Environmental Compliance Certification Program

Certification Workbook For Auto Salvage Yard Facilities



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Section 1.0 - Overview



According to the Automotive Recycling Association, over four million end-of-life vehicles are recycled annually in the United States. Auto recyclers dismantle these vehicles to recover fluids and parts for reuse, and scrap material for recycling. Every year, over eleven million vehicles end up at one of the estimated 7,000 auto salvage yards nationwide. Typically, auto recyclers manage to reuse and recycle over seventy-five (75)

percent of the material content of a vehicle, by weight.

The auto recycling business is over seventy-five years old and has evolved into a sophisticated market and technology-driven industry that must constantly change in response to innovations in automotive technology and manufacturing techniques. To be competitive and profitable in today's markets, the auto recycling process must involve much more than merely crushing wrecked, abandoned, and worn-out motor vehicles. The modern-day auto recycler must establish operating practices that realize the maximum market value of every end-of-life vehicle taken in, as well as produce real economic and environmental benefits within the community being served.

Hence, in order to improve environmental protection at less cost to both government and business, auto salvage facilities are offered the opportunity to self-certify to the Rhode Island Department of Environmental Management, Office of Customer & Technical Assistance (RIDEM/OCTA), that they are complying with the environmental protection requirements that apply to their business.

This common-sense approach to regulation holds great promise for making it easier for the auto salvage industry to meet and surpass Rhode Island's environmental regulations. This workbook provides the information needed to help you understand the environmental issues that apply to auto salvage operations, to comply with state and federal environmental regulations, and implement best management practices to minimize risks and liabilities. It was developed in collaboration with the Department of Environmental Management, the University of Rhode Island Center for Pollution Prevention & Environmental Health, and the Narragansett Bay Commission.

The program uses two documents:

1. Environmental Compliance Certification Workbook for Auto Salvage Facilities (This Workbook):

This workbook contains the basic materials needed to understand environmental regulations and best management work practices related to common auto salvage operations, and how to make sure you are complying with them. The workbook is designed to be used in conjunction with and in completing and submitting the accompanying self-certification "Compliance Certification Checklist" and related forms. It can also be used as a reference in the future.

2. Self-Certification Checklist Package:

This package includes certification instructions, as well as the *Compliance Certification Checklist* that needs to be completed and submitted to RIDEM/OCTA in order to participate, and other forms described below.

- Facility Non-Applicability Statement:
 - This statement is to be submitted <u>only</u> if you are not subject to participate in self-certification. See Section 1.1 of the workbook to determine if you are eligible to file a Non-Applicability Statement. If you aren't subject to participate for one of the reasons identified in Section 1.1, then complete this form and submit it to RIDEM/OCTA.
- Return-to-Compliance Plan: Complete the Return-to-Compliance Plan if your facility is not in compliance with a particular checklist item at the time of certification. The facility must detail its plans to address the particular items to bring them back into compliance with environmental regulations within a specified period of time.

Return-to-Compliance Final Report: If your facility submits Return-to-Compliance Plan Forms with your completed Compliance Certification Checklist, you must submit a Return-to-Compliance Final Report for each RTC that is submitted. This form is not submitted with your Compliance Certification Checklist, but is completed and submitted to RIDEM, for each RTC, when the compliance issue has been corrected, and it states what corrective action that you have taken.

1.1 Who Does Self-Certification Apply To?

Participation in the program is <u>voluntary</u>. However, all licensed auto salvage facilities should strongly consider participating in the Self-Certification Program to take advantage of the educational and compliance assistance benefits and incentives detailed in Section 1.2. All facilities that are licensed by the Department of Business Regulation as an Auto Wrecking and Salvage Yard are eligible to participate in the Self-Certification Program. (Note: All facilities involved in auto wrecking or salvage yard operations <u>must</u> be licensed by the Rhode Island Department of Business Regulation).

You may file a Non-Applicability Statement only if there is no active auto salvage yard operations at your facility address, or if the facility property has been sold. If this applies, please complete, sign, and return the 2023 Non-Applicability Statement, found in the Self-Certification Checklist Package, to RIDEM/OCTA. If you have questions regarding the status of your facility, please call us at (401) 222-4700.

It should be noted that all facilities in the State of Rhode Island <u>must</u> comply with all applicable environmental regulations, whether or not they self-certify.

To participate in the program, please complete and return the **Compliance Certification Checklist** as instructed.

1.2 What are the Benefits of Participation?

Benefits to participating in the Auto Salvage Yards Certification Program include:

- Reduced inspection priority
- Making you better prepared for a random inspection of work being performed
- Being placed on a public list of certified auto salvage yards facilities
- Using your RIDEM Certification as a marketing tool with customers
- Receiving information and education on methods of complying with environmental regulations that apply to auto salvage facilities
- Entitling you to free technical assistance from RIDEM's Office of Customer
 & Technical Assistance to comply with environmental regulations and implement best management practices that could result in financial savings
- Receiving educational and promotional materials

Contact Information:

RIDEM Office of Customer & Technical Assistance (401) 222-4700

Note: Participation in this self-certification program does not guarantee that your shop will not be subject to a random inspection, or an inspection prompted by an employee or a complaint. Both state and federal environmental agencies have the authority to perform such inspections. These inspections can result in enforcement actions against your facility. Participation in this program will help to identify any deficiencies and prepare your facility in the event of an inspection. Keep copies of your checklists to assist you in demonstrating compliance with applicable state and federal regulations. Auto salvage facilities are also subject to local ordinances that may be in effect now or in the future that are afforded to municipalities under Rhode Island law, primarily relating to the issuance and revocation of local licenses.

1.3 Program Requirements

To understand your environmental regulatory responsibilities, please read and use this **Certification Workbook**.

It should be noted that this program covers certification of environmental regulatory requirements pertaining to auto salvage operations and does <u>not</u> cover OSHA requirements. Very basic worker protection information and an overview of some OSHA requirements pertaining to auto salvage facilities are presented in this workbook to help inform and educate. Please note, however, that as a licensed facility, it is your responsibility to comply with all applicable OSHA requirements.

It is easy to participate in the program. To do so, you must complete the **Compliance Certification Checklist** and RTC forms as applicable and submit them to RIDEM.

Compliance Certification Checklist

This form is found in the accompanying Certification Checklist Package. It contains a series of questions that pertain to various auto salvage yard facility operations and regulatory requirements related to hazardous waste, solid waste, auto



mercury switches, wastewater, stormwater, and air emissions. The form is to be completed and submitted now, and every three (3) years to continue participation in the program. You should keep a copy of this completed form for your records.

It is very important to remember that you <u>must</u> comply with all applicable federal and state environmental regulatory requirements, as well as local ordinances afforded to municipalities under Rhode Island law, whether or not you participate in the program.

1.4 Overview of Regulations

Auto salvage facilities are potentially subject to a wide range of environmental regulations including solid and hazardous waste, wastewater, stormwater management, and air pollution. Enforcement of these regulations is governed by US EPA, RIDEM, and the local POTWs (publicly-owned treatment works, or sewer authorities). See **Appendix D** for POTW (or Wastewater Treatment Facility) information.

Pertinent regulations that are applicable to the specific areas of concern will be explained in Section 3 of this workbook.

Additionally, auto salvage facilities are subject to local ordinances afforded to municipalities under Rhode Island law, primarily relating to the issuance and revocation of local licenses.

Section 2 - Preventing Environmental Pollution for Auto Salvage Yard Operators

2.1 The First Step to Compliance

The first step on the road to environmental compliance is to look for opportunities to use fewer hazardous materials and to generate less waste, thus stopping pollution at its source. Preventing environmental pollution is the Rhode Island Department of Environmental Management's preferred method for reducing environmental and human health risks. This includes reduction in the



use of hazardous materials, as well as energy and water conservation. In addition to reducing environmental and health risks, companies can also increase productivity, save money, and reduce workplace exposures by preventing environmental pollution in their facilities.

Why manage wastes when you can eliminate them? Preventing environmental pollution can help you to reduce your compliance burdens, make your workplace cleaner and safer, increase your competitiveness and save you money. Additionally, it can instill local community benefits such as creating a more pleasant living environment, and the preservation of valuable city and town resources. This section outlines some simple steps you can take in the auto salvage yard to prevent environmental pollution. After reviewing these steps to reduce your use of toxic materials and generation of wastes as much as possible, move along in the workbook to find out how to properly manage your remaining wastes, air emissions, wastewater, and stormwater discharges. If you need help with preventing environmental pollution, feel free to contact RIDEM's Office of Customer and Technical Assistance (OCTA) at (401) 222-4700.

2.2 Tips for Auto Salvage Yards

By carrying out the steps outlined below, auto salvage yard operators can help to avoid potential problems with environmental contamination and reduce risk to human health. You can use the list to help in identifying areas that need improvement and tracking your progress in making these improvements. By taking these actions, you will be well on your way to certifying environmental regulatory compliance to RIDEM/OCTA and participating in the program.





On the Road to Pollution Prevention and Environmental Compliance..

On arrival of incoming vehicles at the facility, check for fluid leaks - stop leaks or use drip pans to avoid leaking on the ground



- Draining of fluids and dismantling vehicles should only be done over a concrete or other impervious surface, and under cover to protect it from precipitation and storm water runoff
- Before moving incoming vehicles to storage, remove fluids such as fuel, motor oil, antifreeze, transmission fluid, and brake and power steering fluid
- Remove refrigerants using certified equipment, and recycle or dispose of the refrigerant in accordance with federal regulations
- Sefore moving incoming vehicles to storage, remove batteries, and store on a pallet under cover, or outside in a leak proof container away from traffic areas
- Promptly store fluids in the proper containers or tanks that are labeled with the contents, kept closed other than when being filled, and in good condition with no leaks or defects
- \mathcal{I} Maximize the re-use or recycling of fluids removed from vehicles
- J Dispose of greasy rags, oil filters, air filters, batteries, spent coolants and degreasers properly
- f Inspect storage containers and tanks to detect potential leaks
- Any spills should be cleaned up immediately; any resulting contaminated soil or absorbent should be removed and stored in a separate labeled container for proper disposal
- $oldsymbol{J}$ Do not pour liquid waste down floor drains, sinks or outdoor storm drains
- Store engines, transmissions, and other oily or greasy parts that are removed from vehicles on a concrete or impervious surface that is protected from precipitation and storm water runoff
- \mathcal{I} Store any waste tires that are removed from vehicles in a central location, and do not allow the number to exceed four hundred (400) tires

Section 3.0 - Areas of Concern

This section covers the different operations that are typically found in auto salvage operations. A brief description of the area of concern, and explanations for each question that is found in the checklist, are included in this section.

Section 3.A - Air Pollution Control

Auto salvage facilities should be aware of any operations they conduct that may cause air pollution. Potential air pollution emissions that may be caused by your operations are particulates, dust, fumes, gases, mist, smoke, vapors, or odors. Specific air regulations referred to in this section can be found on RIDEM's web site at: https://dem.ri.gov/online-services/rules-regulations



The following topics may apply to the operations of your auto salvage facility, and compliance with applicable air pollution control regulations is described below:

i. Do you conduct any automobile refinishing at your facility? Auto refinishing operations (such as spray painting, spray gun cleaning with organic solvents) are regulated under RIDEM Air Pollution Control Regulation Part 30 "Control of Volatile Organic Compounds from Automotive Refinishing Operations" (250-RICR-120-05-30). If any auto refinishing operations take place at your facility, make sure that all requirements are complied with.

Surface preparation such as sanding or grinding may be regulated under RIDEM *Air Pollution Control Regulation Part 5 "Fugitive Dust"* (250-RICR-120-05-5), which requires that facilities keep dust confined to their own property.

Also, carrying out auto refinishing operations at your facility requires that you be licensed by the RI Department of Business Regulation as an "Auto Body Shop" or as a "Salvage Rebuilder".

- ii. Do you clean or degrease any parts in equipment that uses organic solvents? If so, you must comply with RIDEM Air Pollution Control Regulation Part 36 "Control of Emissions from Organic Solvent Cleaning Operations" (250-RICR-120-05-36). Self-contained parts washers that use petroleum-based fluids like mineral spirits must also be managed according to RIDEM air pollution control regulations as well as hazardous waste regulations (see Section 3.K).
- iii. Do you have a boiler, furnace, or space heater at your facility in which you burn any used oil by itself or mixed with your regular fuel? Burning waste oil on-site is permitted by air pollution control regulations with oil burners that have a capacity of less than one (1) million BTU's.

- iv. Do you melt or burn any materials to recover metals at your facility?

 If you burn or melt any materials to recover metals, you need to contact RIDEM/OCTA to determine what federal and state regulations may apply.

