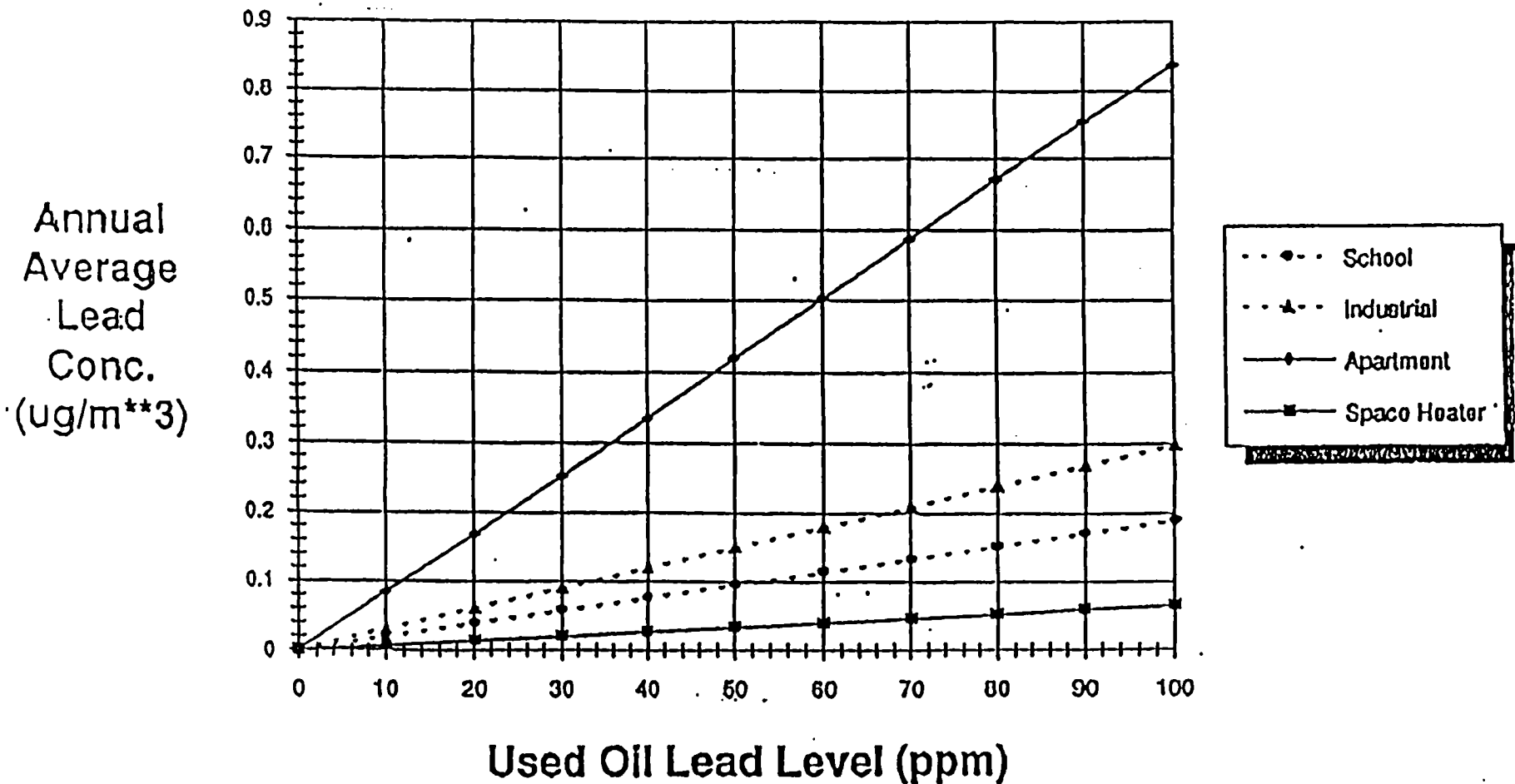
1. Composition And Management Of Used Oil Generated In The United States, PB85-180297, National Technical Information Service, Springfield, VA, November 1985.
2. Waste Oil: Technology, Economics, And Environmental Health And Safety Considerations, U. S. Department Of Energy, Washington, DC, January 1987.
3. N. F. Surprenant, et al., The Fate Of Hazardous And Nonhazardous Wastes In Used Oil Disposal And Recycling, DOE/BC/10375-6, U. S. Department Of Energy, Bartlesville, OK, October 1983.
4. T. D. Coyle and A. R. Siedle, "Metals In Oil: Occurrence And Significance For Reuse Of Spent Automotive Lubricating Oils", Measurements And Standards For Recycled Oil - II, Special Publication 556, National Bureau Of Standards, Gaithersburg, MD, September 1979.
5. Final Report Of The API Task Force On Oil Disposal, American Petroleum Institute, New York, NY, May 1970.

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6. G. A. Chappell, Waste Oil Reprocessing, Project No. 72-5, Esso Research and Engineering Co., Government Research Laboratory, Linden, NJ, January 1973.
7. D. A. Waite, et al., "Waste Oil Combustion: An Environmental Case Study", presented at the 75th Annual Meeting of the Air Pollution Control Association, New Orleans, LA, June 1982.
8. Environmental Characterization Of Disposal Of Waste Oils In Small Combustors, EPA-600/2-84-150, U. S. Environmental Protection Agency, Cincinnati, OH, September 1984.
9. Used Oil Burned As A Fuel, EPA-SW-892, U. S. Environmental Protection Agency, Washington, DC, August 1980.
10. R. E. Hall, et al., "Comparison Of Air Pollutant Emissions From Vaporizing And Air Atomizing Waste Oil Heaters", Journal of the Air Pollution Control Association, 33(7):683-687, July 1983.
11. R. L. Harbour and W. M. Cooke, Chemical Analysis Of Waste Crankcase Oil Combustion Samples, EPA-600/7-83-026, U. S. Environmental Protection Agency, Cincinnati, OH, April 1983.
12. W. B. Walker and R. Salter, Pollution Of The Environment By The Burning Of Waste Oils, PB83-004943, National Technical Information Service, Springfield, VA, September 1980.

This chart uses the highly incorrect assumptions put forth in the "Burning Used Oil - America's Undiscovered Threat" report.

Ambient Lead Concentrations VS. Used Oil Lead Levels



DATA AND CONDITIONS USED FOR REVISED CHART ON PAGE - 3.

(A more realistic scenario than Chart on page 1 and allows for existing emission control devices.)

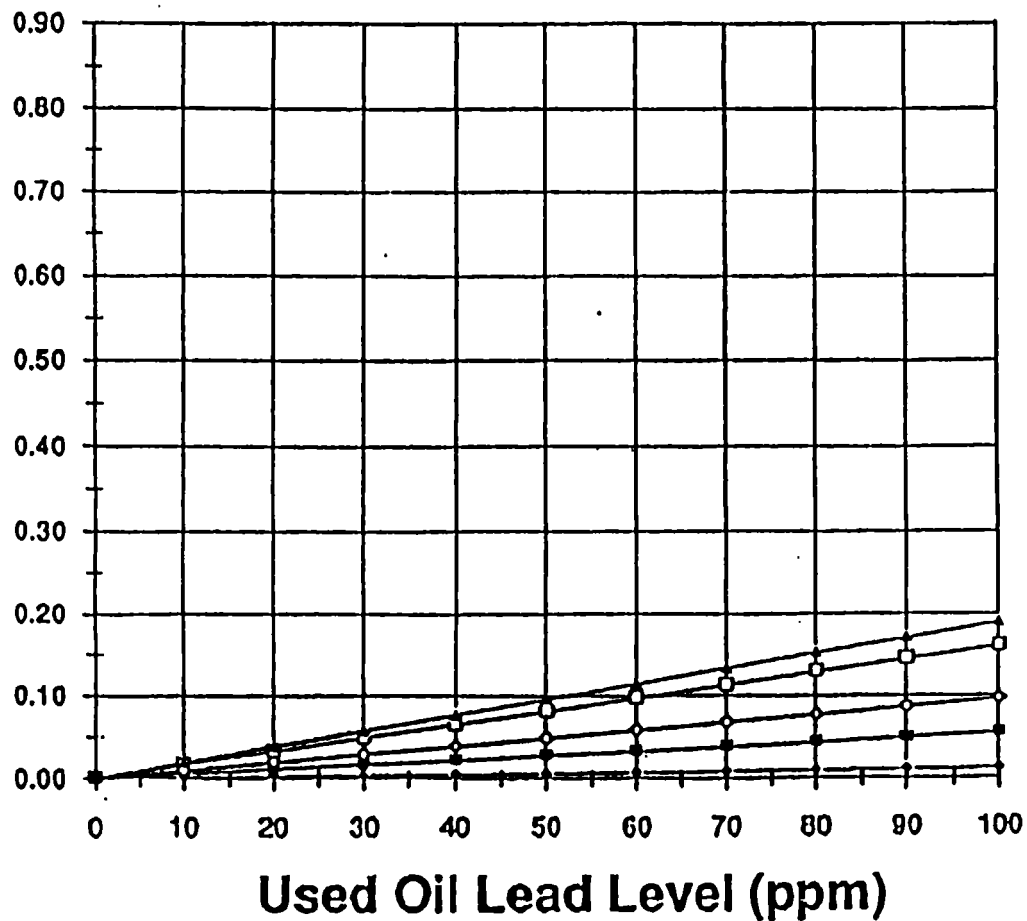
LEAD EMISSIONS AND SOURCE CHARACTERISTIC ASSUMPTIONS

Source Type	Fuel Input (gals/day)	Capture Rate (%)	Average Annual Lead Emissions (lbs/hr)	Average Annual Lead Emissions (p/sec)	Stack Height (meters)	Stack Height Above Bldg. Height (meters)	Bldg. Width (meters)	Stack Diameter (meters)	Exit Velocity (m/sec)	Exit Temp (K)
Small School/Apartment (4 months/yr)	2000	50	0.01042	0.0013	24.38	4.572	60.96	0.457	5.0	533
Small School/Apartment (12 months/yr)	2000	50	0.03125	0.0039	24.38	4.572	60.96	0.457	5.0	533
Asphalt Plant	2500	85	0.01172	0.0015	15.00	0.098	45.72	1.219	10.0	491
Cement Kiln	10000	90	0.03125	0.0039	68.58	9.144	45.72	1.219	5.0	533
Industrial Boiler	8000	50	0.12500	0.0158	33.53	9.144	30.48	0.762	5.0	533

Assume: 100 ppm lead
7.5 lbs/gal

Ambient Lead Concentrations VS. Used Oil Lead Levels - Revised

Annual
Average
Lead
Conc.
($\mu\text{g}/\text{m}^3$)





National Oil Recyclers Association

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NATIONAL OIL RECYCLERS ASSOCIATION

PROPOSED MANAGEMENT STANDARDS

FOR RECYCLED USED OIL

Original, March 1990

Update , March 1992

APPENDIX D

NATIONAL OIL RECYCLERS ASSOCIATION
PROPOSED MANAGEMENT STANDARDS
FOR RECYCLED USED OIL

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BACKGROUND

It has been the consistent position of the National Oil Recyclers Association ("NORA") that an effective system for the management of used oil can and should be implemented without listing used oil as a hazardous waste under the Resource Conservation and Recovery Act ("RCRA"). The following outline of management standards is intended to demonstrate that a comprehensive and straightforward regulatory program can protect human health and the environment without undermining the economic incentives for used oil recycling. It should be emphasized that numerous regulatory requirements governing the management of used oil already exists (e.g., transporter requirements established by the Department of Transportation pursuant to the Hazardous Materials Transportation Act.) Some of these existing requirements are described below. The omission of any applicable requirements in this outline is not intended by NORA as an attempt to create an exemption.

Although a number of citations to various statutes and regulations appear in this outline, NORA's recommendations for used oil management standards also include a basic proposal concerning format. In promulgating the final version of the rules, EPA should eliminate all "cross-references" to other regulatory authorities. In other words, all applicable requirements should be spelled out in a single document. This will help assure that EPA comprehends the full scope of the regulatory burden it is imposing and will inform the regulated community of all the requirements with which it is expected to comply.

