



# Department of Toxic Substances Control



Edwin F. Lowry, Director  
400 P Street, 4th Floor, P.O. Box 806  
Sacramento, California 95812-0806

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Gray Davis  
Governor

September 9, 1999



Mr. Peter C. Hollub  
Better Environmental Systems & Technology, LLC  
1161 Pacific Cove Lane  
Huntington Beach, California 92648

## RECYCLING BRAKE FLUID

Dear Mr. Hollub:

Thank you for your August 26, 1999 letter to the Department of Toxic Substances Control (DTSC) informing DTSC about your Hydraulic Brake Fluid Flush and Recovery System. According to your letter, this system makes it easier to collect and segregate brake fluid from other hazardous wastes, thereby making generation of a brake fluid wastestream possible. You indicate that a large, European waste recycling company would be interested in setting up a facility in the United States for the recycling of brake fluid if a brake fluid wastestream were available.

An October 23, 1995 DTSC's memorandum "Regulatory Status of Used Automotive Brake Fluid" and a December 28, 1993 letter from DTSC to Mr. John Hills on the same subject are attached for your convenience. Existing law and regulations do not specifically address brake fluid apart from the regulation of other hazardous wastes. Brake fluid is presumed to be a hazardous waste, and must be managed accordingly unless testing or other information demonstrates that it does not meet any of the criteria for the identification of a hazardous waste adopted by DTSC and set forth in Chapter 11 of Division 4.5 of Title 22 of the California Code of Regulations. The attached memorandum and letter clarify that mixing of spent automotive brake fluid into the used oil wastestream is not allowed.

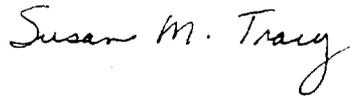
Please note that off-site recycling of spent brake fluid would require a permit or other grant of authorization from DTSC. For further information on this subject, contact DTSC's Permitting Division of the Hazardous Waste Management Program at (916) 322-3501. You may also contact DTSC's Office of Pollution Prevention and Technology Development at (916) 322-0453 for information on DTSC's Certification Program for Environmental Technologies in regard to your Hydraulic Brake Fluid Flush and Recovery System.

Mr. Peter C. Hollub  
September 9, 1999

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I hope this letter is of assistance to you. If you have any further questions, please contact me at (916) 324-1780.

Sincerely,



Susan M. Tracy  
Hazardous Substances Scientist  
Resource Recovery Section

cc: Mr. Larry Matz, Chief  
Statewide Compliance Division  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806

Ms. Paula Rasmussen, Chief  
State Regulatory Program Division  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

Mr. Norman Riley, Chief  
Resource Recovery Section  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806

## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

400 P STREET, 4TH FLOOR  
P.O. BOX 806  
SACRAMENTO, CA 95812-0806



## MEMORANDUM

**TO:** State Regulatory Program Division Branch Chiefs  
Statewide Compliance Division Branch Chiefs  
Regional Duty Officers, External Affairs

**VIA:** Don Johnson, Chief   
State Regulatory Branch

**FROM:** Norman Riley, Chief   
Resource Recovery Section  
State Regulatory Branch

**DATE:** October 23, 1995

**SUBJECT: REGULATORY STATUS OF USED AUTOMOTIVE BRAKE FLUID**

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Recently a local agency representative requested that we clarify whether used automotive brake fluid (spent fluid) could legitimately be managed as used oil. He indicated that he had received information from a DTSC regional office that conflicted with the information in the attached letter.

As the attached letter indicates, spent fluid is not "used oil", as defined in Health and Safety Code (HSC) section 25250.1(a)(1). Therefore, spent fluid (if hazardous) is generally regulated as any other hazardous waste, not as used oil. Accordingly, spent fluid should not be mixed with used oil and should be separately designated on the Uniform Hazardous Waste Manifest as California Waste Code (CWC) No. 343 ("Unspecified Organic Liquid Mixture") or other appropriate CWC, not as CWC No. 221 ("Waste Oil and Mixed Oil") or other CWC appropriate for used oil.

We hope that the attached letter and this memorandum will clarify the subject issue. However, if you have questions regarding this memorandum, please call Ms. Sue Tracy of my staff at (916) 324-1780 or CALNET 8-454-1780.

Attachment

cc: Ms. Sue Tracy  
Resource Recovery Section



## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

400 P Street, 4th Floor  
P.O. Box 806  
Sacramento, CA 95812-0806



(916) 323-2908

December 28, 1993

Mr. John J. Hills  
Public Utilities Department  
City of Anaheim  
P.O. Box 3222  
Anaheim, California 92803

## REGULATORY STATUS OF SPENT AUTOMOTIVE BRAKE FLUID

Dear Mr. Hills:

Your letter of November 29, 1993 essentially requested that the Department of Toxic Substances Control (Department) determine whether used automotive brake fluid (called "spent fluid" hereafter) would qualify for regulation as used oil under state hazardous waste control law. According to your letter, the Department's Regional Office in Long Beach (Region 4) had told you that the spent fluid could legally be mixed with used oil, if the used oil were destined for recycling and if the spent fluid were classified as "hydraulic oil." You enclosed several typical material safety data sheets (MSDSs) for unused automotive brake fluid to assist the Department in making a determination.

Based on the two MSDSs you provided, the Department believes that the spent fluids could not be classified as "hydraulic oils" or any other oils in the context of the definition of "used oil" in Health and Safety Code (HSC) section 25250.1(a), as indicated below.

- o The statutory definition limits "used oil" to "... oil that has been refined from crude oil, and has been used ...", and includes among examples of used oil, "hydraulic oil."
- o According to Hawley's Condensed Chemical Dictionary (twelfth edition, Van Nostrand Reinhold Company, New York, NY. 1993), the following terms have the meanings given:
  - "Petroleum" ("crude oil" is not defined, but is identified as a synonym of "petroleum") is a "... highly complex mixture of paraffinic, cycloparaffinic (naphthenic), and aromatic hydrocarbons, containing a low percentage of sulfur and trace amounts of nitrogen and oxygen compounds."



Mr. John J. Hills

December 28, 1993  
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Since the spent fluids could not legally be mixed with used oil, they would generally have to be managed separately as any other hazardous wastes. However, if the spent fluids are destined for recycling even if they are not mixed with the used oil, you might want to review the enclosed copy of state hazardous waste recycling and related laws for possible exemptions and/or exclusions that might apply to the spent fluids.

If you have questions regarding this letter or the enclosure, please call me at (916) 323-2908 or write to me at the letterhead address.

Sincerely,



Eric Workman  
Resource Recovery Unit  
Program Coordination and  
Policy Development Branch

Enclosure

cc: Mr. Norman Riley, Chief  
Resource Recovery Unit  
Program Coordination and  
Policy Development Branch  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806

Mr. Suwan Sonkprasha, Duty Officer  
Region 4  
Department of Toxic Substances Control  
245 West Broadway, Suite 350  
Long Beach, California 90802

~~LRU~~ Chronological File