

"Avoiding Not Ignoring Hazardous Waste Regulations"

"CONNECTICUT AUTO RECYCLERS (CAR) CASE STUDY"



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METHODOLOGY

1. Establish Goals
2. Define Waste Streams
3. Identify Applicable Regulations
4. Build On Existing Programs
5. Develop Standard Practices
6. Simple Implementation (plan, do, check, act)
7. Detail User Benefits
8. Assure Economic Viability

Question:

How this is applicable to other Industries?



Preventing Pollution in the Vehicle Services Industry

The Connecticut Department of Environmental Protection (CT-DEP) has prepared these fact sheets for the vehicle services industry, which includes vehicle maintenance and repair facilities, auto body shops and dismantling operations. The fact sheets outline basic regulatory requirements and best management practices. Although they do not constitute legal advice, they represent a starting point for understanding what your business is subject to environmental regulations. In addition, these fact sheets may help you in identifying areas where you can reduce the regulations that you must comply with, protect yourself from fines and liabilities, and protect you and your employees from hazards in the shop.

Note: A guide to assist the auto recycling industry with complying with environmental regulations can be found at www.deq.state.ct.us/mw/recyclingguide.pdf.

How to Use These Fact Sheets

Each fact sheet deals with a specific issue or material you may deal with in your business. Most fact sheets are divided into five sections:

- **Potential Environmental Impacts** - Describes the effect of a particular activity or material on the environment.
- **Legal Requirements** - Provides a quick reference for environmental compliance. COS refers to Connecticut General Statutes, RCRA is Regulations of Connecticut State Agencies and CFR is Code of Federal Regulations.
- **Best Management Practices** - Offers ways to reduce environmental impacts that may also reduce your regulatory obligations, save money, and protect the health of you and your employees.
- **Pollution Prevention Checklist** - A reminder to help you implement some of the best management practices.
- **Did You Know?** - Tells an interesting fact relevant to the material in the fact sheet.

The fact sheets refer to three Appendices. Appendix A summarizes the hazardous waste management requirements that apply to vehicle service facilities. Appendix B is a summary of EPCRA, the Federal Emergency Planning and Community Right-to-Know Act. Appendix C provides a quick reference on which vehicle fluids may be mixed and which should be kept separate for recycling.

The last page is contact information with CT-DEP and EPA phone numbers you may find useful.



DEFINE ALL POTENTIAL WASTE STREAMS

1. Used Oil
2. Rags & Absorbents
3. Antifreeze
4. Windshield Fluid
5. Fuel, Tanks & Filters
6. Lead-Acid Batteries
7. Mercury Switches
8. Electronic Equipment
9. Mercury Lamps
10. Oil / Water Separators
11. Parts Cleaning
12. Refrigerants
13. Tires
14. Lab Pack
15. Scrap Metal
16. Air Bags



Potential Waste Streams

Waste Stream	Recommended Handling Method
Absorbents	Dispose in accordance with the waste character. Handle as hazardous waste if absorbent material is hazardous or contact hazardous waste (after portion of absorbent).
Oil Bar Containers	Containers always can be used for reuse or stored if at a permitted hazardous waste facility by a permitted transporter.
Antifreeze	Can be reused. Recycle with waste equipment, provide maintenance at an approved recycling facility.
Batteries	May be mixed with used oil if not contaminated by a hazardous waste.
Transmitters	Conduct a hazardous waste determination and recycle through a permitted processor. If determined to be hazardous, dispose of at a permitted hazardous waste facility by a permitted transporter.
Fluids/Water	Use in facility vehicles. If not fit for use, dispose as hazardous waste or send for recycling.
Fluoride	May be mixed with used oil if not contaminated by a hazardous waste.
Hydraulic Fluid	May be mixed with used oil if not contaminated by a hazardous waste.
Lead Acid Batteries	Recycle at an authorized recycling facility.
Refrigerants	Refrigerant with a potential hazardous waste response to be sent to a permitted recycling or disposal facility.
Power Steering Fluid	May be mixed with used oil if not contaminated by a hazardous waste.
Gas	Conduct hazardous waste determination. If hazardous, manage as a hazardous waste by sending to an authorized transfer service or disposal at an approved disposal facility.
Chlorinated Solvents	Refrigerant using EPA approved equipment is not release to the air.
Fluoride	Recycle.
Tires	Recycle, sell or dispose of property do not accumulate over 10 cubic yards of tires (approximately 70 to 80 tires).
Compressive Fluids	Refrigerant fluid with used oil, send them and recycle.
Hard Oil	Strip off waste for recycling to determine if more hazardous waste conditions are met.
Hard Oil Filter	Strip off waste for recycling.