A. GENERATORS

1. Storage

- (a) Recycled used oil should be stored by the generator in nonleaking tanks or containers clearly marked "RECYCLED USED OIL ONLY" and segregated from hazardous substances.
- (b) The mixture of hazardous waste with oil intended for recycling shall be prohibited.
- (c) Storage of more than 110 gallons of used oil for more than twelve months shall be prohibited.
- (d) Underground tanks containing used oil should be subject to the same rules, promulgated under Subtitle I of RCRA, that apply to underground storage of other petroleum products. See 40 CFR Part 280.

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- (e) Storage or disposal of recycled oil in ponds, lagoons or other surface impoundments should be prohibited.

2. Shipment Off-site

Used oil, which is not recycled on-site, should be shipped only to an approved facility and transported by a permitted transporter. The generator should be required to maintain records of; 1) the identity of the transporters; 2) quantity of used oil transferred to transporters for shipment; 3) facilities to which used oil is delivered. (Note: Section 3014 of RCRA prohibits requiring a generator who meets certain conditions to manifest shipments.)

B. TRANSPORTERS

1. EPA Identification Number

Transporters should be required to obtain an EPA identification number.

2. Shipment Documentation

The transporters should be required to complete a "shipping document" for the oil he collects from each generator and a "consolidated shipping document" for the total quantity delivered to the facility in each shipment. (Note: Used oil transporters, if they are independent operators, consider the sources from which they obtain used oil and the facilities to which they deliver to be confidential business information. They do not want to put themselves out of business by fostering direct contacts between their generators and the recycling facilities. For that reason, shipping documentation should, to the extent possible, permit the transporter to be the focus for tracking shipments. This is possible if the transporter provides a numbered receipt to the generator and then identifies the sources of oil to the facility by listing generator receipt numbers on a consolidated shipping document.)

- (a) The initial receipt for used oil collected by the transporter should be signed by the generator (provided this would not be deemed to constitute a "manifest" under section 3014). Alternatively, the transporter should sign a receipt for each pickup of used oil.

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- (b) Receipts on board the used oil vehicle should account for the amount of oil on board the truck. (A numbered receipt system would be essential.)
- (c) The transporter's delivery of used oil to an approved recycling facility must be verified by an authorized person at that facility. The facilities authorized person must review and formally approve the consolidated shipping document which accounts for all the generator receipts issued in connection with the shipment.
- (d) A discrepancy of 10 percent or more between the quantity collected and the quantity delivered to the facility should be explained by the transporter in a comments section of the consolidated shipping document.
- (e) The transporter and the facility should retain copies of the consolidated shipping documents for at least three years.
- (f) Copies of all shipping and other required documents should be available for inspection by EPA or the authorized state.

3. Storage By Transporters

A transporter storing recycled used oil longer than thirty-five (35) days in tanks or trucks, should be required to obtain a Recycled Used Oil Facility permit.

4. Financial Responsibility

Transporters should be required to maintain insurance coverage as required by the regulations of the Department of Transportation for comparable virgin petroleum products, pursuant to the Hazardous Materials Transportation Act ("HMTA"), 49 U.S.C. § 1801 et seq. See 49 CFR § 387 et seq.

5. Vehicle Identification And Placards

Vehicles transporting used oil should be required to comply with applicable placarding and marking requirements set forth in 49 CFR § 397.21.

6. Operation Safety And Training

Transporters should be required to comply with all DOT

APPENDIX D

requirements concerning vehicle safety and driver training which apply to transporters of comparable virgin petroleum products.

7. Spill Reporting And Response

Transporters should be required to comply with all applicable requirements pursuant to the Hazardous Materials Transportation Act (49 CFR § 172 et seq.), notification requirements of the Comprehensive and Liability Act found at 40 CFR § 355, and spill reporting and emergency response provisions of the Clean Water Act (40 CFR § 302.1).

8. Used Oil Testing

Each truckload of used oil must be tested prior to off-loading at the storage or processing facility to insure that the material does not constitute a hazardous waste.

9. Reports And Recordkeeping

Transporters should be required to submit quarterly reports on their used oil activities to an EPA approved state agency or EPA. This report should include;

- (a) Identification of all generators serviced during the quarter.
- (b) The total amount of used oil collected from each generator during the quarter.
- (c) The total amount of used oil delivered to each reprocessing facility during the quarter.

Copies of quarterly reports should be retained for at least three years. The identities of the generators contained in such reports would be considered confidential business information and could not be disclosed by EPA or the authorized state.

10. Permits

Transporters would be issued permits based upon compliance with these standards. Should inspection, by an authorized state agency or the EPA, reveal that a transporter has failed to maintain compliance with these standards, the transporters permit may be revoked and appropriate legal action initiated.

C. REPROCESSING FACILITIES

1. Permitting

- (a) Used oil recycling facilities (including facilities that engage in recycling of used oil generated on-site) should be required to obtain a permit covering their used oil activities. If a facility which is permitted for hazardous waste activities also undertakes recycled used oil operations, the used oil activities should be permitted separately and not through a modification to the hazardous waste permit. NOTE: A site that receives used oil fuel from a permitted recycling facility as an end user, i.e., a burner, should not be considered a "facility" subject to permitting. Burners of "off-specification" used oil fuel are already subject to the notification requirement and other restrictions of the "burning and blending" rules (40 CFR Part 266, Subpart E).
- (b) EPA identification numbers should continue to be site specific, i.e., generator, storage, transportation, processing activities for used oil and/or hazardous waste should continue under a single identification number though the number is used in connection with a variety of permits.
- (c) Facilities operating at the time of promulgation of the management standards should be granted interim status upon application for a used oil recycling permit. A reasonable time should be allowed for operating facilities to come into full compliance with the standards whereupon the permit will become final; compliance should be verified via inspection by EPA or an authorized state agency.
- (d) Facilities to be placed in operation after promulgation of management standards should be required to demonstrate intent and ability to comply with the management standards before a permit is issued.

2. Storage

(a) Storage In Impoundments

Storage or disposal of used oil in a pond, lagoon

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or other surface impoundment should be prohibited.

(b) Underground Storage

Underground storage of recycled used oil at a recycling facility should be governed by the underground tank rules that apply to other petroleum products under Subtitle I of RCRA (40 CFR Part 280).

(c) Aboveground Storage

NORA believes that the detailed regulations of 40 CFR Part 264, Subparts I (containers) and J (tanks) can apply to storage of recycled oil, with appropriate editing. This editing should include; 1) replacing references to hazardous waste with "recycled oil"; 2) deletion of sections dealing with "incompatible wastes"; 3) deletion of sections dealing with "ignitable or reactive wastes"; and 4) state standards specifically and completely (do not apply standards by reference to other parts of CFR regulations). The editing deletions above cover materials that are not to be allowed in a used oil recycling facility. The omission of standards by reference will avoid confusion of the regulated community and help insure the desired protection of the public health and environment.

3. Security

- (a) Recycling facilities should be adequately fenced or otherwise equipped so as to minimize the possibility of unauthorized entry onto the active portion of the facility.
- (b) All entrances to the active portion of the facility must be posted with signs, legible at a distance of at least fifty (50) feet that state: "RECYCLED USED OIL FACILITY - UNAUTHORIZED ENTRY PROHIBITED".

4. Preparedness And Prevention

- (a) All facilities must maintain a valid Spill Control and Countermeasure Plan as set forth in 40 CFR Part 112.
- (b) Recycling facilities must be operated and maintained so as to minimize the possibility of a fire, explosion, sudden or non-sudden release of recycled used oil to the soil or surface waters.

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- (c) Recycling facilities must have available sufficient equipment, e.g., absorbent, fill material, booms or other barriers and fire extinguishers, to ensure initial fire protection and spill control.
- (d) Recycled used oil facilities must have on-site and in operation a communication system which will insure the ability to summon any external assistance needed to handle any emergency which is likely to occur.

5. Contingency Plan

Recycled used oil facilities should comply with the standards outlined in 40 CFR Part 264, Subpart D, edited to apply specifically to recycled used oil instead of hazardous waste.

6. Financial Responsibility

Financial responsibility requirements for closure of recycled used oil facilities should be determined and implemented only after EPA has had the opportunity to learn the level of protection provided by these proposed management standards. The ability to adequately deal with spills has already been assured in item 4 (c) above.

7. Operating Records

(a) Equipment Inspection and Correction.

A daily equipment inspection log and listing of corrections made must be maintained at the facility and available for inspection by any appropriate regulatory agency.

(b) Receiving Records.

Used oil recycling facilities must maintain daily receiving records of all used oil accepted at the facility. This receiving record must verify:

- (1) The testing performed on each shipment, prior to unloading, that insures hazardous waste is not received or if found is properly isolated and then disposed of in the proper manner.
- (2) That all used oil received at the facility was delivered by permitted transporters.
- (3) That used oil delivered to and accepted by the facility was accompanied by properly completed

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shipping documents required of transporters and facilities. Further, that these shipping documents are properly filed and available for inspection by any appropriate regulatory agency

(c) Reporting.

Facilities should submit quarterly reports to an EPA authorized state agency or EPA. This report should include:

- (1) Full identification of the facility.
- (2) Amount of oil in storage at the end of the quarter.
- (3) Identification of transporters and the amount each delivered to the facility during the quarter.
- (4) Amount of used oil generated, treated, stored and/or recycled on site, during the quarter.
- (5) Amount of recycled used oil shipped during the quarter and to what type of end user.

8. Facility Personnel Training

- (a) Recycled used oil facilities must conduct and record training given to facility operators and vehicle drivers. This training must include, but is not restricted to, spill response and other operations relevant to the employee's job responsibilities.
- (b) Permanent records of each employee's training must be retained. This record must contain an employee certification that the recorded training was received.
- (c) Re-training and certification of re-training will be required when the owner or operator or controlling regulatory authority determines re-training is needed.

9. Facility Inspection

Recycled used oil facilities are to be inspected by an EPA authorized state agency or EPA, as deemed necessary, for compliance with these management standards.

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10. Residues From Recycled Used Oil Treatment

The disposal of any filtrate, sludge or any other residue from treatment or processing recycled used oil will require appropriate testing to determine if the material is a hazardous waste. The disposal method for these tested materials must be approved by the appropriate regulatory authority. A permanent record of each incident of disposal, verifying compliance with the approved method, must be retained at the facility.

D. MARKETERS OF RECYCLED USED OIL AND USED OIL FUEL

- (a) If a marketer stores off-specification recycled used oil or used oil fuel, the marketer is subject to all the standards of a Recycled Used Oil Facility.
- (b) If a marketer does not store any recycled used oil or used oil fuel, the marketer is subject only to the requirements of 40 CFR Part 266.43.
- (c) If a marketer stores any material classified as a hazardous waste, the marketer is then subject to all the hazardous waste regulations of 40 CFR Parts 124 and 260 through 270.

E. PROHIBITED USE

Recycled used oil shall not be used for road oiling.

F. PROPOSED STANDARDS APPLICABLE TO BURNERS OF USED OIL BURNED FOR ENERGY RECOVERY

Burners of used oil fuel defined at 40 CFR Part 266, Subpart E are subject only to the provisions of 40 CFR Part 266.64 and tank storage rules of 40 CFR Part 280. Any other aboveground tank storage rules for similar petroleum products would be applicable.

12/4/91

**IMPACT OF API USED OIL LEGISLATIVE LANGUAGE
ON USED OIL MANAGEMENT**

**Imposition of Stringent Management Standards Will Ensure
Protection of Human Health and the Environment**

It is unnecessary to list used oil as "hazardous waste" to ensure protection of human health and the environment. The imposition of management standards specific to used oil generators, transporters and recyclers will eliminate the potential risks associated with the mismanagement of used oil. Comprehensive management standards would include, but are not limited to, requirements for inspection, testing, recordkeeping, release detection and spill clean-up as well as a ban on used oil as a dust suppressant. Management standards addressed in EPA's recent Used Oil Supplemental Notice (56 FR 48000) on used oil management form the basis herein for outlining why listing used oil as a hazardous waste is not necessary to ensure protection of human health and the environment.

The table attached to this narrative outlines in detail management requirements (using API's used oil legislative language as the basis for the requirements) that would be applicable to generators, transporters and recyclers of used oil. Many of the requirements are actually the same as those that were endorsed by API in comments submitted to EPA on the Used Oil Supplemental Notice. However, due to the differences in scope between EPA's Supplemental Notice and API's legislative language (e.g., provisions specifically addressing SIC code 2911 facilities), the requirements outlined on the table are not identical to those endorsed by API in comments to EPA.