 For example, EPA has a federal regulation that regulates sweat furnaces and other equipment.
- V. Do you burn any waste such as paper, wood, or cardboard at your facility (not including waste oil mentioned in iii. above)? RIDEM Air Pollution Control Regulation Part 4 (250-RICR-120-05-4) does not allow for open burning of any kind at the facility. This includes burning of any material in barrels.
- vi. Do any operations at your facility cause dust to be generated that would travel beyond your property lines? RIDEM Air Pollution Control Regulation Part 5 "Fugitive Dust" (250-RICR-120-05-5) requires that facilities keep dust from traveling beyond their own property. At times some type of control strategy may be required to contain dust. Some facilities may use liquids to control dust, such as water.
- vii. Do you conduct any operations that produce smoke or odors? Any visible smoke or noticeable odors caused by your operations can indicate potential non-compliance issues with various regulations, including RIDEM Air Pollution Control Regulations Part 1 (250-RICR-05-1) "Visible Emissions" and Part 17 "Odors" (250-RICR-05-17).
- viii. If you answered "Yes" to any of the questions above, have you contacted RIDEM to discuss these activities? Answering "Yes" to any of the above questions means that you should contact RIDEM/OCTA for assistance, with any questions or concerns about an air pollution control-related issue.

Section 3.B - Freon/Refrigerant Recovery

Many vehicles that are brought to auto salvage yards contain Freon which is used in air conditioning (AC) systems. Handling Freon either for recycling or disposal must follow EPA regulations. RIDEM normally does not have regulatory jurisdiction in this area; but as part of the certification program, RIDEM can provide assistance to ensure that the relevant regulations are complied with. More information can be found on EPA's web site: http://www.epa.gov/ozone/index.html, or by contacting EPA staff:

Abdi Mohamoud (617) 918-1858

- i. Do you remove air conditioner units from the motor vehicles that come into your facility? If your facility does not remove air conditioning units, you can skip this section. However, if vehicles are dismantled and/or crushed at your facility with the air conditioning units intact, chances are that you would be in violation of EPA's regulations.
- ii. Is Freon properly recovered and recycled prior to scrapping or crushing vehicles? As mentioned in (i), Freon has to be removed before any vehicle is subject to any recycling operations including crushing.
- iii. Are your technicians EPA-certified? Any worker that removes Freon using EPA-approved equipment must also be properly trained through an EPA-approved training program. More information on technician certification can be found on EPA's website:

 http://www.epa.gov/ozone/title6/609/technicians/609certs.html.
- iv. Do you use EPA-approved refrigerant recovery equipment? EPA-approved equipment must be used, and details can be found on EPA's website: http://www.epa.gov/ozone/title6/609/technicians/appequip.html.
- v. Do you recycle refrigerants either on-site or off-site? Please indicate how the recovered refrigerant is handled.
- vi. Do you ensure that refrigerants are not vented into the air? It is important to make sure that 1) all AC unit openings are sealed after evacuation to prevent leaking of residual refrigerant and 2) storage tanks are not overfilled.

Section 3.C - Antifreeze Management

Used antifreeze drained from vehicles should be considered a waste material and handled accordingly. In most cases, antifreeze is not considered a hazardous waste (see Section 3.K for explanation of "hazardous"), unless certain heavy metals are present in high enough concentrations or the waste meets other RIDEM criteria.



- Do you ship any collected antifreeze to an off-site recycling company? The best option to manage waste antifreeze is to have it recycled. Several recycling facilities exist in Rhode Island. It is the responsibility of each auto salvage yard to ensure that the antifreeze is shipped to a bona fide recycling company that follows all proper regulations. When the solution is considered hazardous (most likely due to high levels of certain heavy metals such as lead), proper recycling is a must. If you have any questions, it would be best to contact RIDEM/OCTA.
- Do you ship any collected antifreeze to an off-site disposal company? ii. If you ship waste antifreeze to a disposal facility as opposed to a recycling facility, you may be required to follow certain additional procedures and regulations to ensure proper disposal. Characterization tests are needed to determine whether the material to be shipped off-site is hazardous. If the antifreeze is determined to be hazardous, required handling procedures need to be followed and manifests used. More information can be found in Section 3.K.
- iii. Is the antifreeze collected in containers that are in good condition and in such a way as to minimize spills and leaks? Any fluid recovered from motor vehicles, including antifreeze, should be stored in appropriate containers that do not leak and are in safe areas to minimize the risks of accidental spills.
- Is any antifreeze discharged to either the sewer or septic line? iv. the most part, Rhode Island regulations do not allow for dumping of antifreeze into sewer or septic systems, see Section below. Used antifreeze often contains heavy metals and oils/greases.
- Do you have a permit to discharge antifreeze? Your facility may have a ٧. permit to discharge antifreeze, but only after a pretreatment process that removes any contaminants is approved. Without pretreatment, it is highly unlikely that a discharge permit would be granted. For sewer connections, the local POTW (Publicly Owned Treatment Works) should be contacted to confirm eligibility; for septic systems, you should contact RIDEM's Office of Water Resources at (401) 222-3961

- vi. Is any antifreeze dumped on the ground or placed in the trash? Used antifreeze <u>should not</u> be dumped on the ground or placed in the trash. Groundwater can become polluted and potentially hazardous waste issues can arise. Landfills do not accept liquid wastes.
- vii. Do you give or sell recycled antifreeze to customers? If a program is in place that properly manages recovered antifreeze, it may be possible to provide antifreeze to customers.
- viii. Is any antifreeze reused as engine coolant (filter, test, and recycle)?

 A properly set up recycling system is a good pollution prevention practice in that all fluid management takes place on-site with minimum amounts of waste shipped off-site. While off-site shipping for recycling is considered an acceptable approach for handling used antifreeze, liabilities may be reduced with on-site reuse or recycling, since smaller amounts are being transported.

Section 3.D - Lead Acid Batteries

Both acid and lead found in vehicle batteries can pose serious health and environmental hazards, so batteries must be handled with care and according to regulations.



- i. Do you test the batteries that are removed from vehicles to determine if they are to be reused, recycled, or disposed of? It is prudent to inspect and test all batteries that are removed from vehicles. Those batteries that are in good condition can be recharged and sold again. Any batteries that cannot be sold on-site can be sent off for recycling. It is important to recycle whenever possible to 1.) ensure that materials are eventually reused (not thrown away), and 2.) avoid more complicated regulations dealing with hazardous waste disposal.
- ii. Do you store used lead batteries in a safe manner to prevent spills and leaks? "Safe" means storing indoors if possible, and not stacked more than five (5) batteries high. They should be kept in either a closed, leak-proof container or on a curbed, coated, or lined concrete surface with spill controls such as drip pans. Baking soda or lime should be available near the batteries to neutralize any acid leaks. Wooden pallets are also okay to use if the surface below the pallets is properly lined.
- basis? It is good management practice to check the batteries weekly for cracks and leaks. If a proper storage system is in place (see ii), any leaks that do occur can be controlled to prevent dangerous acid/lead releases. Once discovered, the damaged batteries should be contained and shipped off-site as soon as possible.
- iv. Do you send used lead batteries to an off-site recycling facility? As discussed, any used batteries shipped off-site should be sent for recycling whenever possible. Lead acid batteries are exempt from hazardous waste regulations if they are returned to a battery distributor or manufacturer and reclaimed via regeneration and documentation is maintained. If the batteries are reclaimed by another means, then EPA regulations related to Land Disposal Restrictions contained in 40 CFR Part 268 may apply.
- v. Do you send used lead batteries to an off-site disposal facility? If you send batteries to a facility to be disposed of, as opposed to recycling, please

list the name of the disposal facility.

- vi. If disposed of, as opposed to recycling, usually due to condition, do you manage the unusable batteries as a universal waste, or hazardous waste, if necessary? If batteries are leaking fluid, they must be handled as hazardous waste. If it is determined that any batteries need to be shipped for disposal, if it is needed usually being due to damage to the battery casing, universal waste or hazardous waste regulations must be followed. Requirements include using proper shipping papers (Bills of Lading for universal waste and Uniform Hazardous Waste Manifests for hazardous waste), and shipping to a licensed disposal facility. More information can be found in Section 3.K.
- vii. Approximately how many lead acid batteries do you collect annually?
- viii. Have you completed a one-time Land Disposal Restriction Notification identifying the facility that receives your batteries for recycling and submitted the form to the EPA? Hazardous waste generators are required to obtain a one-time certification letter from the recycling facility that receives your batteries verifying compliance with EPA's Land Disposal Restrictions (40 CFR 268).

Section 3.E - Fuel/Gasoline

Gasoline is considered a potential risk because of the low flash point, high flammability and presence of certain volatile organic compounds. It is therefore important to ensure that off-spec or contaminated fuel is removed and stored properly prior to any crushing and recycling of fuel tanks.



- i. Do you drain fuel tanks using an air-powered pump or some other method that eliminates fire/explosion risk? The safe removal of fuel from tanks is not only common sense but may also be governed by National Fire Protection Association (NFPA) and Occupational Safety & Health Administration (OSHA) regulations. Any operation that uses exposed electric components or is performed carelessly can pose serious risks.
- ii. Do you empty fuel tanks over an impermeable surface? Do you empty fuel tanks over the ground surface? To ensure that environmental regulations are complied with, it is important that fuel removal occurs over some type of impermeable surface like cement, metal, or specially-lined floors. If any gasoline spills and penetrates any ground surfaces, hazardous waste or investigation and remediation of hazard material releases regulations may apply, since the contaminated soil may need to be remediated and handled as a hazardous waste.
- iii. Do you remove fuel tanks prior to crushing? It is important to ensure that all fuel is drained prior to removal of tanks.
- iv. Do you store fuel tanks outside in a manner to allow ventilation, but not accumulate precipitation? While tanks should have been drained as much as possible, there might be residual fuel vapors left in the tank. Totally enclosed tanks could pose a danger with vapor build-up especially if exposed to sunlight and heat. Furthermore, the tanks should not be placed in such a way that would allow precipitation to accumulate and drain trace fuel onto the ground; stormwater management becomes an issue if any fuel leaks from the tanks (see Stormwater section 3.J).
- v. Do you determine whether the recovered fuel is usable or waste? The prime objective is to reuse recovered fuel as opposed to managing it as a hazardous waste. It is important to have a reliable system in place to determine whether the fuel can be reused. There is filtration equipment available commercially to clean the fuel if solids are present. If other contamination like oil or water is detected, it may be more difficult to reuse

- the fuel. Therefore, it is important to minimize contamination by implementing a sound recovery operation.
- vi. Do you store recovered fuel in appropriately-labeled containers? All fluids and chemicals should be stored in easy-to-read containers to avoid mishandling and unwanted mixing. Because of the potential hazards associated with gasoline, National Fire Protection Association (NFPA) regulations should be followed (http://www.nfpa.org). If above ground storage (AST) or underground storage (UST) tanks are used, the applicable RIDEM regulations need to be complied with.
- vii. Are these containers leak-proof with spill controls and always closed when not in use? Per NFPA regulations, approved containers need to be used to store gasoline. Provisions also need to be in place to control accidental spills. When not in use, the containers must be kept closed to avoid potential spills and to reduce fire/explosion risks.
- viii. Do you inspect the containers often to check for leaks? It is a best management practice to check containers for leaks on at least a weekly basis. Any leaking or damaged container should be replaced immediately.
 - ix. Is fuel safely reused on-site? Many facilities do use recovered gasoline for on-site equipment and vehicles. As long as NFPA regulations governing safe handling are followed, on-site reuse of fuel is recommended since potential problems with extra handling and off-site transportation are minimized.
 - x. Do you ship any waste fuel to a recycling or disposal facility? If any recovered fuel is disposed of as a hazardous waste, the waste is subject to RIDEM hazardous waste regulations. More information can be found in Section 3.K. However, unused fuels that are sent off-site for burning for energy recovery as documented by the generator, is not subject to full regulation as a hazardous waste (see 40 CFR 261.2(c)(2)(ii)). The generator must maintain documentation to demonstrate that the fuel is being burned for energy recovery.
 - Xi. Is gasoline given to employees? It is common practice to reuse recovered fuel directly on-site, such as using it in facility equipment or giving it to employees. As long as the transfer is done safely, this practice is encouraged.

Section 3.F - Auto Mercury Switches

Mercury is a neurotoxicant that can cause serious brain and nervous system damage in humans. It remains in the environment for years without breaking down, accumulating in higher concentrations as it moves up the food chain. Some older cars and trucks have a convenience light switch assembly or capsule that contains mercury, and which is commonly found fastened to the underside of a car's hood and/or trunk. Once a car is sent to the salvage yard and later smelted, the mercury from the switch (or mercury-added component) can be released into the air, eventually contaminating our drinking water as well as the fish we eat. It is therefore important to handle mercury switches with care and according to regulations. The Rhode Island Auto Mercury Collection Law can be found on the Rhode Island General Assembly website at: http://webserver.rilin.state.ri.us/Statutes/TITLE23/23-24.9/23-24.9-10.HTM

End-Of-Life Vehicle Solutions (ELVS): 877.225.ELVS (3587)

i.a. Do you remove mercury switches from vehicles? As of July 2005, convenience light switches containing mercury must be removed from "end-of-life" vehicles and properly recycled or properly disposed of as universal or a hazardous waste, in accordance with the Rhode Island Mercury Reduction and Education Act. Currently, the Act applies only to the convenience light switches that contain mercury, but proper removal and disposal of mercury capsules from anti-locking brake system (ABS) switches is highly encouraged.