Pit Stops Fact Sheet

Appendix C

Vehicle Fluids Mixing Chart

The chart below is provided as a quick reference to show which vehicle fluids can be mixed, and which should be kept separate for recycling. Many vehicle fluids can be recycled, providing that they are not mixed with the wrong type of other fluid. In general, the purer the waste stream, the higher the value to the recycler.

Please be aware that vehicle fluids can become hazardous waste if they are contaminated. The general rule is -- a hazardous waste determination should be done for every type of fluid removed prior to mixing. If you determine that your waste is non-hazardous, you may manage that type of fluid as non-hazardous. (See Appendix A for more information on hazardous waste determinations.)

Fluid Type	Oil	Brake Fluid	Automatic Transmission Fluid	Power Steering Fluid	Hydraulic Fluid	Antifreeze	Gasoline
Oil	Same Fluid	Yes	Yes	Yes	Yes	No	No
Brake Fluid*	Yes	Same Fluid	Yes	Yes	Yes	No	No
Automatic Transmission Fluid	Yes	Yes	Same Fluid	Yes	Yes	No	No
Power Steering Fluid	Yes	Yes	Yes	Same Fluid	Yes	No	No
Hydraulic Fluid	Yes	Yes	Yes	Yes	Same Fluid	No	No
Antifreeze	No	No	No	No	No	Same Fluid	No
Gasoline	No	No	No	No	No	No	Same Fluid

*Check with your waste hauler if you have a significant amount of alcohol based (DOP) brake fluid.
 2004 Pit Stops Fact Sheets
 Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-1127
 Office of Pollution Prevention (860) 424-3207 www.dea.state.ct.us/office/poll-prevention.htm
 Fact Sheet: DEP-P2-PITSTOPS-FS-023 Last Updated: August, 2004

IDENTIFY APPLICABLE REGULATIONS

WASTE CHARACTERIZATION:

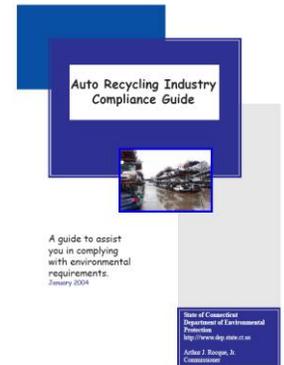
- Hazardous Waste (RCRA)⇒40 CFR 260-270
- Used Oil⇒40 CFR 266 (Subpart E) & 279
- Universal Waste⇒40 CFR 273
- CT Regulated Wastes⇒CGS Sec. 22a-454

GUIDANCE DOCUMENT:

Auto Recycling Industry Compliance Guide

INCORPORATE OTHER REGULATIONS:

- DOT Hazardous Materials⇒49 CFR 172/173
- EPCRA (Right-to Know-Act)⇒40 CFR 355
- OSHA⇒29 CFR 1910



DOT SHIPPING PAPER Bill of Lading

To: Designated Facility
Address
City

From: Shipper
Address
City
Telephone Phone
Transporter ID#

Quantity	Commodity Name	UN	HAZ	PL	PG	PK	CB	CD
1	Automotive Fluid - Motor Oil	295	III					
1	Automotive Fluid - Antifreeze	295	III					

SPECIAL HANDLING INSTRUCTIONS:
* Non-Hazardous Shipping
* Emergency Response Code: 06 (6.1) (05) (05) (05) (05) (05) (05) (05) (05)

IN CASE OF EMERGENCY PLEASE CALL:

SHIPPER CERTIFICATION: This is to certify that the above named materials are properly described, classified, packaged, labeled and shipped in accordance with applicable regulations.