**Management Standards Address Each of the Elements Commonly Found In the
Used Oil Mismanagement Scenarios**

A "typical" used oil mismanagement scenario can be analyzed for the purpose of demonstrating that management standards would address the risks posed by the mismanagement of used oil. A typical used oil mismanagement scenario possesses four basic characteristics. First, some form of inappropriate land disposal is usually involved. For example, used oil may be disposed in an unlined or inadequately lined landfill or surface impoundment. Second, used oil may be mixed with, or contain hazardous constituents, including chlorinated solvents, PCBs, and/or heavy metals. Third, used oil may be poorly managed in leaking tanks or containers. Fourth, owners or operators of facilities where used oil spills have resulted in contamination may not take remedial action.

The management standards contemplated by API's draft used oil legislation along with other existing requirements would address each of these four characteristics commonly found in used oil mismanagement incidents and thus would reduce, if not eliminate, the risks posed by used oil that is recycled. Thus, implementation of these comprehensive standards would ensure that used oil that is recycled is managed in an environmentally sound manner, thereby rendering duplicative and unnecessary the listing of used oil as hazardous waste under RCRA.

a. Management Standards Would Prohibit the Disposal of Used Oil In Unlined or Inadequately Lined Landfills

Management standards would require the storage of used oil in tanks or containers. Storage or disposal of used oil in surface impoundments or in unlined or inadequately lined landfills would be prohibited, thereby addressing one of the elements most commonly found in used oil mismanagement scenarios -- releases of used oil to groundwater from poorly designed land based storage or disposal units.

The recently promulgated federal regulations for municipal solid waste landfills will ensure that municipal landfills where used oil is disposed are properly designed and operated.¹ These comprehensive regulations set minimum requirements governing facility location, groundwater monitoring, corrective action, financial assurance and closure/post-closure care. These new standards will protect human health and the environment from the potential risks posed by the disposal of used oil in municipal landfills. In addition, EPA would have the authority under Section 1008 of RCRA to promulgate specific standards for the disposal of used oil.

Existing state and local regulations also would ensure that used oil is properly disposed. Indeed, many states and localities have banned the disposal of used oil in municipal landfills in an effort to promote recycling and to preserve landfill capacity. Though a worthy goal, these "no" disposal approaches ignore the fact that some used oil, due to certain contamination, is not recyclable. Consequently, a used oil disposal option will always be necessary.

b. Management Standards and Existing TSCA and RCRA Regulations Would Ensure that Used Oil/Hazardous Waste Mixtures are Adequately Regulated

The mixing or commingling of used oil with "hazardous waste" or hazardous substances is a significant concern. API's legislative language would require that used oil mixed with hazardous waste remain subject to regulation as hazardous waste, and that generators and transporters certify that the used oil has not been mixed with a hazardous waste. Furthermore, RCRA standards currently in place regulate used oil/hazardous waste mixtures as "hazardous waste"² and under TSCA, mixtures of used oil and PCBs in excess of 50 ppm are regulated.³ Used oil that has been mixed with a hazardous waste would continue to be regulated as "hazardous waste." API would not oppose the listing categories of used oil intended for disposal that meet the applicable hazardous waste listing requirements.

¹ 56 Fed. Reg. 50978-51119 (1991).

² See, 40 CFR § 261.3(a)(2)(iv) (mixtures of "solid waste" and "hazardous waste" are "hazardous waste") and 40 CFR § 266.40(c) (mixtures of used oil and "hazardous waste" that are burned for energy recovery are hazardous waste mixtures regulated under Part 266 Subpart D).

³ See, 40 § CFR 761.60.

c. Management Standards Would Eliminate the Poor Housekeeping Practices

The third element commonly found in used oil mismanagement scenarios is poor housekeeping practices. API believes that protective storage requirements (e.g., well designed tanks and containers) for used oil would remedy most of the problems associated with poor housekeeping practices, i.e., incidental releases or spills and leaky tanks or containers.

Generators who store used oil in containers should be required to implement several standards that are designed to ensure that containers are in good condition, are not leaking, and are otherwise managed in an environmentally sound manner.⁴ Similarly, generators storing used oil in aboveground tanks should have to implement protective standards.⁵ Facilities storing used oil in aboveground tanks also would be required to comply with regulations promulgated under the Clean Water Act's Spill Prevention, Control, and Countermeasures ("SPCC") regulations.⁶

In addition to standards related specifically to the integrity of tanks and containers, generators would have to devise preparedness and prevention plans. Such things as telephones, fire extinguishers and adsorbents should have to be readily available in areas adjacent to used oil storage areas. Used oil generator facilities should designate a facility emergency coordinator who would be responsible for making arrangements with local authorities. Moreover, personnel need to be properly trained in emergency procedures. Tracking requirements (such as a shipping log) for shipments of used oil also should be required. Standards for the storage of used oil by transporters should mirror those for generators.

⁴ Specifically, generators storing used oil in containers should ensure that containers are in good condition and not leaking; keep containers closed except when adding or removing oil and handle containers in a manner that prevents leaks; inspect containers and container storage areas at least weekly.

⁵ Specifically, used oil generators storing used oil in aboveground tanks should: inspect tanks daily for leaks, tank damage, tank rupture and general tank conditions; respond to releases from tanks and remediate visible releases; and remove used oil from all tanks prior to their closure. Moreover, aboveground tanks should be labeled with the words "used oil," and freeboard controls on open-top tanks should be imposed, as should overfill and spill prevention standards for continuously-fed tanks.

⁶ The SPCC program, codified at 40 CFR Part 112, applies to facilities with underground storage capacity of oil that exceeds 42,000 gallons and aboveground storage capacity of oil greater than 1,320 gallons, if, due to their location, such facilities could reasonably be expected to discharge oil in harmful quantities to navigable waters of the U.S. Owners or operators of facilities subject to the SPCC program must develop and maintain plans for oils spills, which include appropriate containment or diversionary structures to prevent discharged oil from reaching navigable surface waters. The SPCC program provides alternative minimum containment systems that should be used for such containment of diversionary structures. For example, containment options for onshore facilities include dikes; berms or retaining walls; curbing; culverts, gutters or drainage systems; weirs, booms or other barriers; spill diversion ponds; retention ponds; and sorbent materials.

On October 22, 1991, EPA proposed substantial revisions to the SPCC program. See 56 Fed. Reg. 54612. If promulgated, these revisions would significantly strengthen the requirements for facilities subject to SPCC. For example, the proposal would revise the scope and content of SPCC plans.

Similarly, recyclers storing used oil should be subject to stringent standards related to the storage of used oil. Storage in containers at recycling facilities should be similar to those contained in 40 CFR Part 264 Subpart I,⁷ while storage in aboveground tanks should be conducted in accordance with 40 CFR Part 265 Subpart J (these requirements are the same as those for generators). Storage in underground tanks would remain regulated under 40 CFR Part 280 standards. As with generators, substantial closure, analysis, record-keeping and reporting requirements would be imposed on used oil recyclers. In addition, used oil reprocessors and rerefiners would be subject to a class permit requirement.

The implementation of these extensive technical requirements relating to the storage of recycled used oil in tanks and containers would ensure that used oil is stored in a manner that is fully protective of human health and the environment.

d. Management Standards Would Result In the Remediation of Releases of Used Oil

The fourth common element of a used oil mismanagement scenario is that spills and releases of used oil generally are not remediated. The management standards outlined in API's legislative language would result in the timely remediation of used oil releases. Generators, transporters or recyclers storing used oil in tanks or containers would be required to inspect these storage areas regularly (weekly for containers and daily for tanks). Such regular inspections would provide a mechanism for early detection of releases and result in the timely implementation of remedial activities. In addition, generators transporters or recyclers storing used oil in underground storage tanks would be subject to corrective action for releases under Subparts E and F of 40 CFR Part 280.

In conclusion, the management standards envisioned by API's legislative language would subject used oil to standards that are fully protective of human health and the environment, thus abating or eliminating the potential risks associated with the mismanagement of used oil. The promulgation and implementation of the comprehensive management standards would render unnecessary and duplicative the listing of used oil as "hazardous waste."

⁷ The requirements would be the same as those for generators, except for additional requirements addressing secondary containment of the container storage area and closure.

	SECTION	PROGRAM ELEMENT	REQUIREMENT
Generators	3014(a)(1)(A)	Applicability	All generators, EPA must take into account however, effects on small businesses
	3014(a)(1)(B)	Storage	(i) Underground tanks must meet UST requirements of 9003. (ii) Storage limited to less than 12 months *SPCC standards (as modified by Oil Pollution Act of 1990) provide for containment and spill response. Additional tank standards include: overflow and freeboard control, daily inspections, response to leaks and labeling. *Container specific requirements: good condition, proper handling, labeling, packaging standards (as specified by DOT), and weekly inspection of containers for leakage.
	3014(a)(1)(c)	Transfer Options	(i) Recycling facility with permit pursuant to §3014. (ii) SIC Code 2911 facility. (iii) Disposal facility with permit pursuant to §3005 or Subtitle D. (iv) Transporter with agreement to deliver.
	3014(a)(1)(D)	Recordkeeping	Tolling Agreement which includes name and location of facility receiving used oil, or manifest. *Milkrun log book additional option
		Prohibitions	Generators are prohibited from mixing used oil with hazardous wastes.
		Corrective Action	Spills and leaks are subject to clean-up.
Transporters	3014(a)(2)(A)	Applicability	All transporters
	3014(a)(2)(B)	Intermediate Storage	Transfer station storage time limited to 30 days
	3014(a)(2)(c)	Identification Numbers	All transporters must receive EPA ID number
	3014(a)(2)(D)	Pre-transport Requirements	All shipments must meet applicable DOT shipping requirements, including packaging, labeling, placarding & marking
	3014(a)(2)(E)	Financial Requirements	Hazardous Material Transportation Act (HMTA) by reference
	3014(a)(2)(F)	Recordkeeping	Data on each shipment
		Containers/Tanks	Must meet requirements of generators

*Provision supported by API in comments on EPA's Used Oil Supplemental Notice (56 FR 48000)

	SECTION	PROGRAM ELEMENT	REQUIREMENT
Recyclers ¹	3014(a)(3)(A)	Applicability	Recyclers include: processors, re-refiners, reclaimers and those that beneficially reuse used oil (including use as a fuel).
	3014(a)(4)(A)	Applicability	SIC Code 2911 facilities engaged in used oil recycling.
	3014(a)(3)(B)(iv)	Storage	*Containers must comply with §264 Subpart I including: good condition, proper handling, labeling, weekly inspection, secondary containment area and closure. *Aboveground tanks must comply with §265 Subpart J (except secondary containment)² including: inspections, proper condition, and closure of unit. SPCC standards also apply. *Underground tanks must comply with requirements of §9003.
	3014(a)(3)(B)(i)(ii) 3014(a)(4)(B)(i)	Recordkeeping	Records must be maintained for a period of at least 3 years cataloging: all used oil received and recycled; each shipment of used oil transferred; name and address of generator and transporters; and all certification statements. Additionally records on oil spills, inspections, and testing, must be maintained.
	3014(a)(3)(B)(iii)	Contingency Plans	Plans for effective action to minimize unanticipated damage from any spills.
	3014(a)(3)(B)(v) (SIC Code 2911 facilities excepted)	Maintenance and Operation	Facilities shall properly maintain facility operations including: personnel training, <u>closure and post-closure care</u> and demonstrate financial responsibility based on storage capacity.
	3014(a)(3)(B)(vi) (SIC Code 2911 facilities excepted)	Corrective Action	*Releases and spills of used oil must be remedied. \
	3014(a)(3)(B)(vii) 3014(a)(4)(B)(iv)	Contaminated Used Oil	Facilities must provide separate storage for used oil contaminated with listed hazardous wastes. Contaminated oil must be transferred within 90 days unless §3005 storage permit is received.
	3014(a)(3)(B)(viii) 3014(a)(4)(B)(v)	Prohibition on Storage	Storage of used oil in pits, ponds, lagoons, uncovered tanks, or surface impoundments is prohibited.
	3014(a)(3)(B)(ix) 3014(a)(4)(B)(vi)	Prohibition on Mixing	Facilities are prohibited from mixing used oil with other materials prior to testing.
	3014(a)(3)(c) 3014(a)(4)(B)(iii)	Testing	Upon receipt of used oil, facilities shall test for levels of metals, halogens, and other parameters specified by the Administrator. Used oil fuels shall be tested prior to departure from the facility (SIC Code 2911 facilities excepted)
	3014(a)(3)(D) (SIC Code 2911 facilities excepted)	Permits	Recyclers shall be required to obtain a class permit under §3014 unless a §3005 permit is received.