Auto mercury switch removal information is included in **Appendix** C, including a listing of vehicles that contain mercury convenience light switches, vehicles that contain mercury ABS G-force sensors, and guidance and information on removal and recycling of mercury auto switches and on ABS G-force sensor removal procedures.

i.b. Do you attempt to remove the mercury from the capsule that is inside the switch? Under no circumstances should you attempt to remove the mercury from the capsule that is inside the switch. A handler of universal waste (such as mercury switches) must manage mercury-containing devices in a way that prevents releases of any mercury to the environment. If you remove mercury from the capsule inside the switch, the mercury is now considered to be a hazardous waste, imposing greater regulatory requirements. In addition, the potential threat to human health and safety

- is greatly increased, and hazardous waste management and disposal requirements are much stricter than those for universal waste.
- ii. Do you store the removed switches in a heavy-duty plastic container? A handler of universal waste must store any universal waste mercury-containing device in a container. The container must be closed, structurally sound, and compatible with the contents of the mercury-containing devices.
- iii. Do you store the container in a safe place and label the container properly to prevent misuse and exposure to workers? A container in which the mercury switches are collected must be labeled or clearly marked with one of the following phrases:

"Universal Waste - Mercury-Containing Device(s)";

"Waste Mercury - Containing Devices", or;

"Used Mercury - Containing Devices"

- iv. Do you send the switches to a recycling company? Manufacturers of motor vehicles sold in Rhode Island must pay to the vehicle recycler that removed the mercury convenience switch, the cost of removal, collection, and the recovery system for the switches, with a minimum of \$5.00 per mercury convenience switch removed. This process is managed by ELVS.
- V. Do you send the switches to a disposal company? Mercury switches that are leaking or damaged, and thus sent off-site for disposal, must be managed as a hazardous waste. Transporting and disposing of mercury switches as hazardous waste is costlier and is more strictly regulated than if the switches were managed and recycled as a universal waste. See Section 3.K for information on handling hazardous waste.
- vi. Is the waste shipped as a hazardous/universal waste? Mercury switches can and should be managed as a universal waste in Rhode Island. This means that mercury switches can be self-transported by the auto salvage workers to a licensed recycling facility, as long as the switches are transported in properly labeled containers that are closed, structurally sound, and compatible with the contents of the mercury-containing devices. Managing mercury switches as a universal waste eliminates the financial and regulatory burdens associated with managing the switches under the stricter hazardous waste regulations.
- vii. Do you remove other mercury-containing parts such as display screens from DVD players and navigation system sources? Currently, the Act applies only to the convenience light switches that contain mercury, but

proper removal and disposal of other mercury-added products, such as ABS G-force sensors, DVD players and navigation system sources from end-of-life vehicles, is highly encouraged.

Section 3.6 - Waste Tires

There are certain regulations and concerns related to the handling and storage of scrap tires. Tire piles are a fire hazard and a prime breeding area for mosquitoes and rodents that could transmit dangerous diseases. It is important for salvage yards to comply with all pertinent regulations and to implement appropriate measures to prevent hazards. Specific



waste tire regulations (Solid Waste Regulation Part 5) referred to in this section can be found on RIDEM's web site at:

https://rules.sos.ri.gov/regulations/part/250-140-05-5

- i. Do you store waste tires at your facility? If your facility stores any number of tires for a meaningful period, you should comply with requirements described in the remaining part of this section. If you do not remove tires or if you immediately send them off-site, you can skip this section and continue to Section 3H.
- ii. Do you store the tires outside? In many cases, tires are stored outside because of convenience and accessibility. However, it is important to make sure that certain procedures are followed to minimize risks (see the following questions).
- iii. Do you store tires in a trailer, shed, or another enclosed container? If possible, storing tires to prevent direct exposure to the weather elements is preferred, to avoid accumulation of water which can be breeding grounds for mosquitoes. It is not required, and it may be impractical to store a large number of tires in an enclosed container, but it should be considered for best management purposes. At a minimum, keep tire piles covered to prevent entrapment of water.
- iv. Do you take the tires off the rims? Tires are sometimes taken off rims, especially if the rims are aluminum and have a high re-sale value. If tires can be stored on-site and sent to a recycling facility with the rims still intact, the number of potential breeding areas for mosquitoes is reduced.
- V. Do you send the tires to a recycling facility? The best approach to dealing with waste tires is to send them to a recycling facility. Resources are conserved and overall management costs from waste can be minimized by choosing recycling over disposal.

- vi. Do you send the tires to a disposal facility? A disposal facility typically utilizes operations that prepare and/or process the waste for final disposal to landfill or other waste storage. If tires are sent to a disposal facility rather than a recycling facility, the salvage yard must confirm whether the waste is hazardous or not. To avoid more complex procedures, it is recommended that all waste tires be sent to a recycling facility.
- vii. Do you store more than 400 tires at any given time? If four hundred (400) or more tires are stored at any time, RIDEM Solid Waste Regulation Part 5 "Waste Tire Storage & Recycling" (referenced above) needs to be complied with; a license from RIDEM is required to be able to store 400 or more tires. If fewer than 400 tires are stored on-site, a license is not required, but it is still important that best management practices are followed to avoid environmental and health risks. If you store less than 400 tires at any given time, items below are not required but you can view the information as recommendations, and then proceed to Section 3H.
- **Viii.** Do you store tires for periods longer than 6 months? Per RIDEM Solid Waste Regulation Part 5, if you store more than 400 tires, you <u>cannot</u> keep them for more than six (6) months. If Regulation Part 5 does not apply, it is still a good practice to store as few waste tires as possible at your facility, and make sure that tires are removed from the property as soon as possible.
 - ix. Do you store tires in piles? If so, are the tire piles lower than 20 feet in height? If you store more than 400 tires, the piles <u>must not</u> exceed 20 feet in height. Even if fewer than 400 tires are stored, it is recommended not to exceed these dimensions for safety reasons.
 - x. Is your tire storage facility fenced and locked? Facilities must be enclosed by a woven wire, chain-link or other acceptable fence material, at least six feet in height. Access must be controlled by lockable gates. Fences must be a minimum distance of 200 feet from fire piles and tire processing areas.
 - xi. Are the tire piles less than 200 feet in length and 50 feet in width? If you store more than 400 tires, horizontal dimensions of the tire piles must be less than 200 feet long and 50 feet wide. Even if fewer than 400 tires are stored, it is recommended not to exceed these dimensions for safety reasons.
- Xii. Are the tire piles located more than 50 feet between piles and away from buildings and other structures? If you store more than 400 tires,

you <u>must</u> make sure that the piles are more than 50 feet apart and 50 feet away from structures. Even if fewer than 400 tires are stored, it is recommended to follow these guidelines for safety reasons.

- xiii. Are the tire piles located more than 200 feet from property lines? If you store more than 400 tires, per Regulation Part 5, you must make sure that the piles are more than 200 feet from property lines. Even if fewer than 400 tires are stored, it is recommended to follow these guidelines for safety reasons.
- xiv. Do you cover outside tire piles or provide for other mosquito control? If you store more than 400 tires, in accordance with Regulation Part 5, you must make sure that acceptable mosquito control measures are in place. Tires stored outside should be covered to prevent precipitation from accumulating since mosquitoes breed in stagnant water. During the warmer months, RIDEM-approved mosquito abatement techniques should be used. Any questions can be directed to the Mosquito Abatement Coordination Office at (401) 789-6280.
- XV. Do you store tires in a way that prevents fires and allows for fire control if needed? Tires, even in small piles, can pose a fire risk because the raw materials (rubber) used to make tires can burn under certain conditions. While unlikely for smaller piles, it is important that the piles can be easily accessible in the case that fires do start (easy access to water, removal of obstacles like weeds and objects).
- XVI. Do you have a soil stockpile and large capacity fire extinguishers on-site for firefighting purposes? Waste tire facilities must have, at a minimum, a soil stockpile with approximately 2000 cubic yards of soil available for each 4 acres of storage, and fully charged large capacity carbon dioxide or dry chemical fire extinguishers located in strategically placed enclosures throughout the entire facility in quantities as deemed necessary in the operating plan.
- **XVII.** Do you have sufficient surety or insurance to cover worst-case fires or other disasters? Due to the specific fire hazard that tires present, all Waste Tire Storage and Recycling Facilities are required to provide surety or insurance in an amount sufficient to cover the cost of handling the worst-case contingency identified in the contingency plan, or closure of the facility at its minimum capacity (whichever is greater).

xviii. Do you shred or cut tires into smaller pieces? If you shred tires, it is recommended that the pieces are 8 inches or less in length and the piles do not exceed 200 feet in length, 150 feet in width and 20 feet in height.

Section 3.H - Used Oil

Like fuel, used engine oil is one of the common fluids removed from motor vehicles. Proper management of recovered oil is subject to a range of different regulations depending on individual situations.

<u>RIDEM's Rule 1.16</u>, <u>Used Oil Management Standards</u>, in the <u>Rules & Regulations for Hazardous Waste Management</u>, referred to in this section, can be found at https://rules.sos.ri.gov/regulations/part/250-140-10-1.

These regulations governing used oil management are not as restrictive as those related to hazardous waste, but the new rules must be understood and complied with to avoid any regulatory problems. Under the new regulations, those who generate used oil only and do not generate hazardous waste would not be required to register with RIDEM (maintain an EPA Identification Number).

i. Is used oil stored in tanks or containers that are in good condition with proper spill control measures? Used oil must be stored in containers that are in good condition, free of severe rusting, corrosion or structural defects and liquid tight with no visible leaks. In the event that a container deteriorates and begins to leak, you must transfer the used oil to a container that is in good condition. RIDEM recommends that containers of used oil are stored with a containment system in order to prevent unexpected accidents or leaks which could contaminate the ground nearby. Secondary containment is required if you meet the definition of a "Used Oil Burner" or "Used Oil Processing Facility" as defined in Rule 1.16, Used Oil Management Standards, in the Rules & Regulations for Hazardous Waste Management. Examples of secondary containment includes placement of the containers on an impermeable surface such as concrete, surrounded by a berm that is high enough to capture 100% of the container capacity. Additionally, containers that are stored outside should be placed under a roofed structure, on an impervious surface, and protected from precipitation and flooding.

Also, Section 2.10 (Above Ground Storage Facilities) of the Oil Pollution Control Regulations applies to above ground oil storage tank facilities with a combined capacity of over five hundred (500) gallons. It is found at Oil Pollution Control Regulations (250-RICR-140-25-2) - Rhode Island Department of State

ii. Do you label the containers as "Used Oil"? It is a requirement to clearly and permanently mark any containers that store used oil with the words "Used Oil".

RECYCLE

- practice to mix used oil with other non-oil wastes? It is a poor management practice to mix used oil with other non-oil wastes. The mixing of hazardous waste with used oil is strictly <u>prohibited</u> unless the waste is hazardous only based on the characteristic of ignitability and the mixing is conducting to enhance the BTU value of the used oil. If you do mix different wastes, you are responsible for characterizing the waste and managing the mixture accordingly. Part of characterizing the waste may include having analytic analysis performed. For questions concerning sampling please contact the Office of Compliance and Inspection at (401)222-1360. The mixture may be classified as a hazardous waste, subject to applicable hazardous waste regulations and more expensive disposal costs.
- iv. If used oil filters are removed, are they properly managed by draining and proper recycling? To comply with used oil regulations, the used oil should be hot drained and the anti-drain valve punctured or cold drained and mechanically crushed to remove all used oil from the filter for recycling, and the filters processed for scrap metal reclamation with documentation of the recycling of the filters. The filters must not be contaminated by mixtures os used oil and any federal listed hazardous waste identified in 40 CFR Part 231 Subpart D. Please note that if used oil filters are not managed this way, the entire used oil filter must be managed as used oil and cannot be thrown out with the facility's solid waste.
- V. Please indicate how the recovered oil is stored. Per used oil regulations, the containers used to store used oil must be in good condition. Drums and containers holding used oil stored outdoors must be placed on an impervious surface and under a roofed structure.
- vi. Do you ship used oil to a re-refining, recycling, or disposal company? Used oil is managed under Rule 1.16 of RIDEM's Rules & Regulations for Hazardous Management. Under the used oil regulations, you are now able to store up to 1,320 gallons (24 drums) of used oil without a time limit. Any excess volume (over 24 drums) is required to be shipped off-site within 180 days of accumulation. In addition, you must also prepare a contingency plan that satisfies all the requirements of Part 1.7 and maintain the plan on-site for emergencies. You must also mark the containers holding excess used oil with the initial date upon which the excess used oil began accumulating in the containers. In most cases, a manifest will not be required to ship, when using a used oil transporter. However, you must maintain a record of each shipment (E.g., bills of lading). Also, you may self-transport up to 55 gallons

- of used oil to a used oil aggregation point owned by your company, a used oil (burning) or processing facility.
- vii. Do you use oil to suppress dust on your property? Applying used oil or oil-based chemicals to control dust blowing from unpaved areas <u>is strictly prohibited</u>, since the oil would likely contaminate the ground and adversely affect the environment. RIDEM regulations covering contaminated soil would apply and might place your facility in a non-compliant situation. If dust control is needed, there are environmentally safe suppressants which can be used.
- viii. Do you burn oil to heat your building? If the burner's BTU capacity is 1 million BTU/hour or greater, RIDEM Air Pollution Control Regulation Part 20 (Burning of Alternative Fuels) applies, and written approval from RIDEM is required. Under the used oil regulations, facilities such as auto salvage yards will be allowed to burn used oil on-site in burners with less than or equal to 500,000 BTU/hour capacity without a permit or registration. But for burners with BTU capacities greater than 500,000 but less than 1,000,000 BTU/hour, registration with RIDEM will be required. Call RIDEM/OCTA at (401) 222-4700 if you have any questions.
 - ix. Do you use used oil for any purpose on-site besides heating purposes?

