

Automotive Retailers Association

CERTIFIED
GreenGarage



Program Guidebook



Limitation of Liability and Users Responsibility

The primary purpose of this guidance document is to highlight the requirements of responsible waste management. While every effort has been made to ensure accuracy and completeness of the materials contained within this guidebook, it should not be considered the final word in the areas of practice covered. It is the responsibility of the shop owner to ensure that any plans or reports comply with all federal, provincial, or municipal laws and regulations.

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Introduction

Congratulations, and welcome to the ARA's *Green Garage* environmental certification program. You have made the first step toward creating a better working environment for yourself, your employees and your community. The ARA's *Green Garage* program is a self-certification award program designed specifically for shop owners and managers who not only care about the environment, but also wish to become recognized as responsible environmental stewards in their local communities. By becoming a *Green Garage*, you are committing to implementing and maintaining in your shop, the environmental work practices as detailed in this guidance book. There are four basic steps to becoming certified as an ARA *Green Garage*:

1. Review program guidelines and conduct a self-assessment of your facility.
2. Correct any deficiencies.
3. Register to become an ARA *Green Garage* at <https://certification.ara.bc.ca>.
4. Complete online self-assessment for final approval and complete the registration fee payment.

That's it, it is really quite simple. After you have submitted all the necessary information you can proceed to payment and download your certification, at which time you will be granted the right to identify and advertise your shop as an ARA *Green Garage* as well as participate in any ARA *Green Garage* sponsored marketing programs.

You may be randomly selected for audit and verification of the information you provided. If you are selected for verification, you will receive an email from the ARA with further details of what is required of you. Once you have been approved you may proceed with completing your online audit. Certification renewal is required every three years.

Green Garage Program

Many wastes from an automotive repair facility are considered hazardous and must be disposed of properly. This includes waste products such as oil, used oil filters, used antifreeze and used solvents, to name a few.

It is a legal requirement of the shop owner to know who is disposing of these waste products and whether they are being disposed of in an environmentally correct manner.

The *Green Garage Program* is an environmental compliance program designed to assist a shop in ensuring proper disposal of hazardous wastes. The best management practices covered in this guidebook are the generally accepted ways to handle and dispose of hazardous waste products. The material contained in this guidebook will assist you in meeting the legal requirements of federal, provincial, and municipal governments. Where applicable, specific sections from provincial Acts and regulations are referenced.

**Municipal bylaws may supersede federal or provincial requirements and standards. Please consult with your local municipality for specific requirements.*

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Sample Environmental Compliance Policy

Compliance Agreement

How to use this guidebook

This guidebook contains a list of best management practices for the safe handling, storage and disposal of hazardous waste products. Shops wishing to become *Green Garage* Certified should first read the contents of this guidebook, then conduct a preliminary self-audit to determine whether they meet program requirements. Shops must meet all requirements before being awarded a certified ARA Green Garage.

Each section of the online evaluation relates to a section of this guidance document. Shops must measure their current practices against the recommended standards as described. Shops that fully meet each applicable recommended practice may apply to become a certified Green Garage shop. Shops that only partially meet the recommended practices should complete corrective actions before applying to the program.

Shops may be selected for random verification in order to maintain the integrity of the program.

Administrative

1. Staff Training and Environmental Awareness

Shop owners should engage employees on a regular basis in the following five areas:

1. New and Young Worker Orientation.
2. Training in Workplace Hazardous Materials Information System (WHMIS).
3. Transportation of Dangerous Goods (TDG) (if applicable).
4. Waste Disposal Procedures.
5. Spills and Spill Response.

Worker Orientations

WorkSafeBC regulation 3.23 requires: (1) an employer must ensure that before a young or new worker begins work in a workplace, the young or new worker is given health and safety orientation and training specific to that young or new worker's workplace.

Included in their orientation should be a review of shop policies and procedures concerning treatment and disposal of hazardous waste. Worker orientation guidebooks are available for download from:

<https://ohs.ara.bc.ca/ohs-orientation>

WHMIS Training

WorkSafeBC regulations 5.6 (1) states that an employer must ensure that general WHMIS education, as it pertains to the workplace, is provided to workers.