¹Management standards apply to all recyclers, including SIC Code 2911 facilities, unless otherwise noted.

APPENDIX E

Following is a listing of State Government Agencies, State Environmental Officials, Local Government Agencies and Officials and Federal Agencies who support the no listing position and present specifications on recyclable used oil. This list was prepared from letters received by Representative Skelton or from comments made in October and November of 1991 on EPA's September 23, 1991 proposals on used oil.

STATE GOVERNMENT AGENCIES:

State of Alabama
Highway Department
State of Alabama
Department of Economic
And Community Affairs

State of Michigan
Department of Natural Resources
State of Minnesota
Pollution Control Agency

State of Alaska
Department of Environmental
Conservation Hazardous
Materials and Waste
Management Division

State of New York
Department of Environment
Conservation

STATE OF CALIFORNIA
California Integrated Waste
Management Board

State of North Carolina
Department of Environmental,
Health and Natural Resources

State of California
Department of Toxic
Substances Control

State of Ohio
Environmental Protection Agency

State of Colorado
Department of Health
Hazardous Materials and
Waste Management Division

State of Oregon
Department of Environmental
Quality

State of Delaware
Solid Waste Authority

Commonwealth of Pennsylvania
Department of Environmental
Resources

State of Florida
Department of Environmental
Regulation

State of South Carolina
Department of Consumer Affairs

State of Georgia
Department of Natural
Resources

State of South Dakota
Department of Environmental and
Natural Resources

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State of Hawaii
Department of Health

State of South Dakota
Department of Agriculture
Division of Conservation

State of Hawaii
Department of Business,
Economic Development &
Tourism

State of Texas
Department of Natural Resources

State of Illinois
Office of Illinois State
Fire Marshal

Commonwealth of Virginia
Department of Mines, Minerals
and Energy

State of Kansas
Department of Health and
and Environment

State of Wisconsin
Department of Natural Resources

Commonwealth of Kentucky
Natural Resources and
Environmental Protection
Cabinet

State of Wyoming
Office of Governor

State of Maryland, Department of
Environment

STATE ENVIRONMENTAL OFFICIALS:

State of North Carolina
William L. Meyer, Director
Department of Environment
Health and Natural Resources
and Ecology

State of Arkansas
Thomas W. Boston, Chief
Solid Waste Management Division
Department of Pollution Control

State of Texas
Robert A. MacLean, M.D.
Acting Commissioner
Health, Texas Department of
Health

STATE OF CALIFORNIA
John E. Gallagher, Chairman
California Waste Management
Board

State of Florida
Carol M Browner, Secretary
Florida Department of
Environmental Regulation

State of Hawaii
John C. Lewin, M.D.,
Director of Health, State of
Hawaii

State of Idaho
Joy L. Palmer, Manager
Planning & Evaluation
Division, Idaho Department
of Health and Welfare

State of Minnesota
Gerald L Willet, Commissioner
Minnesota Pollution Control
Agency

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State of Missouri
G. Tracy Mehan, III,
Director, Department of
Natural Resources

State of New York
Thomas C. Jorling, Commissioner
State of New York Department
of Environmental Conservation

State of Wisconsin
Lyman F. Wible
Administrator, Division of
Environmental Quality,
Department of Natural
Resources

State of Michigan
Hien Ngyuen
Resource Recovery Section
Waste Management Division
Department of Natural Resources

Commonwealth of Kentucky
Susan Bush, Director
Division of Waste Management
Natural Resources and Environmental
Protection Cabinet

LOCAL GOVERNMENTS AND OFFICIALS:

City of Jacksonville
State of Florida

Larimer County Colorado
Department of Natural Resources

City of Kokomo
State of Indiana

Metropolitan Dade County
State of Florida

City of Pekin
Fire Department
State of Illinois

Montgomery County
Local Emergency Planning
State of Pennsylvania

City of Punta Gorda
State of Florida

Muskegan County
State of Michigan

County of Volusia
State of Florida

Pasco County
State of Florida

Denver Regional Council
of Governments
State of Colorado

Sarasota County Government
State of Florida

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Honorable Chance Irvine
State Representative
State of Florida

Senator George G. Kirkpatrick
Chairman, Committee on Natural
Resources & Conservation
The Florida Senate
State of Florida

George F. Givens
Counsel, Environmental
Review Commission
General Assembly of
of North Carolina
State of North Carolina

Senator Vernon J. Ehlers
Senate President Pro Tempore
The Senate
State of Michigan

Hernando County Board of
County Commissioners
State of Florida

Senator Owen H. Jonson
Chairman, Environmental
Conservation Committee
State of New York

Indiana Association of
Cities & Towns, State of Indiana

FEDERAL AGENCIES:

Defense Logistics Agency

Department of the Army

Department of Energy
Office of Policy, Planning
and Analysis

Department of Energy
Office of Environmental Guidance

Department of Interior

Department of Transportation

If you wish information on the specific remark made by any of those in this list, please contact Ms. Kathryn McWilliams, Executive Director of the National Oil Recyclers Association, 2777 Broadway Avenue, Cleveland, Ohio 44115, or Telephone (216) 623-8383, or FAX (216) 623-8393.

SOME BUSINESSES AND ORGANIZATIONS THAT HAVE PUBLICLY SUPPORTED H.R.1411.

American Trucking Assoc.

National Assoc. of Truck Stops
Operators

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Waste Oil Heater Manufacturers' Association	American Petroleum Institute
Air Transportation Assoc.	North American Equipment Dealers Association
American Institute of Merchant Shipping	Lubrication Specialist (Pennzoil)
Sun Company, Inc.	The Environmental Business Assoc.
Atlantic Richfield Company	Exxon Corporation
Mobil Corporation	National Automobile Dealers Assoc.
Shell Oil Company	The Chevron Company
Petroleum Marketers Assoc. of America	Interstate Truckload Carriers Conference
American Trucking Assoc.	National Truck Equipment Assoc.
Laidlaw, Inc.	United Technologies
National Automobile Dealers Association	Independent Lubricant manufacturers Association
American Car Rental Assoc.	SIGMA
Automotive Parts and Accessories Association	Roadway Services, Inc.
National Oil Recyclers Assoc.	Convenient Automobile Service Institute
Association of American Railroads	Truck Renting and Leasing Assoc.
USX Corporation	Eastern Oil Company
Necessary Oil Company	Pennzoil Company
Automotive Dismantlers & Recyclers Association	Maryland Environmental Service
Institute of Scrap Recycling Industries, Inc.	Commercial Automotive Services Institute

OIL RE-REFINING CO, INC.

4150 N. Suttle Road
Portland, OR 97217
(503) 286-8352

1-800-367-8894

P. O. Box 1407
701 Bozarth
Woodland, WA 98674
(206) 225-6571

A Review of Re-Refined Fuel Oil vs Re-Refined Lube Oil

Prepared by Oil Re-Refining Company Inc.
Woodland, Washington

Presently there is considerable interest, public concern and confusion regarding re-refining of used oil into new lube oil base stock in lieu of the presently acceptable method of re-refining used-oil into fuel oil for heavy industry.

A better understanding should lead the reader to support both methods, with used-oil fuel re-refining being the most acceptable except in cases where there are 15,000,000 to 20,000,000 gallons per year of used base lube oil generated within a 200 mile radius of the refinery, or until new technology is available. The new technology should require costs under \$1,000,000 in order to refit the fuel refineries throughout the nation. Presently base oil refining requires investments of 12 to 40 million dollars, and in most cases it is not possible to collect enough used oil within the 200 mile radius to be profitable. Base oil refineries also process fuel, as do the smaller fuel oil refineries. In addition, there is a problem of marketing the finished re-refined base oils. Normally it is not a case of quality, but one of major oil companies marketing and customer acceptance.

The fuel re-refinery, on the other hand, requires an investment under \$1,000,000, and can be constructed environmentally sound for under \$500,000 in areas where a larger unit is not required or there isn't enough used oil feed stock from the surrounding area to support a larger facility.

Today's fuel re-refinery performs a number of needed environmental services for the local areas:

1. Re-refines used-oil fuels to replace virgin fuel oils.
2. Re-refines used anti-freeze.
3. Handles oily waste waters.
4. Can handle oily solids.
5. Can be equipped to handle used-oil filters.
6. Can be equipped to handle used-oil barrels.

Fuel re-refineries are low sources of environmental pollution when compared to major used-oil re-refiners of lube oil, and can be designed so they do not produce any hazardous wastes. None of the re-refined fuels are high in pollutants that require special markets, as do the lube oil re-refinery still bottoms which are eight times higher in hazardous constituents.

One must understand how and what a major lube oil re-refinery does in order to get a sense of the environmental problems that are created in a lube oil re-refinery.

1. In order for the lube re-refinery to get lube stock in sufficient volume, they must either receive a tax subsidy, or charge the generator \$.20 to \$.30 more per gallon than the fuel oil re-refinery charges.
2. Thus the generator is penalized for letting the lube re-refiner have the used oil vs the fuel refiner.
3. Next, the incoming used oil needs to be pre-selected and processed before attempting to make lube oil or shipping to a lube oil re-refiner. Fuel refiners receive at least 50% of their product which will not or cannot be made into lube stock, as it is waste oil such as diesel fuel, gasoline, tank bottoms, ship bilges, fuel dilutions, etc. In addition, the incoming oil contains some water, normally 11% to 30%, which should be removed before it increases freight costs.
4. Another cost that needs to be considered is that of handling the other local services such as anti-freeze recovery, oily waters, oily solids, used oil filters, etc. Must they be shipped hundreds or even thousands of miles to processors such as Safety Kleen's 40-million-dollar 70-million-gallon per year re-refinery in Chicago, Illinois? When one takes 50% of the fuel re-refinery stock from the fuel re-refineries, will they be able to remain in business? What new costs will the local generators be required to pay if there are no local fuel refineries?
5. One must then take the transportation costs into consideration. Since the cost of freight is close to \$.05 per 100 miles, one must also consider the cost of virgin fuel that the fuel refinery has been supplying before the lube re-refiners enter into the market. Also the cost to the environment for that hauling must be considered.

To clarify that, if one moves 100,000 gallons of used oil 500 miles to a lube refinery, the truck fuel, tires and other costs such as highway use, etc. must be considered; then new virgin fuel must be trucked in to replace the used-oil fuel that is no longer in the area. The risk of spills or accidents to the environment over these extra miles, the extra air pollution as a result of the extra trucking miles, etc., must also be considered.

6. The fuel refineries normally heats their oil to less than 250° F. and, when correctly designed, this is done with waste fuels. Normally their air shed receives less than ten tons per year of air pollutants, while a major lube oil re-refinery is over 100 tons per year. Also, one needs to compare the utility, water, electric, sewer, and odor problems of each. Lube refining uses large volumes of each, plus they heat their

product to 450° F. to 600° F., which normally requires three or more times more fuel and, therefore, more air pollution, ash, etc., and odors are difficult to control at temperatures over 250°.

7. Next, one needs to understand the products of each refinery: The fuel re-refiner makes an industrial fuel in which, if it is sold and burned by a correctly selected industrial account with good air discharge equipment, little or none of the pollutants are detectable, as the levels are lower than some virgin fuel oils. In fact, they often reduce the stack emissions of the oil, wood, or coal they replace. However, the lube oil re-refineries concentrate the pollutants at least eight times more, and then plan to market them as asphalt flux for roofing asphalt. What then happens as the roofs oxidize, the rain washes it back into the environment, and when the roofs are removed, they end up in the local landfill.

When new technology is developed, the local fuel re-refineries will be able to re-refit for low-volume lube oil production, and if what our studies show is true, will be able to overcome most of the problem of the major re-refineries, including using the still bottoms as a kiln fuel. We believe this new technology will be available within the next two years.

Should you like more information, discussion, or a visit to a fuel re-refinery, please contact us at 1-800-367-8894.