 Besides heating, used oil should not be used for any other applications. If there is what you consider a legitimate use that does not threaten the environment and complies with all regulations, you should call RIDEM/OCTA at (401) 222-4700 to discuss the application.
 - X. How much used oil do you generate annually? This includes all used oil that you generate, including used oil that you burn on-site in waste oil burners as well as used oil shipped off-site for recycling or disposal.
 - How much used oil do you ship off-site annually? This includes only used oil that is generated at the facility that is shipped off-site for recycling or disposal.

Section 3.I - Wastewater Discharge

Process wastewater may be generated at auto salvage yards if car washing, parts cleaning or any other operation using water exists on-site. Depending on the location and wastewater discharge capabilities, different regulations may apply. See **Appendix E** for POTW (or Wastewater Treatment Facility) information.



- i. Is process wastewater generated by any of the following business activities (sanitary wastewater from toilets and hand washing is not considered process wastewater)? Typical operations at salvage yards that might use water and then generate wastewater include steam cleaning, power washing, flushing radiators, painting or degreasing. If you engage in any operations that use water and thus produce wastewater, you should continue with this section. If there are no water-based operations on-site, you can skip this section.
- ii. Do you manage any process wastewater as hazardous waste? In some instances, the resulting wastewater could be considered hazardous depending on the characteristics of the waste (pH, heavy metal content). You must properly characterize the wastewater to determine if it is hazardous. If so, all proper hazardous waste regulations should be followed (see Section 3.K). Most wastewater types are not usually considered hazardous waste, but there still may be a high enough level of contaminants that require proper handling as related to discharge to sewer, septic or ground.
- iii. Is any process wastewater treated or reused onsite? Wastewater management may include different options such as treating the water with technologies like filtration or evaporation. Also, reusing the water in the same or different application may be a possibility to minimize the amount of wastewater generated.
- iv. Is a floor trench or floor drain located in the facility? If a floor trench or drain exists, it is important to determine where the drain discharges to (ground outside, drywell, cesspool, leach field, sewer, septic system) and what could potentially be discharged (wastewater, other fluids). If an open drain or trench exists and if it is unknown where it discharges to, it is imperative that the discharge point be located immediately. You want to make sure that you have total knowledge of any process discharge from your facility.

- V. Does any process wastewater go into a drywell, cesspool, septic system, leach field, onto the ground outside or otherwise potentially impact groundwater? If any wastewater enters these locations, you must contact the RIDEM Office of Water Resources at (401) 222-3961 to determine whether a permit is needed. Any process wastewater discharge into the ground would most likely need to be checked by RIDEM.
- vi. Does any of your process wastewater go into a public sewer system? If any of the wastewater that comes from non-sanitary operations like pressure washing is discharged to a public sewer system, you would most likely need a permit from the local POTW (publicly-owned treatment works) that treats your sewer water. Depending on the nature of the wastewater, you may also need to pre-treat the water using some type of separation system to meet sewer discharge regulations. For example, oil & grease is typically regulated at 100 mg/l; the water that is discharged to sewer must contain oil & grease levels under 100 mg/l. There are other parameters like pH, heavy metals and organics that need to be monitored. You should contact your local POTW to find out what requirements pertain to sewer discharge.
- vii. Is any process wastewater discharged into surface waters including a stream, river, waterway, pond, lake or wetland? In order to discharge any wastewater to a natural river way, RIDEM Office of Water Resources must be informed and a special permit (RIPDES) is required. Any release of process wastewater into a natural waterway without the proper permits, whether intentional or unintentional, is a violation and subject to serious penalties.
- viii. Do you have any process wastewater shipped off-site for disposal or reclamation by an outside contractor? If wastewater is shipped off-site, you need to first determine whether the wastewater is hazardous or not (see Section 3.K). If it is deemed hazardous, proper storage and shipping procedures must be followed. If it is not hazardous, you still need to make sure that proper containment is used, and that the outside contractor removes and transports the wastewater in a safe and reliable manner.

Section 3.J - Stormwater Management

All salvage facilities should be concerned about how rain and snow can possibly transport potential pollutants from their property to the environment. Because many items (cars, parts) are usually stored outside without cover, it is important to ensure that all fluid is properly contained, and leaks eliminated. It is also important to implement "Good Housekeeping Measures", to reduce or eliminate the exposure of activities such as fluids removal, dismantling and crushing, to precipitation.

- i. At your site, are there any of the following: above-ground outdoor storage tanks, hazardous waste storage area, outdoor construction activities? All tanks, storage areas and construction activities should be closely monitored to ensure that no spills or leaks occur that could potentially allow the transport or spread of contaminated material into the environment.
- ii. Does your site generate a point source of stormwater discharge? As defined in the Regulations for the Rhode Island Pollutant Discharge Elimination System "RIPDES Regulations", which is found at http://www.dem.ri.gov/programs/water/permits/ripdes/,

 A "point source" means "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, from which pollutants are or may be discharged." Point source discharges to waters of the State are regulated by the RIPDES Program in the RIDEM Office of Water Resources and require a permit.
- iii. Does precipitation (rain/snow) or runoff come into contact with any of your business activities or materials? Any materials stored outside without protective cover will be exposed to precipitation and/or runoff, which could result in the contamination of runoff. It is important that no materials leak, wash away or dissolve as a result of exposure to precipitation. In addition, any activities performed on-site, such as fluids removal, crushing, shredding or dismantling of vehicles prior to transport to a recycling facility, etc. may also produce contaminants that may be harmful if exposed to runoff. Good Housekeeping Measures and Best Management Practices (BMPs) are essential for these sites.
- iv. (a). Does the stormwater discharge directly to a surface water (wetland, pond, river, cove, etc.)? As per the RIPDES Regulations, "Surface Water" is defined as "any waters of the State, which are not groundwater." Any point source discharges to surface waters or wetlands

are regulated by RIDEM and require a permit from the RIPDES Program. (Please be aware that some facilities and activities may be subject to permitting by other RIDEM and CRMC regulations.)

- (b). Do you collect stormwater by pipes or swales, channels, etc., and discharge directly to groundwater by either a surface basin or an Underground Filtration Practice (UIC?)? The owner of a stormwater system that infiltrates stormwater from an auto salvage yard and has been operating without a department approval shall submit to the director an application for a Stormwater Discharge System Registration. Please contact DEM Office of Water Resources Stormwater Program for information and requirements (401-222-3961).
- V. Does the stormwater discharge directly to a municipal stormwater collection system? Any stormwater discharge to a municipal stormwater collection system is considered a point source discharge and requires a stormwater permit (i.e. a Multi-Sector General Permit) from the RIDPES Program. In addition, you may need to seek authorization from the municipality or owner of the system.
- vi. Does the primary activity at your facility meet one of the following definitions (SIC 5015, 5093)? If the primary activity at your facility meets either of the above definitions, your activities are considered "Industrial" activities. Any point source stormwater discharges to waters of the State from the industrial areas of your facility require a stormwater permit from the RIPDES Program at RIDEM. Seek coverage under the Multi-Sector General Permit if applicable.
- Vii. Have you completed and submitted a Stormwater Permit Application (RIPDES) to the Rhode Island Department of Environmental Management? Most facilities can seek coverage under the "Multi-Sector General Permit: RIDPES Storm Water Discharge Associated with Industrial Activity (Excluding Construction)". To meet the requirements of the Multi-Sector General Permit, every facility needs to develop and implement a Storm Water Management Plan (SWMP), which specifies the steps a facility will take to identify potential sources of pollution, prevent spills and leaks, implement regular inspections, train employees, manage runoff, and minimize exposure of hazardous materials to precipitation and runoff.
- viii. Have you completed and submitted a "No Exposure Certification Exclusion" or a "No Discharge Certification" form to the Rhode Island Department of Environmental Management? RIPDES permit coverage is

not required for discharges of stormwater associated with industrial activities identified in RIPDES Regulations 250-RICR-150-10-1 part 1.4(a)(111)(f) if the discharger can certify that a condition of "no exposure" exists at the industrial facility or site. The No Exposure Certification Exclusion Form and No Discharge Certification are intended to "self-certify" that a condition of "no exposure" or "no discharge" exists at your facility or site. A condition of "no exposure" exists at an industrial facility when all industrial materials and activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowfall and/or runoff. A condition of "no discharge" exists when stormwater from the facility does not discharge to a separate storm sewer system or waters of the state. See RIDEM's website to view instructions on how to apply for a No Exposure Certification or No Discharge Certification:

https://dem.ri.gov/environmental-protection-bureau/waterresources/permitting/ripdes/ripdes-electronic-reporting

- ix. Are there any air particulates that are emitted from your facility, which could end up on the roof or other surfaces and impact stormwater? Very small fragments of solid materials or liquid droplets suspended in air are called particulates; soot as a product of combustion, as well as air borne by-products associated with crushing or shredding are examples of air particulates. Typically, roof runoff can be considered uncontaminated unless it mixes with other contaminated runoff on the ground or unless specific processes, which may include activities associated with auto recycling (i.e. crushing, shredding, etc.), produce airborne contaminants. If roof runoff is contaminated or is allowed to mix with other contaminated runoff, it will need to be properly managed.
- X. Are all of your business activities/materials that can impact stormwater located under a roof or tarpaulin? Some examples of activities/materials include fluids removal and storage, as well as crushing and dismantling. It is important to minimize exposure of materials and pollutants with stormwater to reduce treatment requirements and non-compliance liabilities.
- xi. Are all business activities that can cause a spill or leak conducted on an impermeable surface where spills/leaks are cleaned up promptly? The intent is to prevent the transport of any potentially dangerous or hazardous materials from coming in contact with precipitation, runoff, soil or groundwater. In addition, be sure there are no drains that could transport any possible spills or leaks to the ground, surface waters, wetlands, or otherwise mix with stormwater without proper treatment.

- Xii. Are all materials that are susceptible to a spill or leak located on an impermeable surface where spills/leaks are cleaned up promptly?

 Storing materials and fluids on an impermeable surface such as concrete or pavement allows drips, spills and leaks to be detected easily during inspections and cleaned up promptly (i.e. before the next rain event) to prevent soils from being impacted. Not only is it important to ensure Good Housekeeping Measures are in place to clean up any spills or leaks, but it is equally important to ensure that if stormwater comes in contact with these pollutants, an effective system is set up to prevent the transport of pollutants and facilitate proper clean-up.
- xiii. Do you crush or shred any non-automotive waste streams (discarded appliances, misc. scrap metal, empty transformer casings, etc.)? If you perform these activities at your facility, you may be subject to requirements and regulations for Sector N: Scrap Recycling Facilities (SIC 5093) in addition to Sector M: Automobile Salvage Yards (SIC 5015) in the RIDPES Multi-Sector General Permit. Non-automotive waste streams may need to be handled differently than automotive waste streams. For example, appliances may contain mercury switches and old transformer casings may be contaminated with PCBs. If a facility handles these waste streams, BMPs should be implemented to prevent cross-contamination of the scrap materials. See EPA's website for compliance assistance: https://www.epa.gov/npdes/industrial-stormwater-fact-sheet-series
- xiv. Do you treat stormwater? Best Management Practices (BMPs), such as detention basins, oil/water separators, filtration units, swirl concentrator units (such as Aqua-Swirl, Stormceptor, Vortechnics, etc.), deep-sump catch basins, infiltration devices with pretreatment, etc., can be used to manage and treat stormwater on-site. BMP selection is dependent upon the type of pollutant sources present at the site. This treatment is part of a facility's Storm Water Management Plan, which is required by a RIPDES stormwater permit from RIDEM.
- XV. Do you reuse stormwater? Some facilities may have processes that collect and reuse stormwater. If yours is one of them, we would like to know what you use it for in addition to what treatment it receives either before or after reuse.