Transportation of Dangerous Goods (optional)

Section 6.1 of the Transportation of Dangerous Goods Act Regulations requires: 1) a person who handles, offers for transport or transports dangerous goods must:

- a) be adequately trained and hold a training certificate in accordance with this Part; or,
- b) perform those activities in the presence and under the direct supervision of a person who is adequately trained and who holds a training certificate in accordance with this Part.

While dangerous to the environment, Transport Canada does not usually consider used oil or waste oil a dangerous good unless it is contaminated by other products. Waste antifreeze may also be considered a TDG Class 9 if it has been contaminated with heavy metals.

Waste Disposal Procedures

Train your staff on all company waste disposal procedures. Keep written records of all training and discussions you have with your employees.

Spill Response

Employees should receive adequate training in spill clean-up procedures and spill response:

- a) Train your staff on how to handle used oil, spill prevention and spill control and what to do in the event of a large spill; and,
- b) Keep a written record of the discussions you have with staff regarding operating procedures, spill prevention and spill control.
- c) You can download a copy of the ARA spill response plan from <https://certification.ara.bc.ca>.

Do's

- Keep written records of all staff training, external and internal training, and retain copies of any certificate awarded.
- Regularly communicate with other companies who are ARA *Green Garage* shops to come up with ideas for preventing pollution and improving waste management.
- Make sure your employees are aware of the company environmental policy.
- Ensure employees are briefed regularly on safety and environmental policies and procedures.
- Develop written procedures for the disposal of hazardous wastes including solvents, paints, etc. Post these procedures in the areas where these activities take place.
- Ensure that your employees know how to manage each type of waste according to your company procedures.
- Ensure that waste disposal containers and areas are properly labeled, and appropriate signage is used.

Don't

- Assume only one training session is enough. Reinforce the best management practices listed in this guidance book.
- Do not assume that any product is exempt from proper handling, storage, or disposal.
- Do not allow customers to dispose of materials and wastes improperly on your site.

2. Record Keeping and Office Area

The following best management practices will assist shops in maintaining accurate records:

- Record manifest numbers on invoices; invoices must be kept in a central file for a minimum of 2 years.
- A copy of the transporter's current license to transport hazardous waste is kept on file.
- Standard Operating Procedures (Best Management Practices) are summarized in writing and placed in a binder that is accessible to all employees.
- Local and provincial emergency program phone numbers (1-800-663-3456) are posted in an obvious location.
- Environmental audit reports are kept on file.

Copies of Special Waste Transport licenses are kept on file for all of the following:

- Used Oil
- Used Oil Filters
- Used Coolant
- Used Batteries
- Used Tires
- CFC & HFC
- O/W Separator Sludge
- Parts Washer

Manifest and Transportation Thresholds for Hazardous Wastes

Hazardous Wastes	Transportation and Manifest Quantity (L or Kg)
Waste Oil	210 L
Antifreeze	5 L
Waste Fuel	5 L
Lead Acid Batteries	1000kg
Other Solid Hazardous Wastes	5

Monthly visual inspections should be conducted to ensure that best management practices tabled in this guidebook are being maintained along with an annual review of the program and self-audit evaluation in order to maintain certification.

Waste Storage Areas

This is the area where wastes are stored prior to transportation to recycling facilities. Best management practices in this area are:

- Keep the containers of oil and antifreeze under cover with tight fitting lids to avoid precipitation into the containers (if water gets into the containers, oil will float and spill out of the container, and antifreeze will mix with water and overflow).
- Ensure any drains in the storage area are sealed to prevent spilled wastes from getting into drainage.
- Ensure a large funnel is available for employees to drain used oil and antifreeze into containers without spillage.
- Ensure containers are adequately labeled to avoid cross contamination.
- Ensure the area does not flood during rain or snowmelt.
- Avoid use of underground storage tanks.
- Ensure the storage area has adequate cover, an impervious floor and adequate secondary containment (secondary containment means an impervious retainer or container that has been designed to hold 110% of the maximum volume of liquid hazardous materials within a primary container or 25% of the total volume of containers).
- Waste batteries should be stored in acid proof tubs.
- Store damaged or leaking batteries in closed containers to prevent releasing toxic materials to the environment.
- Solvent-based wastes including, thinners, waste paints and paint booth filters must be kept closed and contained when not in used. They must be stored and labeled.