Yours truly,

Bill Briggs
President

WLB:mb

October 30, 1992

Mr. Gregory Ray
President
Evergreen Environmental Services
5000 Birch Street, Suite 500
Newport Beach, CA 92660

Dear Mr. Ray:

Thank you for contacting my office regarding used oil. It's good to hear from you, and I sincerely regret the delay in my response.

I am firmly committed to insuring that we reduce our children's exposure to dangerous levels of lead contamination. Scientific evidence continues to underscore what a pressing problem lead poses to children's health. I disagree vigorously with the actions the Environmental Protection Agency recently took with regard to used oil. I believe strongly that dilution is not the solution to oil pollution. We must ensure that lead and other toxic contaminants in used oil are not emitted into the air or allowed to seep into our soils and groundwater.

Again, thank you for letting me hear from you.

Sincerely,

Albert Gore, Jr.
United States Senator

AG/pdm

Posturing About Lead Poisoning

Health and Human Services Secretary Louis Sullivan's announcement of a new federal policy to test all children for toxic lead exposure by age 2 was well-timed.

The tests are needed now. One in six American kids—including half of all African-American children—is at risk of lead poisoning. Four hundred thousand babies are born each year with elevated blood lead levels that may retard, cripple and eventually kill them.

But there is an irony here that Secretary Sullivan didn't mention when he made his announcement: The same Bush administration that boasts of protecting children has systematically blocked, dismantled or refused to enforce anti-lead regulations passed by Congress and supported by the American people.

The pattern began in 1981, when, as chairman of the "Task Force on Regulatory Relief," ex-oilman and then vice president Bush called for "relaxing or rescinding" the Environmental Protection Agency's new regulations requiring oil refiners to reduce lead in gasoline. Under pressure from the Office of Management and Budget, EPA at first backed down but later implemented the regulations under even greater pressure from another direction: Congress and the public. Then, incredibly, in August of 1983, the Bush task force publicly took credit for "accelerating the removal of lead from gasoline."

Five years later, with the Reagan-Bush administration fighting me all the way, Congress passed my Lead Contamination and Control Act, directing state and federal agencies to help schools test drinking water, screen children for lead and remove or fix all contaminated drinking fountains. This past summer the Natural Resources Defense Council released a report affirming the conclusion of EPA's own inspector general—that the Bush administration has failed to enforce the law.

In fact, 1991 has brought nothing but bad news from the White House for Americans concerned about getting the lead out of the environment:

■ In February, while Sullivan was proclaiming lead poisoning to be "the No. 1 environmental hazard facing our children," the Bush administration was asking Congress for just 80 cents per home to implement the Lead-Based Paint Poisoning Prevention Act of 1971 and rid 57 million homes of danger. Not much to protect kids.

■ In March, the House Health and Environment subcommittee received EPA documents proving that Vice President Dan Quayle and his so-called White House Council on Competitiveness had directed the agency to drop plans, already approved by all six agencies of jurisdiction, to ban the incineration of lead car batteries. According to EPA, lead batteries produce 60 percent of the lead in America's garbage, with incineration of

motor vehicle batteries—and the resulting vaporized lead—contributing most of the poison. A Council press release explained that the proposed ban "did not meet the benefit/cost requirements of regulatory policy." While the council failed to include a single bit of evidence to support that assertion, EPA provided extensive evidence to the contrary.

■ In May, EPA Administrator William Reilly announced a new plan to give America's largest utilities more than 20 years to eliminate toxic lead from drinking water. The program obliterates the "acceptable" EPA lead standard of 50 parts per billion and gives cities such as Washington six years to reduce lead by chemically treating pipes. If that fails, the Bush administration will gladly extend a 15-year grace period. Worse than nothing because it puts two more generations of kids at risk, even this initiative had to be court order—14 years after the

National Academy of Sciences called for drastic reductions in the amount of lead allowed in drinking water.

■ In June, the administration finally got serious, announcing an all-out effort against lead in drinking water. Problem is, the program affects just one home—Dan Quayle's vice presidential mansion.

Which brings us back to Secretary Sullivan. He will get plenty of support, including mine, for his plan to test kids for lead. The question is: When the frightening results are known—when angry Americans demand to know who failed to act to stop the poisoning of our kids—how will he and the president and the vice president reply?

The writer, a Democratic representative from Minnesota, is vice chairman of the House subcommittee on health and environment.

While pondering advice not to pursuers of Clarence Thomas off hook, President Bush was urged to take the "kinder and gentler" path of two moderate Republican senators who had much to do with winning confirmation fight.

Sen. John Danforth, Thomas's tor and intrepid defender, and Arlen Specter, the relentless investigator of Anita Hill, visited the president Friday afternoon in a moment not listed on the White House appointments schedule. Their mission: To bind up the nation's wounds. To bind up the nation's wounds should accept the latest version of "civil rights" measure backed forth and Sen. Edward M. Kennedy and labeled a quota bill by the administration.

It is no exaggeration to say shape of not only what's left of presidential term but also of the election and a Bush second term stake. One route would have

WASHINGTON



*for Bush
Reilly*

FOR IMMEDIATE RELEASE
October 20, 1992

Contact: Noreen Madigan
212-473-7841
Daniel Weiss
202-675-6275

EPA'S REILLY CANNOT OBSCURE BUSH ADMINISTRATION'S POOR RECORD ON HALTING LEAD CRISIS IN NEW YORK AND OTHER CITIES

NEW YORK, NY...Sierra Club leaders in New York today criticized efforts by Environmental Protection Agency Administrator William Reilly to camouflage President Bush's shameful record of ignoring the lead poisoning of America's children. At a speech in New York City today, Reilly addressed the problem of lead in drinking water.

"Bill Reilly may care about lead poisoning, but his boss does not. Despite the rosy picture painted by Bill Reilly, George Bush has ignored the lead crisis in America's cities," said Ken Baer chair of the New York City Group of Sierra Club. "The Bush Administration consistently opposed proposals that would protect our children from lead poisoning," Baer added.

Lead poisons the central nervous system and slows childhood development, affecting mental as well as physical development. Children exposed to even small amounts of lead are likely to develop significant reading disabilities. Because of the danger posed by lead, the Centers for Disease Control recently lowered the threshold for lead poisoning in half. In 1991, Secretary of Health and Human Services Louis W. Sullivan said, "Lead poisoning is not to be taken lightly. It is the number one environmental threat to the health of children in the United States."

"These warnings went unheeded by the Bush Administration. George Bush hasn't lifted a finger to stop the lead poisoning of our children," said Daniel J. Weiss, Director of Environmental Quality Program for Sierra Club. "If President Bush cared about lead poisoning, he would sign the National Affordable Housing Act Amendments, which contain a major new program to reduce childhood lead poisoning," added Weiss. "Unfortunately, his own Secretary of Housing and Urban Development is urging him to veto this critical public health bill," remarked Weiss.

The Act would implement the Centers for Disease Control's recommendations for fighting the major cause of lead poisoning -- lead paint in homes built before 1978. The bill would require disclosure of the risks of lead poisoning before an old home sale or rental. It would regulate contractors engaged in lead inspection and other activities that create lead hazards. Finally, it would authorize \$375 million for abatement of lead hazards in low-income housing. President Bush has not indicated whether he will sign this bill.

Post-It™ brand fax transmittal memo 7671		# of pages >
To <i>Katie McGinity</i>	From <i>Dan Weiss</i>	
Co.	Co. <i>Sierra Club</i>	
Dept.	Phone #	
Fax # <i>228-2611</i>	Fax #	

MORE

Other examples of the Bush Administration's inaction on the lead crisis in America include the following:

Lead in Drinking Water In May 1991, the Administration issued a long-overdue and loophole-ridden rule to reduce lead levels in drinking water. Despite widespread lead contamination, the rule gave water companies an additional 20 years to remove lead sources from the water supply.

Lead in Homes and Schools In 1992, President Bush proposed slashing in half the federal funds available for abatement of lead hazards in private, low income housing -- precisely where the problem is worst. The Administration also opposed the inspection of schools and day care facilities to identify hidden lead hazards, like those that recently frightened parents and closed an elementary school in New York City.

Lead from Garbage Incinerators Garbage incinerators are the single largest source of airborne lead emissions, spewing approximately 800,000 pounds of lead annually. This lead comes from burning car batteries and other garbage. Despite the vast quantities of lead from this source, the Bush Administration killed EPA's proposal to require incinerator companies to remove car batteries before burning municipal garbage. The proposal would have required some trash recycling before building new incinerators.

Lead from Burning Used Oil Burning contaminated used motor oil is the second largest source of airborne lead emissions, producing nearly 600,000 pounds of lead annually. Several small companies re-refine used oil into recycled motor oil and other products. Big oil companies, including Exxon and Amoco, simply burn the contaminated used oil without removing the lead and other deadly substances. The Bush Administration refused to require oil companies to get the lead out of used oil.

"George Bush has littered the American landscape with a long string of broken promises on the environment, from 'no net loss of wetlands' to his 'guarantee' of clean air for future generations to 'I am a Teddy Roosevelt environmentalist.' Those claims aren't worth a plugged nickel," noted Weiss.

Weiss concluded that "George Bush and Dan Quayle actively oppose measures to halt childhood lead poisoning. Bill Reilly's only remaining role is to perpetuate the myth that Bush cares about public health and the environment."

###

- parks → money
- white house - effort
- clean air.
- recycling
- wetlands.

NEWS FROM

U.S. Senator Al Gore



(D - Tennessee) SR 393 Russell Building, Washington, D.C. 20510 (202) 224-4944

DATE

7/31

TO

Katie McGinty

FROM

Sarah Maxa

PAGES including cover

35

SUBJECT

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Katie - a Routine Matter
computer disk was also included Fairly Important
in package - ☒ The future of Western Civilization
I left it on your desk - Sarah
Sarah Maxa.

Attached are the materials
we discussed. The attached has
been: faxed to Susan Harbort
(310-659-2546)
Fed-Exed to Charley Duncan
(415-866 6454)
Messenged to Chris Kelly

HAZARDOUS WASTE TREATMENT COUNCIL



915 15th Street, N.W.
Fifth Floor
Washington, D.C. 20005
Tel (202) 783-0870
Fax (202) 737-2038

HAZARDOUS WASTE TREATMENT COUNCIL
915 15th Street, NW
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Washington, DC 20005

Phone: 202/783-0870
Fax: 202/737-2038

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Date: 7/31/92

PLEASE DELIVER (ASAP) THE FOLLOWING PAGES TO:

Name:

Susan Herbert

Company:

Clinton/Gore Campaign

Phone No:

Fax No:

310-659-1034

Note(s):

Here's The Talking Points for
Monday. We've boxed the Backup
Materials separately

FROM:

Name:

Company: Hazardous Waste Treatment Council

Total Number of Pages (Including Cover) 16

If there is a problem and you do not receive all of the following pages, please contact the Treatment Council offices at the above number.



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MEMORANDUM

915 15th Street, N.W.
Fifth Floor
Washington, D.C. 20005
Tel. (202) 783-0870
Fax (202) 737-2038

TO: Senator Al Gore
Katie McGinty
Chris Kelly

FROM: Richard C. Fortuna
Chris van Löben Sels

DATE: July 31, 1992

RE: Evergreen Oil Event — Background Materials

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Enclosed are the following materials on Evergreen Oil and the used oil issue:

- **Potential Talking Points**
- **Summary of Useful Statistics**
- **Background on Administration Inaction (includes chronology)**
- **Executive Summary of Environmental Group — Treatment Industry
Joint Report on Used Oil Burning Lead Emissions**
- **Chapter on California Regulation from Joint Report**

The potential talking points are general in scope. For details: The most detailed account of Administration inaction (in the face of legal and court-ordered deadlines) is the chronology. The most detailed account of the regulations that have made Evergreen possible, but which EPA has refused to adopt, is in the section of the joint report on the California regulatory experience.

One word on terminology on the used oil issue: Not all recycling is good. Environmentalists and companies like Evergreen oppose the indiscriminate burning of used oil (which releases hundreds of thousands of pounds of lead into the air, wastes virgin resources, and prevents the growth of innovative technologies). However, this burning is still called "recycling" by EPA and others. "Recycling back into motor oil", "re-refining", and "getting the lead out of used oil" are all terms that refer to the "real recycling" that Evergreen does.