- xvi. Does any of your stormwater ultimately enter a public or private sewage disposal system? Typically, stormwater is not allowed to discharge into a sewage disposal system, unless your facility discharges stormwater into a Combined Sewer Overflow (CSO), which is a system designed to mix both sewage and stormwater. If this is the case with your facility, you may be exempt from RIDEM permitting, but you will need to be authorized by the owner of the CSO. If your stormwater enters an ISDS or other underground sewage disposal system, you may be subject to regulation by the ISDS and/or UIC Programs at RIDEM in addition to the RIPDES Program.
- xvii. Do you follow a written plan such as a Stormwater Management Plan; Best Management Practices Plan; EPA Spill Prevention, Control and Countermeasure Plan or Environmental Management System to manage stormwater? As part of the Phase II EPA requirements and in order to meet the requirements of the Multi-Sector General Permit from the RIPDES Program, each industrial facility is required to develop and implement a plan to manage and treat stormwater (i.e. a SWMP). If you do not already have a plan in place for your facility, you will need to create one in order to comply with the state and federal regulations. Guidance to assist you with this task is found at http://www.dem.ri.gov/programs/water/permits/ripdes/stormwater/industr

ial.php.

xviii. Have you sampled and analyzed your stormwater discharges, conducted quarterly routine facility inspections, completed quarterly visual monitoring of your stormwater discharges, conducted annual comprehensive site evaluations and submitted to RIDEM Annual Reports and Discharge Monitoring Reports (DMRs)? As part of your RIPDES permit industrial facilities are required to conduct quarterly visual inspections of the facility's stormwater discharges, quarterly routine facility inspections of all areas of where industrial materials or activities are exposed to stormwater, and of all stormwater control measures. Checklists for conducting these inspections is found in Appendix D, Attachments 4 and 5. The permit also requires: a comprehensive site evaluation, the preparation and annual submission to RIDEM of an Annual Report, and sampling of stormwater discharges and the submission to RIDEM of results. See RIDEM's Industrial stormwater webpage for Record Keeping and Recording and Annual Report templates:

http://www.dem.ri.gov/programs/water/permits/ripdes/stormwater/industrial.php

Section 3.K - Hazardous Waste

As a business owner, you must manage your hazardous wastes in a safe and environmentally responsible manner. Federal and State regulations place the burden on you, as the generator, to properly dispose of the waste. The generator has "cradle-to-grave" responsibility (i.e., you retain responsibility even when other companies handle and dispose of your waste). By choosing products that are less hazardous, and minimizing the amount that you you can reduce your cradle-to-grave liability. If your facility does not



products that are less hazardous, and minimizing the amount that you generate, you can reduce your cradle-to-grave liability. If your facility does not generate hazardous waste, this section can be skipped. RIDEM's *Rules & Regulations for Hazardous Waste Management*, referred to in this section, can be found at: https://rules.sos.ri.gov/regulations/part/250-140-10-1.

- i. Does your facility generate hazardous waste? While many materials that are removed from vehicles can be considered potential pollutants and are toxic, how the recovered items are managed often dictates whether they are hazardous or not. For example, lead acid batteries can be sent out to a recycler and are therefore not regulated as hazardous waste. However, if the batteries are sent to a disposal facility, the batteries must be managed as a hazardous waste or universal waste. Any wastes sent to a disposal facility must be characterized to determine if the waste is hazardous.
- ii. Regarding all your waste streams, do you have appropriate documentation or process knowledge that supports your hazardous waste determination? As a generator, you are required to determine whether your wastes fall into any of these three categories: 1) listed by EPA in 40 CFR 261 Subpart D; 2) exhibits a characteristic as detailed in 40 CFR 261 Subpart C (ignitability, corrosivity, reactivity, toxicity); or 3) they meet the description of a Rhode Island Hazardous Waste as listed in Section 1.5 of the RI Rules and Regulations for Hazardous Waste Management. You can make this determination by using your knowledge of the process and materials, including available information like Safety Data Sheets (SDSs), or by testing a representative waste sample. A licensed waste transporter, environmental lab, or RIDEM/OCTA can help you characterize your waste for proper disposal. If changes in your materials or process cause your waste to change, then you are required to re-evaluate it to ensure proper handling and disposal. Generators are regulated based on quantities generated per month as abbreviated below.

Generator Type	Quantity
Conditional Exempt Small Quantity Generator (CESQG)	220 lb/month (100 kg) or less;
Small Quantity Generator (SQG)	≥220 (100 kg) to <2,200 lb/month (1,000 kg)/month
Large Quantity Generator (LQG)	2,200 lb (1,000 kg)/month or more

Some transporters and disposal facilities may also require you to reevaluate your wastes each year. You must keep records of waste analyses to confirm your identification and characterization of wastes. The lead acid batteries, for example, would be a hazardous waste or universal waste if *disposed of* rather than recycled, because of the presence of acids (corrosivity) and lead (toxicity). The generator shall also notify the Department of any changes in generation status. Please contact RIDEM/OCTA at (401) 222-4700 if you are not sure whether or not you generate hazardous waste.

iii. If you generate hazardous waste, do you have an EPA (generator) identification number? In order to properly handle hazardous waste, you must have an EPA hazardous waste identification number that is used in all documentation and manifests. An auto salvage facility must not generate, store, or offer for transportation, hazardous waste without having received an EPA identification number. If you do not have one and intend to manage any of your waste as hazardous, you must complete a "Notification of Regulated Waste Activity" application form, which can be found on RIDEM's web site at:

http://www.dem.ri.gov/programs/benviron/waste/pdf/epaidno.pdf. If you need assistance in completing the form, please call the RIDEM Office of Compliance & Inspection (OCI) at (401) 222-1360. Shops also must not offer hazardous waste to commercial transporters or to treatment, storage, or disposal facilities that have not received an EPA identification number. In addition, the Transporter must have a valid RI Hazardous Waste Transporter Permit as indicated by an official sticker on the vehicle.

iv. Do you have proper documentation (manifests) which shows where your hazardous waste is being shipped? A manifest is a six-copy document designed to track your hazardous waste shipment. It is the generator's responsibility to make sure that the manifest is accurate, even if it is filled

out by the transporter for you. You should maintain the Generator copies of the manifests for three (3) years. All hazardous waste in Rhode Island must be shipped on a manifest form. However, for used automotive oil and universal waste, the transporter may use a bill of lading or other document, in which case, the generator does not have to send anything to RIDEM. You should maintain these documents for three (3) years. Additional information on manifests can be found at:

https://www.epa.gov/hwgenerators/hazardous-waste-manifest-system

- v. Are all containers kept closed when not in use? All hazardous waste containers <u>must</u> be closed except when actively adding or removing waste.
- vi. Do you recycle hazardous waste on-site? In some cases, it may be cost-effective to recycle some wastes on-site to save on costs and reduce the amount of hazardous waste generated and shipped off-site. For example, if you use solvents to clean parts and you generate a significant amount of waste solvent, it may be worth investigating the use of recycling equipment to clean and reuse chemicals on-site. You can call RIDEM/OCTA if you have questions about recycling hazardous waste.
- vii. How much hazardous waste do you ship off-site annually? The amount of hazardous waste that is produced can help to determine what kind of storage system you should use. There are three options that you can use: satellite accumulation, 90-day storage for a LQG, 180-day storage for a SQG, 365-day storage for a CESQG, or both. More information about the different options is explained below. You can call RIDEM/OCTA to obtain advice on which option is best, based on the amount of hazardous waste generated.
- viii. Where is your hazardous waste being stored (satellite accumulation area, 90-day (LQG), 180-day (SQG), 365-day (CESQG) storage area, or both)? There are different options for storing hazardous waste. If small amounts of hazardous waste are accumulated, it may make sense to set up a satellite accumulation area, or workstation accumulation. If large amounts are generated, a 90-day (LQG), a 180-day (SQG), or a 365-day (CESQG) storage area is needed to properly manage the larger volumes of waste.

In the case in which certain wastes are continuously generated (such as mineral spirits used in a parts cleaner), the drum or container holding the chemical can be stored in a satellite accumulation area until a hauler removes the waste for off-site disposal, provided that the total volume of hazardous

waste is less than fifty-five (55) gallons, regardless of the waste stream. The satellite <u>container must be stored at or near the point of generation</u> and be under the control of the operator that generates the waste.

ix. If you have a satellite accumulation area, please see below:

- a. Is the area clearly marked and the container(s) properly labeled with the words "Hazardous Waste" and what the contents in the container(s) are? The containers have to be labeled "Hazardous Waste", along with words that identify the contents. Labeling requirements for wastes stored in 90/180/365- day storage areas are outlined below.
- b. Is the container under control of the operator and at or near the point of generation? The satellite container must also be in good condition, and under the control of the operator of the process that generates the waste, at or near the point of generation. The maximum that can be stored in this manner is fifty-five (55) gallons. You should make sure that the container is protected, and although not required, maintain adequate spill control through measures such as providing secondary containment.

x. <u>If you have a 90/180/365-day hazardous waste storage area, please</u> see below:

- a. Are containers/tanks labeled with the words "Hazardous Waste"?
- b. Does the label include the Generator's name, facility address and EPA Identification Number?
- c. Are containers labeled with the chemical or common name of the waste?
- d. Are containers/tanks labeled with the date upon which the waste first began to accumulate in excess of satellite accumulation?
- e. Are all containers/tanks in good condition? If a container or tank holding hazardous waste is not in good condition, or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition or manage the waste in some other way that complies with the requirements of this part. You must inspect the waste containers weekly, excluding satellite accumulation containers, keep the containers closed when not in use, and have special spill kits readily available.

The Shipping Label

At the time that the container is being prepared for shipment offsite, it must have the "EPA Marking" and "DOT Hazard Label" placed on it. As stated above, for hazardous waste containers, the following must be present on the label (EPA marking) prior to shipping the container offsite: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency. The Generator's name and address must be placed on the label, as well as the waste name, associated waste code(s), hazard classification, and the accumulation start date. The accumulation start date is important, since you have 90 days as an LQG, 180 days as a SQG or 365 days as a CESQG, from that date to ship the waste. Environmental laboratories and aids such as Safety Data Sheets (SDS) can help you to determine whether the waste is hazardous, and if hazardous, what the waste codes are and the hazardous classification. A sample of the EPA Hazardous label and the DOT Hazard label are shown below:

HAZARDOUS WASTE- Federal Law
Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S.
Environmental Protection Agency.
The Generator's Name and Address: Generators phone # EPA ID #
Generic Waste Shipping Name:

EPA Label

Hazard:

EPA Waste Code:__ Date of Containerization: Manifest Document Number:

CLA	SS 3	A		
		M		
<	FLAM	MABLE I	LIQUID	
	1	3		
		V		
Flamn	able liqu	id		

DOT Hazard Label

f. Is the storage area itself secure and protected from stormwater? EPA and RIDEM are implementing programs to more closely regulate stormwater runoff from all auto salvage facilities. Even if your facility has already been inspected by RIDEM and deemed not to need a stormwater permit (no point discharge), it is important to make sure that all hazardous waste containment is not exposed to precipitation (it should be inside a structure or outside with adequate cover). Any leaks that could potentially be in contact with stormwater can contaminate the ground (creating another type of hazardous waste) and affect groundwater supplies. Secondary containment is also required to help contain any leaking waste.

g. Does the hazardous waste that is stored in tanks have proper secondary containment?

LQG requirements for accumulation of hazardous waste in tanks:

The area in which hazardous wastes are stored in tanks must have a secondary containment system for hazardous waste stored in tanks, which is capable of containing a leak or a spill. This containment must be designed and operated as follows:

- A base must underlie the containers, that is free of cracks or gaps, and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;
- 2. The base must be sloped, or the containment system must be otherwise designed and operated, to drain and remove liquids resulting from leaks, spills, or precipitation away from containers, unless the containers are elevated (for example, on wooden pallets) or are otherwise protected from contact with accumulated liquids;
- 3. The containment system must have sufficient capacity of one hundred percent (100%) of the volume of the design capacity of the largest tank. Containers that do not contain free liquids do not need to be considered in this determination:
- 4. Run-off (for outdoor storage areas) into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in # 3 above, to contain any run-off that might enter the system;
- 5. Spilled or leaked waste and accumulated precipitation must be removed from the floor sump or collection area in a timely manner that is necessary to prevent overflow of the collection system. If the collected material is a hazardous waste, it must be managed as a hazardous waste in accordance with all applicable regulatory requirements;
- Floor drains that discharge to the sub-surface, sewer system, or direct to a waterway are strictly prohibited.