Best Management Practices

1. Used Oil

Used oil means automotive lubricating oil, cutting oil, gear oil, brake fluid, hydraulic oil or any other refined petroleum-based oil or synthetic oil. Oil filters are also considered hazardous waste. The average vehicle will contain approximately six litres of used oil or oil related products.

The British Columbia Used Oil Management Program is the agency tasked with the collection and disposal of used oil. The BC Used Oil Management program will pay shops for their waste oil and oil filters. For more information go to: <http://usedoilrecycling.com/en/bc>

Used oil and oil related products are considered hazardous wastes and must be managed in an appropriate manner. The legal thresholds for used oil are tabled below:

Summary of Used Oil Thresholds

Registration	Storage	Manifest	Spill Reporting
5000L	5000L	210L	100L

If a shop stores more than 5,000 litres of waste oil they will be required to obtain a Consignor Identification Number from the Ministry of the Environment.

Do

- Use a transporter that is licensed under section 45 of the Hazardous Waste Regulation for transportation of used oil in quantities greater than 210 litres. The transporter must have a valid Hazardous Waste Transport License issued by the Ministry of Environment.
- Store all records for a period of two or more years.
- Store used oil and filters in separately marked containers with adequate lids and secondary containment.
- Store containers of used oil in a covered area away from drainage. Steel drums are considered the best for storing used oil.
- Store wet parts in an area with an adequate level of containment for any residual oil.

Don't

- Ever mix solvents with used oil.
- Don't ever dispose used oil into a drain, septic tank or sewer and *never* pour used oil on the ground or use it for dust suppression.

2. Spills and Spill Reporting

The spill reporting regulation requires that all persons managing hazardous waste to report significant spills to the Provincial Emergency Program at 1-800-663-3456. A spill is considered reportable if it exceeds the thresholds tabled below:

Hazardous Wastes	Spill Reporting Threshold
Oil and Oil Related Products	100L
Antifreeze	5L
Waste Fuel	100L
Refrigerants	10kg

Do

- Ensure you have adequate spill kits on site and visible.
- Keep a drip pan under the vehicle while you unclip hoses or remove filters and other parts.
- Use shop wipes for small spills and absorbents for larger spills.
- Dispose of oil-soaked absorbents in a double sealed bag.
- Ensure staff receive adequate training in spill prevention (see response plan below).

Don't

- Allow spills or drips to sit for a long time before cleaning up.
- Do not leave drip pans and open oil containers unattended. Empty containers when they are at least half-full.

Spill Response Plan

In the event of a spill, adhere to the following steps:

- Shut off source of spill.
- Prevent the spill from entering any drains.
- Confine the spill to one area.
- Use absorbent materials to dry area.
- Sweep up and dispose of the absorbent material properly (absorbent material is considered hazardous waste).
- Report spill to manager.
- Report spill to the provincial emergency program if it exceeds legal thresholds.

Spill Kits should be stocked with:

- Safety Equipment for employees including gloves, glasses, and masks.
- Absorbent materials for soaking up oils and solvents.
- Material for neutralizing battery acid (e.g. lime or bicarbonate soda).
- Shovels or scoops to clean up spills.

3. Antifreeze

Anti-Freeze is considered hazardous waste. It is toxic and may contain other hazardous materials such as lead or other corrosion products. Spills of antifreeze can easily cause the ground to become contaminated. If antifreeze is reusable, then it is not considered hazardous waste.