If you are interested in OMB/Competitiveness Council angles on the issue, we can supply you with materials on OMB interference with EPA's unfruitful attempts to regulate used oil. I will be in California to attend the event on Monday, and can provide additional support on technical, historical, or economic issues as needed. If you have any questions, please do not hesitate to call:

Richard Fortuna
Executive Director
(o) (202) 783-0780
(h) (301) 299-6216

Chris van Löben Sels
Regulatory Analyst
(o) (202) 783-0870
(h) (703) 553-8691

*The Talking Points are on IBM 5.1 Diskette in the
Senator's D.C. Office*



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**THE ENVIRONMENTAL PRESIDENT IN ACTION:
PHOTO-OPS WITH RE-REFINERS;
POLICIES THAT BOOST UNCONTROLLED BURNING**

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- o A little over four weeks ago, George Bush, the self-proclaimed "Environmental President" appeared here at Evergreen Oil to praise this facility's advanced technology, and to associate himself with the spirit of environmental entrepreneurship that this facility represents.
- o However, for the past 4 years ¹⁹⁸⁶⁻⁶⁻¹⁷ he and his Administration have done everything possible to put facilities like Evergreen out of business, rather than promote their growth and protect the environment with the process. ✓
- o Evergreen Oil takes used oil and turns it back into a clean motor oil, while removing toxic constituents, such as lead, that contaminate used

oil during use. The Bush Administration, however, has done everything in its power to promote the mere disposal methods of the status quo: Uncontrolled burning that puts hundreds of thousands of pounds of lead and other toxic constituents into the air each year and uncontrolled disposal into landfills and sewers.

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- o These tactics reveal hypocrisy and cynicism with which this Administration approach environmental issues: appearing to be supportive, but promoting policies that do just the opposite.
- o This president's commitment to environmental protection begins and ends with the text of his speeches, and lasts about as long as a camera flash.
- o Rather than establishing a level environmental and economic playing field that ensures that we get

the lead out of used oil and our air, this "Environmental President" is wedded to disposal practices of the past -- Irrespective of their impact of the technologies of the future, or the present environment.

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- o George Bush doesn't "get it" on environmental regulations. He doesn't understand that the right environmental regulations create environmental jobs and prevent future environmental clean-up costs. This company and these jobs would not be here if it weren't for the right environmental regulations -- regulations that Bush has opposed for 4 years.
- o We need a change in federal policy. We must stop promoting practices of the past and photo-opportunity environmentalism, and truly embrace the technologies of the future -- technologies that

ensure protection, stimulate productivity, cost-savings and international competitiveness.

THE RISKS AND REWARDS OF USED OIL

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- o Used oil represents both a risk and a resource. If improperly disposed it is an unacceptable environmental risk. If re-refined, however, it represents a renewable resource that begins to decrease our demand for virgin fuel.
- o Over 1.4 billion gallons of used oil is generated each year.
 - o 60% is simply burned as a fuel. (800 million gallons)
 - o 35% is dumped or disposed in the sanitary

landfills or sewers. (500 million gallons)

- o only 5% is re-refined into
new lubricating oil. (67
million gallons)**

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- o Irrespective of what one wants to call it, used oil
is unquestionably hazardous and toxic.**
- o EPA itself acknowledges that, "used oil typically
and frequently contains significant quantities of
lead, other metals, and other toxic contaminants."**
- o Every can of virgin lubricant contains a warning
regarding the skin cancer risk of prolonged used
oil contact.**
- o The burning of used oil is the single largest
industrial source of lead emissions in the country**

today, emitting almost 600,000 additional pounds of lead each year -- more than the entire smelting industry reported to EPA in 1989, and has been estimated to cause an additional 3,000 cancer deaths due to high concentrations of another toxic metal -- chrome. (Source: Burning Used Oil, America's Undiscovered Lead Threat, a report by the Natural Resources Defense Council, Sierra Club, Izaak Walton League and the Hazardous Waste Treatment Council. November, 1991.)

- add
Sullivan
photo

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- o Lastly, uncontrolled used oil "blend and burn" practices have left a legacy of leaking dump sites across the country. Over 63 Superfund sites have been created by unregulated used oil recycling with an estimated cleanup cost of \$ 2.1 billion.
- o The environmental policies of the past 12 years and their defiance of Congressional directives

✓

today allow toxic waste oil to be "recycled" by being labeled as "fuel oil" and burned in hospitals, schools, apartment complexes, shopping malls -- often without the knowledge of the building owner. In addition, much of the used oil generated in this country is merely disposed of as trash or in sewers.

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- o The policies of this Administration promote pollution of the air and ground water, even though we have ready access to the technologies to prevent such contamination, and have forced the re-refining industry to sue for its survival to prevent even more used oil from merely going up in smoke.

- o *pollution* People who invest in the technologies of prevention and resource conservation should be rewarded, not punished. Those who get the lead

out of used oil should not be forced to compete against those who simply blend, burn and put lead into the air.

ECONOMIC IMPACTS

- o As exemplified by Evergreen Oil and used oil re-refining in general, the Bush administration's environmental policies are not only bad for the public, but bad for our pocket books.
- o The only cost this administration worries about are the increased cost to those who improperly dispose of used oil or those who seek to use dilution as the solution to lead pollution.
- o The 63 Superfund contamination sites resulting from improper used oil disposal and management alone cost over \$1.0 billion dollars to clean up.

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The Bush Administration's blind eye to pollution will only add to this economic burden by allowing today's practices to become tomorrow's contaminated Superfund sites.

- o Lead pollution from used oil burning will continue to extract an incalculable cost on the health and welfare of this nation's children.**
- o If this Administration is not stopped, the energy and cost savings of turning used oil into a renewable resource will never be realized, and our ability to export these technological advances to other countries will be compromised. We must first promote and encourage their growth at home, before we can expect foreign markets to grow.**
- o It is both ironic and disturbing that at the very time that other nations in Europe and the Far East**

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are looking to invest in the very technology that this facility represents, the Bush Administration has gone out of its way to promote archaic and destructive acts such as burning and dumping, rather than moving us forward to the next generation of control technologies that protect the environment, conserve our resources, and advance our international competitiveness.

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- o This Administration would have us believe that we must emulate the environmental practices of Eastern Europe in order to increase our international competitiveness. If eliminating environmental regulations were the key to international competitiveness, then eastern Europe should be wiping the economic map with us, instead of looking to the U.S. for help in halting its environmental holocaust.

DISMANTLING THE HAZARDOUS WASTE REGULATORY PROGRAM

- o Used Oil burning is but one puff of smoke from the Bush - Quayle deregulatory Kettle.
- o On May 20, 1992 the Administrator, with strong influence by OMB and the Competitiveness Council, proposed a rewrite that would eviscerate the Federal Hazardous regulatory system. By their own admission in the preamble the proposed rule would:
 - o allow 90% of the nation's most toxic hazardous waste to be dumped in unlined garbage landfills as "non-hazardous" waste,
 - o contaminate the drinking water of at least 13,000 additional citizens,

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- o and create at least 1,800 new contaminated sites.

- o This proposal is astounding by any measure, and would even make Ronald Reagan cringe. This proposal exemplifies how out-of-control this Administration is, and how out-of-touch Mr. Bush's rhetoric is with his Administration. Mr. Quayle and his Competitiveness Council have seized control of this government, and are unilaterally making environmental policy decision as if this nation were run by royalty, not controlled by laws.

- o The proposal has been overwhelmingly rejected by virtually all the States, Attorney Generals, environmentalists and the waste treatment industry.

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- o The State of Pennsylvania notes that , " The Administration has apparently forgotten what the "E" and "P" stand for in E-P-A."
- o The State of New York observes that, "The proposal would gut the law's central regulatory provisions, stripping both the Federal Government and the States of their enforcement capability . . ."
- o Montana notes, "The proposal is a retreat from the successes the EPA and the states have made in the management of hazardous waste."
- o Tennessee notes, "The proposal appears to be written by people who know nothing about hazardous waste management."

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CONCLUSION

- o Perhaps the best summary of the hypocrisy and folly of Mr. Bush's environmental policies appeared in a recent article in the Wall Street Journal. As a writer noted "Laws and regulations that force polluters to spend money on cleaning up the environment do not diminish the wealth of a nation. They transfer this wealth from polluters to polluter-cleaner-uppers and lay a foundation for greater future wealth . . . What Mr. Bush's regulation-relaxation policies do is temporarily insulate inefficient producers from the need to innovate and invest in new equipment . . . temporarily shielding ossified entrenched interests from the dictates of a changing world economic order." ("Bush's polluter protectionism isn't pro business," Wall Street Journal; May 28, 1992 page A21, Michael Silvers Silarestels)

- o What we have at Evergreen Oil is the very type of

technology that can lay the base for greater future wealth through conserved resources, through environmental protection, reduced cleanup cost, and increased wealth through expanded international trade and employment

- o Yet all we hear out of the Bush administration is the death rattle of policies and a world view which are reminiscent of 1892, rather than a recognition of the economic and environmental realities of 1992.**
- o If we are going to get the lead out of used oil, and begin putting people first again, we must first get this dead head out of the White House.**

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PHOTOCOPY PRESERVATION

ENVIRONMENTAL PRESIDENT OR ENVIRONMENTAL HYPOCRITE? THE BUSH ADMINISTRATION AND USED OIL REGULATION

The President is engaging in a shameless display of photo-op environmentalism and outright hypocrisy. The very industry he is praising today as an example of environmental entrepreneurship, used oil re-refining, is in the process of being put out of business by EPA and OMB regulations that disadvantage re-refiners of used oil. Re-refiners remove the toxic metals from used oil before turning it into a lubricant. EPA's recent regulations promote the unregulated burning of lead-laced used oil, and in turn expose the nation's children to excessive and unnecessary lead emissions. The very industry he is praising only 1 month ago sued the Administration over its irresponsible failure to regulate used oil burning and dumping -- regulations that should ^{have} ^{be} level the playing field for all recycling practices (i.e., re-refining, burning) and protect the environment as well. (See Chronology) Moreover, the uncontrolled burning of lead-contaminated used oil is the single largest stationary source of lead emissions (588,000 lbs/yr).

BACKGROUND

Most used oil is toxic waste, yet the Bush Administration refuses to regulate its unsafe recycling and disposal. Congress enacted laws in 1980, and again in 1984, directing the U.S. Environmental Protection Agency (EPA) to properly regulate used oil. EPA has blatantly violated these laws throughout the Reagan/Bush Administration. When taken to court, EPA has even ignored court decisions that found EPA's actions illegal. As a result, today used oil is still being dumped into municipal landfills or "recycled" by being burned in uncontrolled devices, including home heating units.

In 1985, the U.S. Environmental Protection Agency (EPA) found that used oil "typically and frequently contains significant quantities of lead and other metals, chlorinated solvents," and other toxic contaminants.¹ Many of these toxic ingredients, such as lead, cadmium, chromium, benzene, and nitrosamines, cause cancer in humans.² There is a cancer warning on every can of virgin lubricant. Ninety percent (90%) of all used oil that is recycled is merely burned as fuel, not re-refined. This results in the release of 588,000 lbs of additional lead into the atmosphere every year.³ Used oil mismanagement over the years by improper burning, "recycling," and disposal has caused hundreds of contaminated sites throughout the country, 63 of which are on the national "Superfund" list. (See Attachment) The EPA estimates that 1.2 billion gallons of used lube oil from automobiles, trucks, and airplane engines, and industrial oils (cutting, grinding, and cooling oils) require

¹ U.S. EPA, Proposed Rule to List Used Oil as a Hazardous Waste, 50 Federal Register 49258 (Nov. 29, 1985).

² Id.

³ Burning Used Oil: America's Undiscovered Lead Threat, Joint report of NRDC, Sierra Club, Izaak Walton League, Hazardous Waste Treatment Council, November, 1991.

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- 2 -

disposal each year.⁴ Yet the Bush Administration's EPA has repeatedly failed to identify used oil as a hazardous waste, or to require safe recycling and disposal, in clear violation of the laws that Congress has enacted.⁵ As a result, toxic waste oil is "recycled" by being labeled "fuel oil" for burning in hospitals, schools, apartment complexes, and shopping malls -- often without the knowledge of the building owners. This burning of toxic waste oil as fuel is the largest source of lead poisoning to the air⁶ -- and it is done because the Bush Administration refuses to comply with the law.