SHIPPER	DATE	INITIALS
TECHNICAL	DATE	INITIALS
RECEIVED	DATE	INITIALS

WARNING
WINDSHIELD FLUID

Keep Container Closed
Use With Adequate Ventilation
Avoid Contact With Skin, Eyes And Clothing
Use Prescribed Personal Protective Equipment

FOR DETAILED INFORMATION SEE MSDS

Provided by CT Auto Recyclers
CT Auto Recyclers.com

BUILD ON EXISTING PROGRAMS

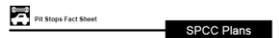


Use of Existing Materials, Examples:

- Used Oil ⇨ Burned for Heat
- Fuels ⇨ Burned as Fuel
- Lead-Acid Batteries ⇨ Resold or Recycled
- Air Bags ⇨ Resold
- Mercury Switches ⇨ Recycled
- ✓ National Auto Recyclers Program In-Place

Combine / Coordinate with Other Programs:

- Stormwater, SPCC ⇨ Training, Inspections
- EPCRA / OSHA ⇨ Labeling, Reporting



Spill Prevention, Control, and Countermeasure Plans

Legal Requirements

The federal Clean Water Act requires facilities that store any kind of oil above certain volumes to prepare and implement Spill Prevention, Control and Countermeasure (SPCC) Plans to prevent the discharge of oil from a facility into navigable waters or adjacent shorelands. CCR is defined in Section 101(1)(16) of the Clean Water Act as "oil of any kind or any form including, but not limited to, petroleum, but not, crude, oil refuse, and oil refuse with water, other than sludge (spoil), EPA impurities that definition includes made oil, petroleum and petroleum-related products, as well as any petroleum oils such as vegetable and animal oils.

SPCC Plans require that your facility have adequate containment, such as berms and dikes around aboveground fuel tanks (ASTs) or non vented double-walled ASTs to prevent the fuel and water in the event of a spill (40 CFR 112.1). SPCC Plans are federal requirements, administered by the U.S. Environmental Protection Agency (EPA).

Does Your Facility Require a SPCC Plan?

Your facility needs to develop a SPCC plan if it does any of the following:

- Stores oil above ground in any one tank(s) with a total aggregate volume over 1,320 gallons (consisting of less than 73 gallons in any one tank).
- Could reasonably be expected to discharge oil to a "navigable water of the United States"
- An "adjacent shoreland" (contiguous) to navigable waters in the United States. This contains navigable waters refers to any natural surface water in the United States. This contains adjacent to shore even facilities in the state that cover oil. There is facility (containment) and considerations may also be made independent to the Date of oil.

Note: A facility storing over the threshold quantity of oil and engaging that there are not a berms to separate systems need have a berms from a registered Professional Engineer certifying that a SPCC Plan is not necessary for that facility.

What is an SPCC Plan?

An SPCC Plan requires a facility's oil containment system and procedures to prevent an oil spill. It also outlines oil spill response and clean-up protocols. Even if you are not required to have a formal SPCC Plan, you should still consider implementing the common sense practices that are part of a spill plan.

DEVELOP STANDARD PRACTICES

Management & Compliance Manual

- General Program Reference Documents
- Separate Section for Each Waste Stream
 - ◆ General Information ⇨ Management Instructions, Profiles, Shipping Papers
 - ◆ Reference Documents ⇨ DEP Fact Sheets
 - ◆ Waste Characterization Data
 - ✓ Compliance Summary Form
 - ✓ Support Data – Analytical, MSDS's
- Container Labels ⇨ Material Segregation
- Acceptable Vendors & Disposal Methods