Legal thresholds for waste antifreeze as tabled:

Registration	Storage	Manifest	Spill
500L	500L	5L	5L

A shop must obtain a Consignor Identification Number if they store more than 500 litres of waste antifreeze. All mechanical repair shops that offer for transport waste antifreeze in quantities greater than 5L are required to use a transporter that is licensed under section 45 of the Hazardous Waste Regulation. The transporter must have a valid Hazardous Waste Transport License issued by the Ministry of Environment.

Do

- Store all records for a period of two or more years.
- Report waste anti-freeze spills over five litres to the provincial emergency program 1-800-663-3456.
- Keep waste antifreeze in a marked container with adequate lid protection and secondary containment.
- Store waste antifreeze away from any drains.
- Provide an adequate level of containment and protection from residual antifreeze leakage from radiators.
- Properly label and dispose of all absorbents used to clean a spill.

Don't

- Allow spills, drips, or leaks to remain unattended for long periods.
- Do not mix waste antifreeze with other hazardous products.

The B.C. Used Oil Management program manages the collection of waste antifreeze. For more information, visit: <http://usedoilrecycling.com/en/bc>

4. Waste Lead Acid Batteries, Lead and Lead Tire Weights

Lead and Lead acid batteries are considered hazardous waste and must be managed appropriately. Legal thresholds for waste batteries are tabled below:

Registration	Storage	Manifest	Spill
2000kg	2000kg	1000kg	200kg

All shops that offer for transport waste batteries in quantities greater than 1,000kg (approximately 50 lead acid batteries) are required to use a transporter that is licensed to transport lead acid batteries. The transporter must have a valid Hazardous Waste Transport License issued by the Ministry of Environment. Ensure that the transporter manifests the shipment and puts the manifest number on your invoice.

Do

- Store used batteries in an acid proof container.
- Store cracked or damaged batteries in water-tight secondary containment.
- Store lead tire weights and battery cable ends in a metal container. Lead is a non-ferrous metal, highly toxic to the environment and is regulated as a hazardous waste.
- Store all records for a minimum of two or more years.
- Attend to spills immediately with lime or bicarbonate soda.

Don't

- Re-sell waste lead acid batteries to consumers.
- Do not assume absorbents used to neutralize acid are safe. They must be disposed of as hazardous waste.
- Do not assume any battery is completely dry. Take storage precautions even if the acid has been drained out.

The Canadian Battery Association (CBA) has developed a province-wide lead-acid battery recycling program. Lead-acid batteries included in the program fall under one of five categories:

- Sealed Lead Acid (i.e. emergency lighting)
- Passenger & Light Truck Vehicle
- Commercial Truck Vehicle
- Motive (i.e. electric forklifts)
- Stationary (i.e. large power supply and emergency back-up)

They are accepted for free at participating retailers. Also, private metal recyclers may accept lead-acid batteries and may pay for them. For local recycling options, please visit www.rcbc.ca.

5. Refrigerants

Removal of refrigerants is highly regulated and requires careful management as they may contain ozone depleting substances.

R12 contains hazardous ozone depleting substances. HFC134A is non-ODS but contains greenhouse gases and contributes to global warming. R12 was phased out in 1995 after the Montreal Protocol but may still be present in older vehicles. R12 was replaced by HFC134A.

Only an approved person can evacuate R12 or HFC134a from vehicles.

The shop must ensure the approved person used a proper device for the evacuation of R12 or HFC134 that meets SAE performance standards

A shop must not dispose of an air conditioner unit unless the R12 or HFC134 has been evacuated.

The shop must maintain records for inspection of each approved person.

The shop must maintain in a service log:

- a) The amount of R12 or HFC134 evacuated,
- b) The date the R12 or HFC134 was evacuated, and,
- c) The name and registration number of the approved person who performed the evacuation

The service log must be maintained and made available for inspection during regular business hours.

Containers storing evacuated R12 or HFC134A should be properly labeled. A shop must keep accurate records of all volumes of refrigerants sent for disposal.