SQG requirements for accumulation of hazardous waste in tanks:

SQGs must provide secondary containment for tanks as described above unless the generator inspects the tank systems once each operating day and maintains a written record of each inspection. The inspection shall include at least the following:

- 1. Overfill/spill control equipment (e.g., waste feed cutoff systems, bypass systems and drainage systems) to ensure they are in working order.
- 2. Visual inspection of the aboveground sections of a tank for signs of corrosion or release of waste.
- 3. The construction materials and area immediately surrounding the tank system's discharge confinement structures, if any, looking for signs of corrosion and for signs of a release of hazardous waste.
- 4. Any and all monitoring equipment that is part of the tank system to ensure that it is operating properly.
- 5. The level of the waste in the tank to ensure at least 2 feet of freeboard.

Please note: CESQGs are <u>not</u> permitted to store hazardous waste in tanks.

- h. Are containers kept closed except when removing/adding waste? Facilities should ensure that containers are closed except when it is necessary to add or remove waste. Items such as funnels with lids, or simply securing the drum cap (bung), etc., can be used. Funnels must be secured with a locking mechanism and have a gasket to prevent releases of VOCs. Consider posting instructions in the area.
- i. Do you inspect the storage area weekly (containers) or daily (tanks) and is this inspection documented (written records)? For the 90-day (LQG), 180-day (SQG), 365-day (CESQG) hazardous waste storage area, regulations require that a weekly inspection for leaks or deterioration of containers and/or a daily inspection for tanks be performed, using the checklist on the following page. You should keep all records for at least three (3) years; keeping them in a designated binder is an easy way to store them and find them if necessary.

Please note: CESQGs are <u>not</u> permitted to store hazardous waste in tanks.

Figure 1 provides a sample hazardous waste storage area inspection checklist.

Figure 1: Hazardous Waste Storage Area Inspection Checklist

Weekly (containers) or Daily (tanks) Inspection	on Checklist and Record for
	(facility name)
Name/Title of Inspector:	Date and Time of Inspection:
Area(s) Inspected:	Number of Full Containers:
Are All Containers/Tanks Closed:	
Condition of Containers/Tanks: (Do containers/tanks show signs of leakage? been damaged?)	Is there deterioration due to rust? Have containers
Condition/Integrity of Containment Area:	ıkage? Have berms or other containment device
Is there sufficient aisle space between rows	of drums (At least three feet)?
Are ground-wires in place for ignitable wastes	(Note condition of wires as well)?
Is there evidence of spilled material?	
If there was a spill, list remedial action taken replaced):	(Example: Spill was cleaned and leaking drum was
Are drum labeling requirements satisfied?	
Additional remarks or actions to be taken:	

Record this inspection on an inspection log and keep these records for at least three (3) years from the date of inspection.

xi. Are you shipping your hazardous waste off-site according to the 90/180/365-day storage time limit? You have 90 days for a LQG, 180 days for a SQG or 365 days for a CESQG to ship the waste off-site from the date written on the hazardous waste label. While satellite accumulated waste has no storage time limit, as soon as the volume of accumulated hazardous waste reaches fifty-five (55) gallons, the container must be moved to the 90/180/365-day storage area within three (3) days, the container must have the proper labeling and all other requirements for 90/180/365-day storage area must be met. The container must be shipped offsite within 90 days for a LQG, 180 days for a SQG and 365 days for a CESQG to a licensed treatment facility. An alternative to this situation is to keep a close eye on satellite accumulated waste and arrange for shipment prior to the volume reaching fifty-five (55) gallons.

xii. If the 90/180-day storage area contains flammable hazardous waste, please see below;

- i. Is the area separated from sources of ignition?
- II. Are "No Smoking" signs posted in the area?
- iii. Is the area located at least 50 feet from the property line?
- iv. Are drums of ignitable waste electrically grounded?

You must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. The waste must be separated and protected from sources of ignition or reaction, including but not limited to: open flames, smoking, cutting, welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (eg. from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to special designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste. Typically, auto salvage yards may generate ignitable waste, such as gasoline. Drums containing ignitable wastes must also be electrically grounded.

- xiii. Does your facility contain and maintain (per manufacturing specification) emergency equipment designed to help reduce the possibility of an explosion, fire or accidental release of hazardous materials? Your facility must be maintained in order to minimize the possibility of a fire, explosion, or unplanned release of hazardous waste constituents. Your facility must have the following:
 - 1. An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.
 - 2. A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police and fire departments, or State and local emergency response teams.
 - 3. Post next to any and all phones in the vicinity of the HW storage areas: the name and phone number of the emergency response coordinator, phone number for the local fire department, the DEM day & 24-hour phone numbers, the NRC number and company's environmental contractor.
 - 4. Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment. Clearly mark the location of fire extinguishers, spill control equipment and fire alarms (if present) and post the location of these items next to all phones near the HW storage area.
 - 5. Water at adequate volume and pressure to supply water hose streams, foam producing equipment, or water spray systems.

 Adequate water pressure can be determined during the annual sprinkler test required by OSHA and local fire departments.
 - 6. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency. Spill control equipment shall also be maintained at or near all areas where hazardous waste is generated and stored at the facility.

- 7. Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee.
- 8. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.
- 9. The owner or operator must attempt to make arrangements to familiarize local police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, and possible evacuation routes in accordance with 40 CFR 265.37. (Note: In cases in which more than one police or fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority, should be obtained).
- 10. The owner or operator must attempt to make arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility, and the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.
- 11. Regarding # 8 and # 9 above, if State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating records of the facility.
- Xiv. If applicable, does your facility have a site specific <u>written</u>

 Contingency Plan designed to help reduce hazards associated with the possibility of an explosion, fire or accidental release of hazardous materials? Large Quantity Generators of hazardous waste must have a written contingency plan designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned release of hazardous waste to air, soil, or surface water. The plan should outline specific steps that company personnel will take in response to

emergencies. To help auto salvage yard facilities develop their contingency plans, a guidance document has been included as **Appendix A**, to assist you in the development of a Contingency Plan. This guidance is to be used for guidance only; you should not fill in the blank spaces and use it as your Contingency Plan. Once developed, this plan is required to be submitted to local emergency response providers. Should the response providers be unwilling to make arrangements with you, document this in the operating records of the facility.

In the development of this plan, you must designate an emergency coordinator. Should an emergency arise, the emergency coordinator must be prepared to act quickly to protect employees, emergency response personnel, and the environment. Also, evacuation routes should be posted, along with exit signs, in areas where hazardous wastes are handled or stored. Please contact RIDEM/OCTA at (401) 222-4700 if you have questions about Contingency Plan requirements.

- XV. Has this plan been submitted to local emergency response providers? See k. above.
- XVI. Does your facility have an employee training program that teaches them proper hazardous waste management procedures, including how to implement the contingency plan?

LQGs and SQGs requirements for annual personnel training:

Personnel working with or otherwise managing hazardous waste at the facility of a generator engaging in 90-day hazardous waste accumulation for LQGs and 180-day for SQGs must successfully complete a program of classroom instruction or on-the-job training that teaches them hazardous waste management procedures that are relevant to the positions in which they are employed. The program must be directed by a person already trained in hazardous waste management procedures, and must include instruction that teaches the following to employees that deal with hazardous waste:

 Definition of each category of hazardous waste including characteristic and listed wastes:

- Knowledge of all wastes generated at your facility and description (hazardous vs. non-hazardous);
- Management of all applicable types of hazardous waste storage (tanks, containers, drip pads, etc.) and explanation of satellite accumulation vs. 90/180-day accumulation;
- Labeling requirements;
- Accumulation time limit and requirement to mark containers/tanks with accumulation start dates;
- Tank/container inspection requirements;
- Hazardous waste manifest requirements;
- Preparedness and prevention requirements of 40 CFR 265 subpart C, and;
- Implementation of the Hazardous Waste Contingency plan designed for your facility.

The training program must also be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

- Procedures for using and maintaining emergency and monitoring equipment;
- Operation of any continuous waste feed cut off systems
- Communications or alarm, systems;
- Response to fires or explosions;
- Response to groundwater contamination incidents;
- Operation of any waste feed cut-off systems, and;
- Shutdown of operations.

Facility personnel must successfully complete the program within six (6) months of entering a position which involves hazardous waste generation or management. Employees must not work in unsupervised positions until they have completed the training requirements. In addition, LQGs must provide facility personnel with an annual review of the initial training.

Exemptions:

SQGs or LQG who manage their hazardous waste in satellite accumulation only are not required to provide training to personnel provided that they maintain compliance with the satellite accumulation requirements found in Rule 1.7.8 of the RI Rules and Regulations for Hazardous Waste Management.

CESQGs are <u>not</u> required to provide hazardous waste training.

- xvii. Does your facility have records indicating that an employee training program is occurring? Regarding this training, the Generator must maintain the following documents and records at the facility:
 - The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
 - A written job description for each position;
 - A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position;
 - Records that document that the training or job experience required has been given to, and completed by, facility personnel.

Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three (3) years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

XVIII. List the type(s) of hazardous waste generated at your facility You should list all the hazardous wastes that are generated at your facility.

More information on Hazardous Waste Management can be obtained from the Hazardous Waste Compliance Workbook for Hazardous Waste Generators posted on RIDEM's website at https://dem.ri.gov/environmental-protection-bureau/customer-and-technical-assistance

Section 3.L - Other Fluid Management

This section is intended to cover any fluids not covered in earlier sections.



Storage and Inspection

- i. Do you store all new liquids indoors?
- ii. Do you store all new liquids outdoors under a roof?
- iii. Do you store all liquid wastes in leak-proof containers?
- iv. Do you store the waste containers indoors?
- v. Do you store the waste containers outdoors under a roof?
- vi. Do you inspect the containers and storage areas often for leaks and spills?

It is good management practice to store all liquids and wastes either indoors or at least under a roof, to avoid contact with precipitation. Any leaks would be better controlled and managed if the containers are in good condition and not potentially exposed to the outside environment. You should frequently check all fluid containers to make sure that there are no leaks or spills.

- vii. Are all containers clearly labeled with the proper information identifying the contents? Whether the containers containing liquids are new chemicals, solid waste or hazardous waste, there should be clearly-marked labels that identify the contents. It is important to avoid mixing of incompatible chemicals and the use of the wrong chemical or solution in a particular operation. In the case of hazardous waste, regulations require specific labeling.
- viii. If any vehicles are crushed on-site, is any resulting residual liquid waste properly managed? Though all fluids have been drained prior to crushing, there may still be some fluids that drain out from the crushed vehicle. Most crushers are equipped with catch basins to capture residual fluids. You should make sure that the fluid does not drip onto the ground and is properly contained. The captured fluid may or may not be hazardous, so you need to characterize the waste and manage it accordingly. If an outside

contractor crushes your vehicles and takes away the recovered fluid, the facility is still the Generator of the fluid and is responsible for proper recycling or disposal. This should be addressed in the contract agreement with the outside contractor.

- ix. Is all windshield washer fluid re-used, recycled, or otherwise managed for proper off-site disposal? It is good management practice to recover unused windshield washer fluid from old vehicles. This washer fluid can be re-used on-site or sent off-site for disposal. If not removed, the fluid can leak out of the vehicle when it is crushed and most likely come into contact with oil-laden parts, contributing to the residual waste mentioned in (viii) above.
- **X.** Is brake fluid disposed of properly? Brake fluid is typically managed and disposed of as a hazardous waste.
- Xi. Excluding used oil or fuel, do you store any chemicals or fluids in tanks: If you store any fluids other than used oil or fuel in underground or aboveground tanks, you may need to contact RIDEM/OCTA to determine if any additional regulations or permits apply.

Section 4.0 - Worker Health & Safety Information

As noted earlier in this workbook, this program does not cover certification of the Occupational Safety & Health Administration (OSHA) worker health and safety requirements. Helpful information to assist in complying with OSHA requirements can be found on the OSHA website at http://www.osha.gov.

Non-regulatory OSHA Compliance Assistance can be obtained from the Rhode Island Department of Health's OSHA Consultation Program. The program offers on-site and off-site health and safety technical assistance at no cost, and can be reached by calling RIDOH at (401) 222-7745 or by visiting their website at: https://health.ri.gov/programs/detail.php?pgm_id=24. Information provided such as business/owner name, and detailed work practices, will be kept strictly confidential. This service is free, confidential, and without fines/penalties for any non-compliance. Training, sampling, evaluations, and monitoring are also offered without charge.

The requirements of the Occupational Safety & Health Act do not apply to self employed persons, or sole proprietors with no employees. But in any case, these persons are still encouraged to review good health and safety practices promoted in the OSHA requirements.

More information on this topic can also be obtained from federal OSHA at (401) 528-4669, or the Rhode Island Committee on Occupational Safety & Health (RICOSH) at (401) 751-2015.