CONNECTICUT AUTO
RECYCLING INDUSTRY

MANAGEMENT & COMPLIANCE
PROGRAM

KORTH ENGINEERING, LLC
12 LEWIS ROAD
MARLBOROUGH, CT 06447

**USED
OIL**

Provided by CT Auto Recyclers

**UNIVERSAL
WASTE
USED
BATTERIES**

Provided by CT Auto Recyclers

GAS
Provided by CT Auto Recyclers

PROGRAM BENEFITS



Minimize or Improve Regulatory, Operational:

- Requirements ⇒ Ex: Record Keeping, Plans
- Audits ⇒ More \$\$'s React to Problems
- Liability & Risks ⇒ Cleanup, Lawsuits
- Incidents ⇒ Fire, Explosion, Spill, Exposure
- Costs ⇒ Material Disposal, Insurance
- Visual Site Appearance ⇒ Organization
- Public Opinion ⇒ "Green Is In"

Hazardous Waste Category Summary of Requirements			
	Extremely Small Qty	Small Quantity Inventory	Large Quantity Inventory
Hazardous Waste Inventory	Less than 220 lbs of liquid waste and less than 220 lbs of waste in solid form	More than 220 lbs but less than 1000 lbs of hazardous waste AND less than 2 lbs of waste in solid form	More than 1000 lbs of hazardous waste
Max Storage Time	90 Days	90 Days	90 Days
Spill Contingency Plan	Yes	Yes	Yes
Emergency Response Plan	Yes	Yes	Yes
Personnel Training	Personnel handling waste must receive training in proper handling of hazardous waste	Personnel handling waste must receive training in proper handling of hazardous waste	Personnel handling waste must receive training in proper handling of hazardous waste
Emergency Preparedness	Yes - Must have spill kit, fire extinguisher, and other emergency equipment	Yes - Must have spill kit, fire extinguisher, and other emergency equipment	Yes - Must have spill kit, fire extinguisher, and other emergency equipment
Waste Labeling	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Tracking	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Handling	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Disposal	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Reporting	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Storage	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Transfer	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Manifest	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste
Waste Audit	None - Hazardous waste labels are not required	Yes - Must have labels for all hazardous waste	Yes - Must have labels for all hazardous waste

Avoid CT Transfer Act - BIG \$\$'s:

- "Establishment" ⇒ Generate > 100 kg / Month (220 lbs.) Hazardous Waste

NLR Waste Profile

1. GENERATOR INFORMATION

Generation Site: Parke Street Metal Auto Parts Site To: RLS Inc.
 Address: 175 State Street Address: 225 Main Street
Manchester, CT 06040 East Windsor, CT 06088
 Contact: Frank Johnson Jr. Contact: Jeffrey Richards
 Phone: 860-452-1311 Phone: 860-252-1192
 EPA ID #: CE925 Manifesting Agency: State of Connecticut
 Condition Code: Transferment Labels
 Process Description: Lamp replacement

2. WASTE CHARACTERIZATION

Characteristics (Must be <= 10%):
 Ignitable: 0% %
 Corrosive: 0% %
 Reactive: 0% %
 Toxic: 0% %

3. WASTE MATERIALS METAL COMBAT

METALS	LEAD (ppm or %)	METALS	LEAD (ppm or %)
Antimony	0	Mercury	<0.1mg
Barium	0	Nickel	0
Bismuth	0	Thallium	0
Cadmium	0	Zinc	0
Chromium	0		
Copper	0		
Lead	0		
Manganese	0		
Mercury	0		
Nickel	0		
Silver	0		
Sulfur	0		
Tin	0		
Zinc	0		

4. PACKAGING INFORMATION

Drum: 0 Type/Code: Fiber drums Cu Yd: 0 Cu Yd Bag: 0
 Other (please specify): _____
 Anticipated Volume per Shipment: _____

APPLICABILITY

How Can My Facility Be a CESQG?

- Overall Program Basis ⇨ Manufacturing
- Material Segregation ⇨ Labeling
- Material Substitution
- Regulatory Exemptions
 - ✓ Universal Wastes
 - ✓ Reuse as a Commercial Chemical Product
 - ✓ Specific Regulations ⇨ Ex: Used Oil
 - ✓ Hazardous Waste Permits By Rule
- Existing Information ⇨ Manual, Fact Sheets
- Waste Characterization Documentation



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 Email: korth@kortheng.com Website: www.kortheng.com

Comprehensive Environmental Compliance Programs

Compliance / Ongoing Enforcement Program Mission:

- Audit
- Train
- Regulatory Requirements
- Test

What Are Some Types of Typical Requirements?