CHRONOLOGY

The chronology of the Bush Administration's failure to protect the American public from toxic waste oil is documented on the public record:

- | | |
|-------------------|---|
| October 15, 1980 | Congress enacts the Used Oil Recycling Act. This law directs EPA to issue standards to protect public health from the hazards of used oil recycling, and to report to Congress on whether used oil should be designated a hazardous waste. |
| October 17, 1981 | EPA submits its Report to Congress on the significant hazards of used oil, and its improper disposal and recycling. EPA then does nothing. |
| November 8, 1984 | A frustrated Congress enacts the Hazardous and Solid Waste Amendments, again directing EPA to determine whether to regulate used oil as a hazardous waste and to issue management standards. |
| November 29, 1985 | EPA <u>proposes</u> to list used oil as a hazardous waste under Federal law, because used oil typically and frequently contains toxic and cancer-causing contaminants. EPA also documents the substantial threats to human health and the environment from disposal of used oil in municipal landfills, and from recycling by burning as a substitute fuel. |

⁴ Franklin Associated, Ltd., Composition and Management of Used Oil Generated in the United States (September 1984).

⁵ In the Used Oil Recycling Act of 1980, Congress directed EPA to promulgate requirements "to protect public health and the environment from hazards associated with recycled oil." 42 U.S.C. § 6935(a). In 1984, Congress enacted the Hazardous and Solid Waste Amendments which directed EPA to make a determination on whether to regulate used oil as a hazardous waste, and to promulgate protective standards for used oil recycling. 42 U.S.C. § 6935(b)-(d). Today EPA has still not complied with these laws.

⁶ Burning Used Oil, November, 1991.

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- March 10, 1986 Vice President Bush, as head of the Reagan Administration's Regulatory Reform Task Force, intercedes in EPA's plans to identify used oil as hazardous waste. Because of Vice President Bush's concerns, EPA must reconsider. 51 Fed. Reg. 8206.
- November 19, 1986 EPA announces its decision not to identify used oil as a hazardous waste, because the "stigma" of calling used oil "hazardous" may adversely affect gas stations and the oil industry.
- October 7, 1988 Environmental group and the hazardous waste treatment industry win their lawsuit against EPA. The court rules that EPA's "stigma" decision violated the statute. EPA is ordered by the court to decide "now" whether to regulate used oil as hazardous in accord with the law. Hazardous Waste Treatment Council v. EPA, 861 F.2d 270 (D.C. Cir.).
- March 26, 1990 Frustrated with Bush Administration inaction, environmental groups and treatment industry file a new lawsuit seeking a court-ordered deadline for EPA action. Natural Resources Defense Council v. EPA, No. 90-0694 (D.D.C.). EPA enters into a settlement agreement.
- July 29, 1991 EPA issues updated list of National Priority Sites that require cleanup under the Superfund law. Sixty-three sites are the result of unsafe used oil recycling. The estimated cost of cleaning up these used oil sites is \$2.1 billion.
- November 13, 1991 Natural Resources Defense Council, Sierra Club, Izaak Walton League, and Hazardous Waste Treatment Council release Burning Used Oil - America's Undiscovered Lead Threat. The report documents how EPA allows toxic waste oil with high levels of lead to be burned as fuel oil under the guise of "recycling."
- May 1, 1992 EPA violates the settlement agreement in NRDC v. EPA. Due to Bush Administration direction, EPA fails to regulate used oil as hazardous and fails to issue regulatory standards. However, EPA decides not to list as a hazardous waste even that used oil which is disposed of onto the ground. As a result, today most used oil can still legally be dumped into municipal landfills and sewers. 57 Fed. Reg. 21524 (May 20, 1992).
- May 28, 1992 NRDC, HWTC and the Association of Petroleum Re-Refiners file suit against EPA for violating the settlement agreement in NRDC v. EPA. The three groups asked the federal district court to enforce the agreement and order EPA to make a final decision on recycled oil by July 1992.

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Today

The Bush Administration and EPA continue to ignore Congress' laws, court decisions, and the public outcry for more protective Federal standards to control used oil recycling and disposal in this country.

RELATED ISSUES

The Administration's failure to control the hazards of used oil recycling is but one example of numerous attempts to de-regulate hazardous waste disposal.

The Hazardous Waste Exemption Rule -- On May 20, 1992, the Administration proposed a re-definition of hazardous wastes so extreme in scope that it would exempt 90% of all the listed hazardous wastes currently regulated under federal law. By the Administration's own calculations this would result in the disposal of "hazardous wastes" into sanitary landfills such that: the drinking water wells of 13,000 people would become contaminated, 15% of the drinking water wells within one mile of sanitary landfills would be rendered unusable, and approximately 1700 new contaminated sites would be created. This proposal is being driven by OMB and the Competitiveness Council, with the express purpose of putting hazardous waste management back on the honor system. If this proposal is finalized this Administration will succeed in taking this country back to the days of unregulated and uncontrolled disposal.

IF USED OIL IS NOT A HAZARDOUS WASTE, WHAT IS?

USED OIL IS A CARCINOGEN.

- Used oil is a carcinogen, in addition to containing very high levels of lead, a potent neurotoxin. See 56 Fed. Reg. 48000.
- Every can of virgin motor oil carries a warning about the skin cancer risks of handling used oil.
- EPA estimates that current used oil burning may cause over 3 000 cancer cases due to chromium emissions. See EPA, "Regulatory Impact Analysis—Proposed Standards for the Management of Used Oil," 1985, page I-8.

USED OIL REMAINS A MAJOR LEAD SOURCE.

- Burning used oil emits almost 600,000 additional pounds of lead each year, more than the entire metal smelting industry reported under SARA Title III. Source: EPA, TRI Database, 1989 data set.
- The leaching test for heavy metals identifies wastes as hazardous if they contain over 100 times the drinking water standard for lead. Used oil contains over 6000 times the drinking water standard for lead. See 56 Fed. Reg. 48000 (Used oil lead levels), 55 Fed. Reg. 11798 (TCLP definitions), and 56 Fed. Reg. 26480 (New SDWA lead levels).
- Used oil contains lead levels higher than those in many currently listed wastes. This includes derived-from wastes such as hazardous waste incinerator ash as well as K048 through K052 refinery wastes.

UNREGULATED RECYCLING CREATES MORE USED OIL SUPERFUND SITES.

- 63 Superfund sites have been created by unregulated used oil recycling. The cost of the used oil clean-ups is an estimated \$2.1 billion. Source: EPA, National Priorities List Site Descriptions, ROD/CERCLIS Database.
- EPA has stated that, if used oil were listed as a hazardous waste, used oil would be placed in the highest-risk category of hazardous waste. The Agency stated that if it were a hazardous waste it would be classified a first-third waste for the land ban program, since used oil scored a 96 out of 100 on EPA's risk priority scale. See EPA, "Hazard Comparison: Waste Oil Management Practices," March 16, 1987, p. 2-4.
- RCRA sets no facility standards to prevent the creation of more used oil Superfund sites. See 40 CFR 266, Subpart E.

63 Former Used Oil "Recycling" Facilities Are Superfund Cleanup Priorities

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Arizona - 2 sites Luke Air Force Base - Glendale Williams Air Force Base - Chandler	Missouri - 4 sites Minker/Stout/Romaine Creek - Imperial Quail Run Mobile Manor - Gray Summit Shenandoah Stables - Moscow Hills Times Beach - Times Beach
Arkansas - 1 site Gurley Pit - Edmonson	Montana - 1 site Comet Oil - Billings
California - 3 sites Liquid Gold Oil Corp - Richmond Purity Oil Sales - Malaga Treasure Island - San Francisco	Nebraska - 1 site Monroe Auto Equipment - Cozad
Delaware - 1 site Sealand Limited - Mount Pleasant	New Hampshire - 1 site Keele Environmental Systems - Epping
Florida - 5 sites Dubose Oil Co. - Cantorment Peak Oil Co./Bay Drum Co. - Tampa Petroleum Products Corp. - Pembroke Park Tri-City Oil Conservationist - Tampa Whitehouse Oil Pits - Whitehouse	New Jersey - 3 sites Bridgeport Rental - Logan Township Chemical Control - Elizabeth Imperial Oil Co. - Morganville
Idaho - 1 site Arcom Corp. (Drexler) - Rathdrum	New York - 4 sites Applied Environmental - Glenwood Landing General Motors Center Foundry - Massena Wide Beach Development - Brandt York Oil - Molra
Illinois - 5 sites Adams County Quincy Landfills - Quincy A&F Materials Reclaiming Inc. - Greenup Ilda Energy Co. - East Cape Girardeau Interstate Pollution Control - Rockford Lenz Oil Service - Lemont	North Carolina - 2 sites Charles Macon Lagoon - Cordova Potter's Septic Tank Services Pits - Maco
Indiana - 1 site Envirochem Corp. - Zionsville	Ohio - 1 site Laskin/Poplar Oil Co. - Jefferson Township
Iowa - 1 site Wayne Waste Oil - Columbia City	Oklahoma - 3 sites Double Eagle Refinery Co. - Oklahoma City Fourth Street Refinery - Oklahoma City Sand Springs Petrochemical - Sand Springs
Kansas - 1 site John's Sludge Pond - Wichita	Pennsylvania - 3 sites Avco Lycoming - Williamsport Bruin Lagoon - Bruin Borough Douglassville Disposal - Douglassville
Louisiana - 4 sites Combustion, Inc. - Denham Springs Dutchtown Treatment Plant - Ascension Parish Oldinger Oil Refinery - Darrow PAB Oil & Chemical Service, Inc. - Abbeville	South Carolina - 1 site Geiger/C&M Oil - Rantowles
Maine - 1 site McKin Co. - Gray	Texas - 4 sites Dixie Oil Processors, Inc. - Friendswood Molco, Inc. - La Marque Petro-Chemical Systems - Liberty County United Creosoting Co - Conroe
Massachusetts - 3 sites Cannon Engineering Corp. - Bridgewater PSC Resources - Palmer Silresim Chemical Corp. - Lowell	Utah - 1 site Petrochem Recycling/Etotek - Salt Lake City
Minnesota - 2 sites Arrowhead Refinery Co. - Hermantown Oak Grove Landfill - Oak Grove Township	Washington - 1 site Commencement Bay - Tacoma
Mississippi - 1 site Gautier Oil Co., Inc. - Gautier	Wisconsin - 1 site Waste Research and Reclamation - Eau Claire

Facts and Figures:

Approximately 1.4 billion gallons of used lubricating oil are generated each year.

56 percent (784 million gallons) of all used oil is burned.

36 percent (500 million gallons) of all used oil is dumped.

5 percent (67 million gallons) of all used oil is recycled back into motor oil.

3 percent (49 million gallons) of all used oil goes to other industrial uses.

(Source: U.S. EPA)

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Approximately 900 million gallons of used oil are collected each year.

Over 90 percent of used oil that is collected for recycling is actually burned.

(Approximately 784 million gallons are burned.)

Less than 10 percent of used oil collected for recycling is recycled back into motor oil.

(Approximately 67 million gallons are re-refined.)