APPENDICIES



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Appendix A

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF COMPLIANCE AND INSPECTION

HAZARDOUS WASTE CONTINGENCY PLAN GUIDANCE (Guidance Only)

The Rhode Island Rules and Regulations for Hazardous Waste Management requires that hazardous waste generators who engage in 90-day hazardous waste accumulation must prepare a formal written plan outlining specific steps that company personnel will take in response to spills, fires, and explosions or any unplanned release involving hazardous wastes or hazardous waste constituents which could threaten human health or the environment. This rule references 40 CFR 265 Subparts C and D of the Code of Federal Regulations. This guidance was developed by the Department to assist companies in developing a good, thorough, and easy-to-read plan for use during an emergency involving hazardous waste. Although contingency plans are site-specific and can be of various levels of detail, this information may be useful as a general guide. Please note that the contingency plan guidance is not necessarily all-inclusive, and that the Department requires that the preparer address all of the items in 40 CFR Subparts C and D.

Please contact the Office of Compliance & Inspection at (401) 222-1360 if you have specific questions regarding this guide or any other questions related to hazardous waste management.

INDEX/CONTENTS OF PLAN

- 1 Emergency Coordinators
- 2. Emergency Procedures
- 3. Emergency Equipment
- 4. Evacuation Routes
- 5. Facility Site Diagram
- 6. Arrangements with Local Authorities

EMERGENCY COORDINATORS

The emergency coordinators listed in this section are authorized to act as on-scene coordinators and to commit the necessary resources during an emergency. At all times, there is at least one coordinator (primary or alternate) either on the company premises or on-call. The coordinators must be familiar with all aspects of the contingency plan, all operations and activities at the company, the locations and characteristics of wastes handled, the location of all company records, and the physical layout of the company. The emergency coordinator will take all reasonable measures to ensure that fires, explosions, and/or releases do not occur, recur, or spread to other areas in the company. These measures shall include, where applicable, stopping processes and operations, collecting, and containing released waste, and removing or isolating containers.

The coordinators are as follows:

separate enclosure.

Primary Coordinator:
Name:
Address:
Phone number (work/home):
Alternate Coordinator:
Name:
Address:
Phone number (work/home):
Note: Qualifications of the emergency coordinators should be included in a

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EMERGENCY PROCEDURES

During an emergency, the emergency coordinator shall perform the necessary actions to insure a timely and appropriate response. The coordinator shall choose the order and applicability of the following actions, based upon the situation and the hazardous waste or hazardous waste constituents involved:

- 1. Identify and assess the situation (source, health, and environmental impact),
- 2. Activate alarm to notify all company personnel,
- 3. Evacuate the facility, if necessary,
- 4. Determine action to be taken (e.g. containment, absorption),
- 5. Oversee the cleanup throughout its entirety.
- 6. Within 15 days after the incident, emergency coordinator must submit written report on the incident to the RIDEM and the EPA Regional Administrator.

Note: Emergency procedures should be a step-by-step, site-specific plan that would be implemented in the event of an emergency. A detailed description of actions to be taken by company personnel during an emergency should be included.

EMERGENCY EQUIPMENT

The following equipment should be found in good condition at the company. Include the physical description and capabilities of each item:

EQUIPMENT PHYSICAL DESCRIPTION AND CAPABILITIES

Alarm system

Communication Systems

Fire Extinguishers

Sprinkler Systems

Spill Control

Personnel Protection

Other

Note: Location of emergency equipment should be indicated on-site diagrams.

EVACUATION ROUTES

In the event an emergency arises involving hazardous waste where an evacuation of company personnel becomes necessary, the following evacuation plan would be implemented. Include a description of the signal that would be given to begin evacuation and both primary and secondary evacuation routes personnel would utilize.

Note: Indicate evacuation routes on facility site plan.

FACILITY SITE DIAGRAM

Note: Indicate location of emergency equipment, hazardous waste storage area(s), and both primary and secondary evacuation routes.

ARRANGEMENTS

The following local authorities h	have been sent copies of	the contingency plan:
Police		
Fire		
Hospital		
Response Contractor		
Other		
Note: Identify the primary eme department may respond. documentation of local authorit	Describe arrangements	•
I have read and understand Procedures.	d the Contingency Plar	n and Emergency
Employee's Name (Print)	Signature	Date

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Appendix B

E-Manifest Statement Requirements

MYRCRAINFO

RIDEM has adopted EPA's Industry (database) Applications to allow hazardous waste handlers (generators, transporters and facilities) to update their site status using MyRCRAid, to use e-manifests and produce biennial reports online. Handlers can sign up for access to EPA's Industry Applications

at: https://cdx.epa.gov/cdx/login. Users who have signed up on the federal central data exchange for other programs (e.g. air, water) can use the same ID and password.

Questions about MYRCRAINFO can be directed to sherry.washington@dem.ri.gov

E-MANIFEST IS HERE!

The National E-Manifest Rule has gone into effect as of June 30, 2018. This rule contains a federal pre-emption that means it takes effect in all states (including RI) even if those states have not adopted the rule. The most important provisions of the rule are:

- 1. Generators and destination facilities not required to send manifest to States.
- Destination facilities are required to send manifest data, manifests, or manifest images to USEPA.
- 3. Generators, transporters, and destination facilities may track manifests in EPA's system without mailing or retaining paper copies provided they are all registered in EPA's system.
- 4. Destination facilities pay a fee for each manifest used; the fee varies based on method of submission (fully paper manifests are the most expensive).
- 5. If the manifest has **only** non-hazardous waste on it, no matter the generator status, that manifest does not need to be uploaded or sent to the clearinghouse. If the manifest has a mix of hazardous and non-hazardous wastes on it, then the manifest must be submitted to EPA.

More information about e-manifests can be found at: https://www.epa.gov/e-manifest.

For questions about E-manifests, contact alyson.brunelli@dem.ri.gov

E-MANIFEST RULES FOR RHODE ISLAND

Some rules are different for each State. Here is one that is specific to Rhode Island:

• CESQG's and SQG's require EPA ID #'s to have Hazardous Waste picked by a transporter. One can get a free temporary or permanent EPA ID by calling 401 222-1360.

Appendix C

MERCURY SWITCH REMOVAL INFORMATION

C-1	Vehicles Containing Mercury Convenience Light Switches
C-2	Vehicles Containing Mercury ABS G-Force Sensors
<i>C</i> -3	Removing & Recycling Mercury Switches
C-4	ABS G-Force Sensor Removal Procedure

Information: From "End of Life Vehicle Solutions" (ELVS)

http://www.elvsolutions.org/

Appendix C-1

Vehicles Containing Mercury Convenience Light Switches

(Participating Members of the End of Life Vehicle Solutions Only)

Mercury light switches are common in U.S. made passenger cars and pickups. As a general rule, you should assume there is a mercury switch in the hood or trunk convenience lights on:

- Model year 2002 or older GM vehicles
- Model year 2001 or older Ford vehicles
- Model year 1998 or older Chrysler vehicles and

Mercury switch information for specific brands and model years for the participating members of the End of Life Vehicle Solutions are as follows:

DAIMLERCHRYSLER CORPORATION (Chrysler, Dodge, Eagle, Jeep, Plymouth)

 Assume that all vehicles equipped with convenience light assemblies from 1998 and older model year Chrysler Group (Chrysler) vehicles are mercury switches.

FORD MOTOR COMPANY (Ford, Lincoln, Mercury, Mazda, Merkur, Volvo)

- Cars (potentially contain both hood and trunk switches)
 2000 Model Year and prior Ford Mustang, Ford Crown Victoria, Mercury Grand
- Marquis, Lincoln Town Car 1996 Model Year and prior Ford, Lincoln, Mercury and Merkur cars (except those listed above)
- Trucks, SUVs, and Vans (hood switches)
 2001 Model Year and prior Ford, Lincoln, and Mercury Trucks, SUVs, and
 Vans except: 1999 Model Year and newer Ford Econoline, Ford Windstar, Ford
 Ranger; Mercury Villager
- 1991 Model Year and prior Volvos (may contain glass switches-please handle with care)

<u>GENERAL MOTORS CORPORATION</u> (Buick, Cadillac, Chevrolet, GMC, Oldsmobile, Pontiac, Saturn, Saab)

1998 Model Year and earlier – check all vehicles

1999 Model Year – check all vehicles except for the following:

- Chevrolet Astro
- Chevrolet Silverado
- GMC Safari
- GMC Sierra

2000 Model Year – only the following vehicles:

- Cadillac Escalade under hood light
- Chevrolet Blazer under hood light
- Chevrolet Cavalier trunk light
- Chevrolet Corvette under hood light
- Chevrolet Express under hood light
- GMC Denali under hood light
- GMC Envoy under hood light
- GMC Jimmy under hood light
- GMC Savana under hood light
- Oldsmobile Bravada under hood light
- Pontiac Sunfire trunk light

2001 Model Year – only the following vehicles:

- Chevrolet Blazer under hood light
- Chevrolet Cavalier trunk light
- Chevrolet Express under hood light
- GMC Envoy under hood light
- GMC Jimmy under hood light
- GMC Savana under hood light
- Luxury G-Van under hood light
- Oldsmobile Bravada under hood light
- Pontiac Sunfire trunk light

2002 Model Year – only the following vehicles:

- Chevrolet Blazer under hood light
- Chevrolet Express under hood light
- Chevrolet S-10 Crew cab under hood light
- GMC Savana under hood light
- GMC Sonoma Crew cab under hood light
- Luxury G-Van under hood light

2003 Model Year and beyond **DO NOT** contain mercury light switches.

VOLKSWAGEN (Audi)

• 1977-1988 Audi 100, 1980-1988 Audi 200

THE FOLLOWING ELVS MEMBER MANUFACTURERS DO NOT HAVE MERCURY CONTAINING CONVENIENCE LIGHT SWITCHES:

BMW, MITSUBISHI, NISSAN, SUBARU, TOYOTA

Appendix C-2

Vehicles Containing Mercury ABS G-Force Sensors

(Participating Members of the End of Life Vehicle Solutions Only)

AUDI

- 1987-1993 Audi 80/90
- 1987-1993 Audi 100/Avant,
- 1989-1995 Audi V8 ,
- 1987-1991 Audi 200,
- 1987-1992 Audi Coupe Quattro

BMW (no removal procedures)

DAIMLERCHRYSLER

- 1992-96 4WD Dodge Stealth,
- 1992-2001 Jeep Cherokee,
- 1993-2001 Jeep Grand Cherokee,
- 1992-2003 Jeep Wrangler

FORD/MAZDA/MERCURY

- 1993-97 Ford Bronco,
- 1993-2002 Ford Explorer & Mazda Navajo,
- 1995-2001 4x4 Ford Ranger & Mazda B-Series Pick-Up,
- 1997-2002 AWD Mercury Mountaineer

GENERAL MOTORS

(has no models with Hg ABS G-sensors)

<u>MITSUBISHI</u>

- 1990 Galant 4WD,
- 1991 3000 GT 4WD, Expo 4WD/Expo LVR 4WD, Eclipse 4WD, Galant 4WD,
- 1992 3000GT 4WD, Expo 4WD/Expo LVR 4WD, Eclipse 4WD, Galant 4WD,
- 1993 3000 GT 4WD, Expo4WD/Expo LVR 4WD, Eclipse 4WD
- 1994 3000 GT 4WD,

NISSAN

1996 Pathfinder 4X4

SUBARU

- 1990-1995 Subaru Legacy with 5MT AWD,
- 1993-1996 Subaru Impreza with 5MT AWD

VOLKSWAGEN

(has no models with Hg ABS G-sensors)

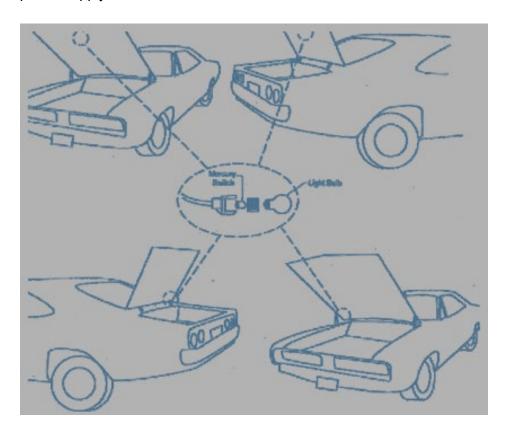
Appendix C-3

Removing Mercury Switches

Removing hood and trunk convenience lights:

In some instances (such as many GM vehicles), leaving the assembly intact and removing the pellet may be easier than removing the assembly.

- 1. Check for hood and convenience light switches on these cars and trucks.
 - GM, 2002 and older.
 - Ford, 2001 and older.
 - Chrysler, 1998 and older.
 - Volvo, 1991 and older.
 - 1977-1988 Audi 100 and 1980-1988 Audi 200
 - Mazda, 1993-1997 Navajo and 1995-1999 B-Series pickup
 - Mitsubishi, 1993 Eclipse 4WD
- 2. Disconnect the battery.
- 3. Find the small lighting fixture on the underside of the hood or trunk.
- 4. Cut the power supply wire to the fixture.