- Resource Pollution Prevention Plans (RPPPs)
- Waste Characterization, Management and Disposal
- Chemical Handling
- Spill Prevention Planning
- Other Programs Depending Upon Specific Site Operations

What Are Typical Regulatory Objectives?

- Regulatory Oversight: On-site Regulatory Audits, Inspections, Lack of Documentation Liability Issues (Non-Compliance, Management & Support)

How Do We Control Environmental Program Implementation?

- Reviewing Site Operations
- Developing Strategies to Mitigate Regulatory Requirements & Improve (Audit and Insure)
- Integrate Compliance Program Requirements

What Are Typical Compliance Objectives? (This Includes Both an Environmental Program)

- Regulatory Audit/Inspection Plans: Regularly review audits to meet or anticipate
- Compliance: Air, Landfill, Spills, Chemical Spills, etc.
- Emergency Operational Contingency: Chemical, Spills, Site Change, Leachate, etc.
- Public Opinion: (2014/2015)

What Are Our Next Steps?

- We have Developed Detailed Environmental Programs Tailored for Specific Industries
- Let us show you how much this can be accomplished for you
- Program Establishment
- Auditing Program Requirements: Training, Inspection, Program Oversight, etc.
- Compliance Audit Requirements: Call us
- Phone: (860) 293-4455 or (860) 293-2800
- Email: korth@kortheng.com
- Website: www.kortheng.com

11/2012

Korth Engineering, LLC

ENVIRONMENTAL REQUIREMENTS CHECKLIST
 AUTO RECYCLING FACILITY

FACILITY: _____
 ADDRESS: _____
 COMPLETED BY: _____
 DATE: _____

REQUIREMENT	POTENTIALLY APPLICABLE
	YES / NO
1. Resource Pollution Prevention Plan, Industrial Activities (RWPPP)	
COMMENTS: _____	
2. Spill Prevention Control & Countermeasure Plan (SPCC Plan)	
COMMENTS: _____	
3. EPCRA Reporting	
A. Container Labeling (Hazardous Waste)	
COMMENTS: _____	
B. Container Labeling (Hazardous Labeling)	
COMMENTS: _____	
C. Other Reporting Requirements for all the site Materials	
COMMENTS: _____	
4. RCRA Reporting (Universal & Specific)	
COMMENTS: _____	
A. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
B. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
C. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
D. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
E. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
F. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
G. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
H. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
I. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
J. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
K. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
L. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
M. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
N. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
O. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
P. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
Q. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
R. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
S. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
T. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
U. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
V. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
W. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
X. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
Y. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
Z. 400 Gallons of 15,000 lb. approx. 1,100 gallons)	
5. Other Reporting Requirements	
COMMENTS: _____	
6. RCRA EPCRA Waste Pallets: 10 cubic yards, approx. 10,000 cubic feet	
COMMENTS: _____	
7. Universal Waste Pallets (Shrink-wrap Pallets)	
COMMENTS: _____	
8. RCRA Universal Waste Pallets	
COMMENTS: _____	
9. Underground Storage Tank (UST) Regulations	

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Additional Resources



- DEP RCRA Help Website
 - www.ct.gov/DEP/RCRAhelp
- CESQG Handbook
 - www.ct.gov/DEP/hazardouswaste
- [Auto Recycling Industry Compliance Guide](#) (January 2004)
- [Pit stops Fact Sheet](#) (July 2005)
- CAR (Connecticut Auto Recyclers Association)
 - <http://ctautorecyclers.com>
- COMPASS (Compliance Assistance)
 - Hotline: 1-888-424-4193
 - Consultative Audits (Free)
 - HWAC (Hazardous Waste Advisory Committee) Training