(Source: U.S. EPA)

California's recycling rate is more than double the national rate for used oil from do-it-yourselfer oil changers:

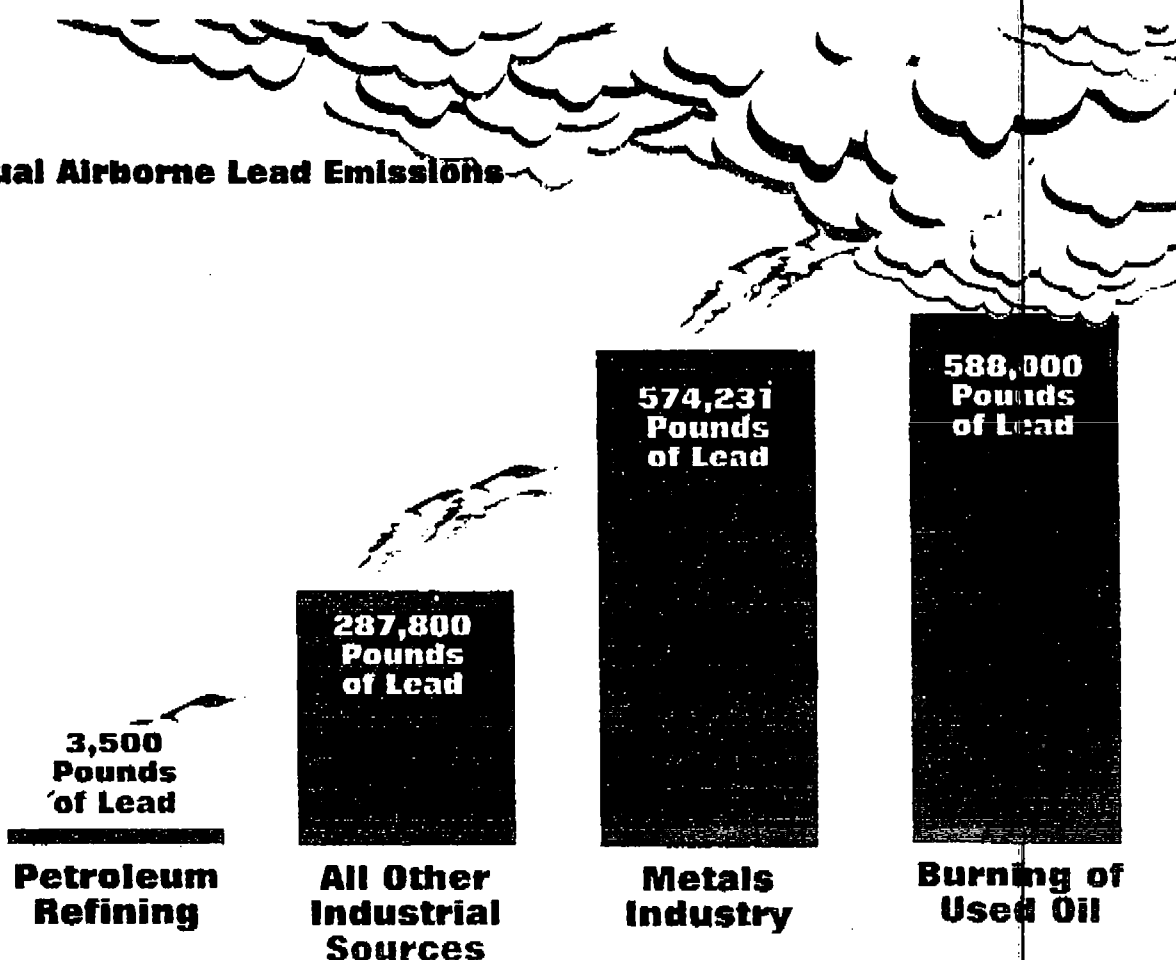
Of the 100 million gallons of used oil generated by do-it-yourself oil changers, only 10 million gallons of used oil is collected for recycling nationwide. (U.S. EPA)

Evergreen Oil alone collects 2.4 million gallons of do-it-yourselfers' used oil, putting California's recycling rate 2.5 times higher than the national rate. (HWTC)

Burning Used Oil— America's Undiscovered Lead Threat

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Annual Airborne Lead Emissions



Natural Resources Defense Council
Sierra Club
The Izaak Walton League of America
Hazardous Waste Treatment Council
Embargoed until 10:00 a.m., EST
November 13, 1991

EXECUTIVE SUMMARY

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OVERVIEW

The burning of used oil is the single largest industrial source of airborne lead emissions in the country today. According to EPA data, over 90 percent of all used oil that is "recycled" in the U.S.—784 million gallons each year—is merely burned as a "fuel." EPA allows such "fuel" to contain high levels of lead (i.e. 100 parts per million) and other toxic metals such as arsenic, cadmium, and chromium. This report, which includes a study of over 16 million gallons of used oil in commerce today, illustrates that despite the lead phase-down in gasoline, the lead content of used oil is still very high, averaging approximately 100 parts per million. Consumers are unaware of the contamination because EPA regulations allow lead-contaminated used oil fuels to be burned in thousands of unregulated apartment building, school, hospital, and commercial boilers and space heaters.

Shockingly, the Agency itself estimates that used oil burning will cause 3,094 cancer cases across the country. Moreover, EPA has placed 63 used oil "recyclers" on the Superfund toxic sites list, at an estimated cleanup cost of over \$21 billion. Despite these findings, the Agency's current proposal to "regulate" used oil would effectively protect the polluters more than it would protect public health. Congress must close the used oil burning loophole by using solutions that have already been tried and tested in California. In California, used oil recyclers are fully regulated, lead in used oil burning is controlled, and the used oil collection rate from do-it-yourself oil changers is two-and-a-half times greater than the nationwide average.

USED OIL BURNING AND LEAD EMISSIONS

- The vast majority of "recycled" used oil is simply burned. According to EPA's estimates, over 90 percent of used oil that is "recycled" is merely burned. The popularity of burning is attributable to the lack of restrictions on blend-and-burn activities. While the uncontrolled disposal of Do-It-Yourselfer (DIY) oil may be a problem, the 183 million gallons of unrecycled DIY oil is less than one quarter the size of the 784 million gallons of contaminated used oil fed into uncontrolled burning devices each year.
- This study of over 16 million gallons of used oil shows that, even after years of the lead phase-down in gasoline, used oil being generated today contains 100 ppm lead on average. After two independent 3-month studies of over 16 million gallons of used oil, this study—the largest of its kind in over seven years—has determined that used oil lead levels average approximately 100 parts per million.
- Burning used oil releases more lead into the air than any other stationary source. Lead emissions from burning used oil release more than any industrial source

reporting to EPA's Toxics Release Inventory (SARA Title III) database. While in 1989, the primary metals industry reported lead emissions totalling 574,231 pounds, used oil burning alone released 588,000 pounds of lead into the air that same year. In fact, used oil burning released more than twice the airborne lead of all the non-metals industries put together. (Note: EPA does not require some large sources of lead—such as garbage incinerators—to report their emissions.)

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- In fact, unregulated school, apartment building, and industrial boilers are allowed to emit higher airborne lead levels than facilities that have permits to burn hazardous waste. Current EPA regulations allow apartment building, school, and hospital boilers to burn used oil as a fuel that contains up to 100 ppm lead, and other toxic metals (40 CFR 260.40). This level is ten times higher than what EPA allows when hazardous waste itself is burned in many industrial boilers and furnaces. EPA recently issued standards governing the burning of hazardous waste in boilers and industrial furnaces (i.e. the "BIF" Rule). While the adequacy of the BIF Rule limits have been challenged by the environmental community, used oil burning cannot meet even the modest BIF Rule limits as they currently stand. Just two space heaters in neighboring homes can create airborne lead levels that exceed the BIF lead limit for burning hazardous waste. One school boiler can create airborne lead levels 2 times the BIF lead limit; an industrial boiler can create airborne lead levels 3 times the BIF lead limit; and an apartment building boiler can create airborne lead levels 9.3 times the lead limit allowed when burning hazardous waste in a boiler or industrial furnace.

HEALTH AND ENVIRONMENTAL EFFECTS

- Present used oil burning will cause 3,094 cancer cases, according to EPA's own calculations. The burning of heavy metal-contaminated (i.e. chromium) used oil occurs in school boilers, space heaters, industrial boilers, and apartment buildings. Exposure of urban residents and children is maximized by the fact that this contaminated oil is burned right in our homes—In fact, EPA estimates that approximately 86,000,000 gallons of lead-contaminated fuel is burned in tens of thousands of space heaters each year.
- Sixty-three Superfund hazardous wastes sites are former unregulated used oil recycling sites. Shoddy practices by unregulated facilities have released hazardous waste into the environment, adding these 63 sites to the nation's cleanup burden. This report details how most of these sites could have been prevented if RCRA safeguards were applied to used oil.
- EPA estimates indicate that it will cost over \$2 billion to the Superfund program to evaluate, fund, and administer the cleanup of these 63 used oil sites. Although this cost figure does include an estimate of EPA's administrative costs, there is no way to estimate the full costs of enforcement and legal action that will be placed on EPA and industry.

EPA'S INACTION COMPOUNDS THE THREAT

- Used oil containing 100 parts per million lead can still be burned, without any regulation regarding its labelling or use. This fuel would flunk the Toxicity Characteristic test, which would automatically make it a hazardous waste under current law—but for the fact that EPA has explicitly exempted used oil from hazardous waste legislation. Since used oil is exempted by EPA, 100 ppm lead fuels are not called hazardous wastes, rather they are be burned in homes, apartment buildings, and schools. Such fuels are also allowed to contain significant levels of cadmium, chromium, arsenic, and toxic solvents.
- There are still no regulations to prevent the creation of more sites. Since used oil is not listed as a hazardous waste, current used oil operators are still engaging in many of the practices that created the 63 used oil Superfund sites. Keeping hazardous waste in 60-year-old, leaking tanks is normally unthinkable—but with used oil it still goes on today.
- EPA's proposed rule only encourages blend-and-burn and does nothing to prevent future Superfund sites or continuing lead emissions. Congress must face up to the used oil problem. EPA's proposed rule would continue to allow facilities to simply dilute large amounts of virgin oil with small amounts of used oil to meet the lead fuel standard. Thus, the total amount of lead emitted into the atmosphere will not decrease because the lead will still be in the fuel and will still be released into the environment when burned. Moreover, the proposed rule "defers" the most basic facility standards, such as secondary containment to control leaks and tank bursts, insurance requirements, and financial responsibility requirements. Worse yet, the proposed rule will encourage those facilities that have to buy new equipment to refine clean gasoline under the new Clean Air Act to instead get into the business of making dirty fuel out of used oil. EPA has not yet begun to attempt to curtail the parade of used oil facilities onto the Superfund National Priorities List.

CALIFORNIA'S REGULATORY MODEL ENCOURAGES COLLECTION, ENSURES PROTECTION

- The California experience shows that listing used oil as a hazardous waste leads to an increase in the responsible handling of used oil. Since consumers in California are warned about the hazardous of used oil, responsible collection and recycling are ballooning. Forty-four cities and towns in California have curbside pick-up programs from used oil—the most convenient program possible. Evergreen Oil, which is just one facility in the state, will handle 2.4 million gallons of Do-It-Yourselfer used oil from free collection centers. *This means that California collects nearly 2.5 times more of its Do-It-Yourselfer used oil than the nationwide Do-It-Yourselfer collection rate.* In 1988, a total of only 10 million gallons of DIY oil were recycled at all facilities in all 50 states, according to EPA estimates. The California law exempted collection centers from its hazardous

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collection programs. Kragen Auto Parts, the largest automotive supply retailer in the country, has just invested in 180-gallon, double-containment tanks at over 200 California stores so they can collect do-it-yourselfer used oil. Kragen, in a joint operation with Valvoline, is accepting the used oil for free. Even though California's laws are the model for the modified listing proposal, the stricter laws have caused environmental awareness to grow and DIY used oil collection has skyrocketed. Now Exxon has announced that it will accept used oil for free at its company owned stations in California. One California rerefining facility alone has estimated that it will receive 2.4 million gallons of DIY oil this year.

CONGRESS MUST ACT TO STOP UNCONTROLLED BURNING AND EPA APATHY.

- Congress can close this loophole by declaring used oil to be a hazardous waste under the current regulations. Both used oil rerefiners and environmental groups have proposed a method of listing used oil as a hazardous waste that would not impact used oil collection. Under the modified listing proposal, used oil would be listed as a hazardous waste only once it is picked up for recycling or disposal. Thus, the Do-It-Yourselfer and the collection center would be exempt and used oil collection would continue to grow unimpeded. Product standards would be set to ensure that recycled used oil products no longer cause the unacceptable threat to public health that they do today. Thus, regulation would focus on the two greatest centers of risk: the uncontrolled recycling facilities that are becoming Superfund sites and the uncontrolled burning of contaminated fuels that are predicted to cause over 3,000 cancer cases.
- The Johnston-Wallop energy bill proposes that the nation stick its head in the sand about the hazards of used oil. Despite the cancer and lead poisoning risks of used oil burning, S. 1220 specifically *prohibits* EPA from declaring used oil a hazardous waste, even in situations when the Agency's chemical tests indicate that it is a hazardous waste.
- The Skelton used oil bill would similarly prohibit the regulation of used oil as a hazardous waste. H.R. 1411 would also leave EPA with unlimited discretion to continue the shameful status quo at used oil recycling facilities.
- By contrast, others are looking to phase out the used oil burning altogether. This would include requirements that new motor oil contain a certain percentage of rerefined oil, which would create a market to lead toward the total re-distillation of used oil.