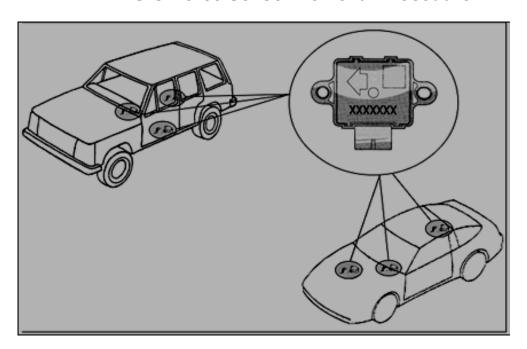
5. Remove any fasteners to separate light from vehicle.

Recycling Mercury Switches

Collecting and managing mercury-containing assemblies and pellets:

- 1. Determine if the vehicle should be checked for a switch assembly. If unsure, check the list of likely vehicle years, makes and models provided.
- 2. If yes, see removal instructions above panel.
- 3. Remove the entire assembly. If the state requires pellet removal, then remove the metal pellet from the assembly if possible.
- 4. Place the assembly and/or pellets in the plastic bucket. Properly labeled containers with airtight lids will be provided.
- 5. Replace the lid after each pellet or assembly is added.

Appendix C-4 ABS G-Force Sensor Removal Procedure



Description:

The ABS G-Force Sensor contains either two or three mercury switch capsules embedded in the assembly.

General Procedure for removing ABS G-Force Sensor:

- 1. Confirm vehicle is equipped with ABS.
- 2. Disconnect the battery.
- 3. Locate the ABS G-Force sensor on the vehicle (varies on different vehicles).
- 4. Remove the sensor. Please note do not attempt to remove pellets from mercury ABS G Force sensors. Place the entire assembly in the bucket.
- 5. Collect and recycle the sensor with care.

The locations where the ABS G-Force Sensor is commonly found are on the drive tunnel, below the rear seat on the floor pan, on the right front wheel apron, rear seat center, and on the left frame rail, right below the driver.

<u>AUDI</u>

Removal Procedure for 1987-1993 Audi 80/90, 1987-1993 Audi 100/Avant, 1989-1995 Audi V8, 1987-1991 Audi 200, 1987-1992 Audi Coupe Quattro

- 1. Remove rear seat bottom and locate ABS Sensor mounted in the middle under seat on seat support.
- 2. Disconnect wire harness connector from switch mounting hardware.
- 3. Remove securing nuts

BMW (no removal procedures)

DAIMLERCHRYSLER

Removal Procedure for 1992-96 4WD Dodge Stealth:

- 1. Locate the ABS G-Force Sensor under the center floor console.
- 2. Remove center floor console.
- 3. Disconnect the harness connector.
- 4. Remove the two bolts to release the sensor.

Removal Procedure for 1992-2001 Jeep Cherokee:

- 1. Fold the rear seat assembly forward for access to the sensor.
- 2. Locate the ABS G-Force Sensor.
- 3. Disconnect the harness connector.
- 4. Remove the two bolts to release the sensor.

Removal Procedure for 1993-2001 Jeep Grand Cherokee:

- 1. Fold the rear seat assembly forward and roll back the carpeting to gain access to the sensor.
- 2. Locate the ABS G-Force Sensor.
- 3. Disconnect the harness connector.
- 4. Remove the two bolts to release the sensor.

Removal Procedure for 1992-2003 Jeep Wrangler:

- 1. From the driver's side, lift carpet back in front of console/shifter.
- 2. Locate the ABS G-Force Sensor in front of the console/shifter mounted to a bracket on the floor pan.
- 3. Disconnect the harness connector.
- 4. Remove the two bolts to release the sensor.

FORD/ MAZDA/ MERCURY

Removal Procedure for 1993-97 Ford Bronco/1993-2002 Ford Explorer & Mazda Navajo/1995-2001 4x4 Ford Ranger & Mazda B-Series Pick-Up/1997-2002 AWD Mercury Mountaineer:

- 1. Raise and support the vehicle.
- 2. Locate the ABS G-Force Sensor on the left frame rail, right below the driver.
- 3. Remove the two nuts.
- 4. Unclip the fuel filter from the vehicle frame (on some models).
- 5. Disconnect the harness connector.
- 6. Remove ABS G-Force Sensor.

GENERAL MOTORS (has no models with Hg ABS G-sensors)

<u>MITSUBISHI</u>

Removal Procedure for 1990 Galant 4WD; 1991 3000GT 4WD, Expo 4WD/Expo LVR 4WD, Eclipse 4WD, Galant 4WD; 1992 3000GT 4WD, Expo 4WD/Expo LVR 4WD, Eclipse 4WD, Galant 4WD; 1993 3000 GT 4WD, Expo4WD/Expo LVR 4WD, Eclipse 4WD, 1994 3000 GT 4WD

1995 Model Year and beyond DO NOT contain mercury ABS switch assemblies

- 1. Locate the ABS G-Force Sensor under the center floor console.
- 2. Remove center floor console.
- 3. Disconnect the harness connector.
- 4. Remove the two bolts to release the sensor.

NISSAN

Removal Procedure 1996 Nissan Pathfinder 4X4:

- 1. Locate the ABS G-Force Sensor under the center floor console.
- 2. Remove center floor console.
- 3. Disconnect the harness connector.
- 4. Remove the two bolts to release the sensor.

<u>SUBARU</u>

Removal Procedure for 1990-1995 Subaru Legacy with 5MT AWD, 1993-1996 Subaru Impreza with 5MT AWD:

- 1. Locate the ABS G-sensor switch on the right front wheel apron.
- 2. Disconnect the wire harness connector from the switch and mounting hardware (two screws).

VOLKSWAGEN (has no models with Hg ABS G-sensors)

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Appendix D

Wastewater Treatment Facilities/Locations and Officials In Charge

May 2023

Municipal Treatment Plants						
WASTEWATER TREATMENT FACILITY/SUPT.	POPULATION CENSUS 2010	ESTIMATED POPULATION SERVED BY SEWERS	DESIGN FLOW (MGD)	AVERAGE DAILY FLOW (MGD)	MAJOR TREATMENT SYSTEMS	RECEIVING WATERS
Town of Bristol Jose DaSilva, Superintendent Bristol WWTF 2 Plant Street Bristol, RI 02809 TEL: 253-8877 FAX: 253-2910	22,954	20,700	3.8	2.8	RBC's Chlorination Dechlorination	Bristol Harbor
Town of Burrillville Mike Emond Burrillville WWTF PO Box 71 Harrisville, RI 02830 TEL: 568-9463 FAX: 568-9464	15,955	9,700	1.5	0.7	Activated sludge Chlorination Phosphorous reduction Dechlorination	Clear River
City of Cranston (Veolia Water) Earl Salisbury Water Pollution Control Facility 140 Pettaconsett Ave. Cranston, RI 02920 TEL: 467-7210 FAX: 781-5260	80,387	73,200	20.2	13.2	Activated sludge BNR Chlorination Dechlorination Sludge Incineration	Pawtuxet River
Town of East Greenwich Shawn O'Neill East Greenwich Town Hall PO Box 111 East Greenwich, RI 02818 TEL: 886-8619 FAX: 886-8652	13,146	6,000	1.7	0.8	RBC's BAF/Nutrient Removal UV Disinfection	Greenwich Cove
City of East Providence serves: East Providence Barrington Pat McShane E. Providence WWTF Crest Ave. Riverside, RI 02915 TEL: 433-6363 FAX: 433-4059	47,037 16,300	46,100 31,400 14,700	14.2	6.7	Activated sludge BNR/Nutrient Removal Chlorination Dechlorination	Providence River
Town of Jamestown Douglas Ouellette Jamestown Sewer Division 44 Southwest Ave. Jamestown, RI 02835 TEL: 423-7295 FAX: 423-7229	5,405	2,100	0.75	0.4	Extended Aeration Chlorination	Dutch Island Harbor/ Narragansett Bay East Passage
Narragansett Bay Comm. Bucklin Point (United Water) serves: Central Falls Cumberland East Providence Lincoln Pawtucket	19,376 33,506 47,037 21,105	120,000 19,400 11,100 8,900 9,400	46.0	23.1	Activated sludge BNR UV Disinfection	Seekonk River

Smithfield Mark Pariseault NBC-Bucklin Point WWTF 102 Campbell Ave. East Providence, RI 02914 TEL: 434-6350 FAX: 438-5229	71,148 21,430	72,600 150				
Narragansett Bay Comm. Fields Point serves: Johnston North Providence Providence Nathan Boiros NBC-Fields Point 2 Ernest St. Providence, RI 02905 TEL: 461-8848 FAX: 461-0170	28,769 32,078 178,042	226,000 15,900 32,100 178,000	65.0	45.5	Activated sludge Chlorination Dechlorination	Providence River
Town of Narragansett Scarborough Facility Scott Goodinson Narragansett Town Hall 25 Fifth Ave., P.O. Box 777 Narragansett, RI 02882 TEL: 782-0682 FAX: 782-0681	15,868	7,300	1.4	0.6	Oxidation Ditch Chlorination Dechlorination	RI Sound
City of Newport (United Water) serves: Middletown Newport U.S. Navy Base Tom Ciolfi Newport WWTF 250 J.T. Connell Highway Newport, RI 02840 TEL: 845-2000 FAX: 845-2014	17,334 26,475 	41,600 5,200 26,400 10,000	10.7	8.4	Activated sludge Chlorination Dechlorination	Narragansett Bay East Passage
New Shoreham Chris Blane New Shoreham Sewer Commission PO Box 220 New Shoreham, RI 02807 TEL: 466-3231 FAX: 466-3237	1,010	300-700- winter 4,000-summer	0.3	0.1	Extended aeration BNR Chlorination Dechlorination	RI Sound
Quonset Point RI Dept. of Economic Development Eddie Davis Quonset Development Corporation 95 Cripe Street North Kingstown, RI 02852 TEL: 294-6342 FAX: 295-7430	N/A	10,000	1.78	0.492	RBC's Chlorination	Narragansett Bay West Passage
Town of Smithfield (Veolia Water) Kevin Regan PO Box 17249 Smithfield, RI 02917 TEL: 231-1506 FAX: 231-7089	21,430	14,000	3.5	1.4	Activated sludge BNR Tertiary Treatment Chlorination Dechlorination	Woonasquatucket River
South Kingstown Regional WWTF serves: Narragansett South Kingstown University of RI Kathy Perez South Kingstown Town Hall 180 High St.	15,868 30,639 	29,400 13,000 9,800 6,600	5.0	2.4	Activated sludge Chlorination Dechlorination	RI Sound

Wakefield, RI 02879 TEL: 788-9771 FAX: 789-3070						
Town of Warren (United Water) Norman Blank 427 Water St. Warren, RI 02885 TEL: 245-8326 FAX: 245-8713	10,611	8,000	2.01	1.8	Activated sludge Chlorination Dechlorination	Warren River
City of Warwick Mike Bedard (Asst. Super) Warwick Sewer Authority 125 Arthur W. Devine Boulevard Warwick, RI 02886 TEL: 739-4949 FAX: 739-1414	82,672	60,200	7.7	4.5	Activated Sludge BNR Chlorination Dechlorination	Pawtuxet River
Town of Westerly (United Water) Adam Federau P.O. Box 2924 Westerly, RI 02894 TEL: 596-2847 FAX: 348-9504	22,787	16,500	3.3	2.5	Activated Sludge BNR Chlorination Dechlorination	Pawcatuck River
Town of West Warwick serves (portions of): Coventry Cranston East Greenwich Warwick West Greenwich Jeff Chapdelaine Superintendent West Warwick Regional WWTF 1 Pontiac Ave. West Warwick, RI 02893 TEL: 822-9228 FAX: 823-3620	29,191 35,014 80,387 13,146 89,672 6,135 29,191	31,600 1,200 200 20 930 30 29,200	7.9	5.2	Activated Sludge BAF/Nutrient Removal UV Disinfection	Pawtuxet River
City of Woonsocket (CH2MHILL) serves: North Smithfield Woonsocket Blackstone, MA Anthony Turchetta Woonsocket WWTF 11 Cumberland Hill Rd. (rear) Woonsocket, RI 02895 TEL: 356-1468 FAX: 356-1478	11,967 41,186 4,854 9,026	51,400 5,200 41,200 2,000 3,000	(12.8) (1.92) (0.8) (0.48)	9.3	Activated Sludge BNR, Tertiary Treatment Chlorination Dechlorination	Blackstone River
SYNAGRO (@ Woonsocket WWTF) Terrence Bain 15 Cumberland Hill Road Woonsocket, RI 02895 TEL: 765-6764	-	-	-	-	Sludge incineration	NA