6. Oil Water Separators

For purposes of this guidebook shops that have oil/water separators will be defined as **'wet shops'** and those that do not are considered **'dry shops'**.

Any shop with oil/water separators are required to meet Section 17 of the Hazardous Waste Regulation: any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works which results from the operation of the storage facility must meet the effluent criteria prescribed in Schedule 1.2. (Appendix A)

Do

- Ensure your oil/water separators are regularly cleaned of sludge – every six months is recommended, and they should be tested annually.

Don't

- Don't ever use your separator as part of your spill control or clean-up. Sudden discharge of waste contaminants can cause dramatic deviations from regulatory thresholds.

7. Shop Rags, Towels and Coveralls

Shop rags and towels may contain solvents, paints, inks or other chemicals that may be ignitable, toxic or contain hazardous wastes. For these reasons you must treat them as hazardous and dispose appropriately. This means they must be properly labeled, stored and contained. Used towels or rags may contain gas, oil or solvents that can start fires and should be stored in closed, fireproof metal containers. The following best practices are recommended:

Do

- Send your soiled towels and coveralls to an off-site laundry facility that can accept them, they may not be considered hazardous waste.
- Make sure used cloth and rags contaminated with hazardous substances are collected, transported, and stored in sealed containers. If a commercial laundry facility picks up your towels and coveralls, they may provide you with appropriate containers.
- Make sure that any laundry facility you use meets environmental standards and other applicable regulations.

Don't

- Accumulate used rags or coveralls for more than 180 days.

8. Waste Tires

Waste tires are considered to be an environmental risk in the event that they ever catch on fire. They may also enhance the spread of mosquitos during summer months. It is recommended that nomore than 125 waste tires be located at a shop at any one time.

Waste tires are managed in British Columbia by the Tire Stewardship B.C.

On average between 80% and 90% of the scrap tires collected are recycled into products. Most are recycled into crumb rubber, which are granules of rubber with the steel and fibre removed. Recycled rubber is then used to create a variety of products including athletic tracks, synthetic turf fields, playground surfacing; colourful, resilient flooring in recreational facilities; flooring and mats for agricultural and industrial use; and coloured landscaping mulch. The remaining scrap tires collected are used as a fuel supplement in the cement and pulp and paper industries.

Tire Stewardship B.C. will pick up used tires at no cost if they have been removed from the rim. For more information visit:

<http://www.tsbc.ca>

9. Cardboard & Paper (Optional)

Cardboard is easy to recycle in most municipalities in B.C. Many curbside recycling programs accept cardboard as a paper product, and once it is processed it can be used to make new products such as gypsum wallboard liner, roofing felt, core board and new boxes. Cardboard is an easy and environmentally efficient material to recycle, and the use of recycled cardboard conserves large amounts of water and energy when manufacturing new products, compared to using virgin fibre. To prevent contamination and preserve the quality of the material, keep your cardboard dry and free from food contaminants or residue when putting it out for collection.

Mixed waste paper is defined as anything made of 100% paper. This includes, but is not limited to: office paper, magazines, paper egg cartons, ad-mail, phone books, soft cover books, and boxboard (cereal and cracker boxes).

Use only reputable shredding services that recycle waste paper.

For more information on a recycling centre or pickup services near you, visit:

<http://www.rcbc.ca>

10. Plastics, Plastic Containers, Metal, and Glass (optional)

Plastics, Plastic Containers and Glass are all recyclable products. They may contain harmful products and need to be kept out of landfill.

Most types of plastics are recyclable and are numbered with codes 1-7. The numbers are usually stamped on the container; for instance, Plastics code 1 is a common code found on soft drink containers. Other forms of recyclable plastics include bags, cartons, and jugs.

Plastics code 2 is common for used oil containers. The British Columbia Used Oil Management Association (BCUOMA) manages the collection and recycling of used lubricating oil, used oil filters and plastic oil containers in BC. Accepted through this program are all empty oil containers with a capacity of 30-litres or less.

To find a drop-off location, visit the BCUOMA website, or call the RCBC Recycling Hotline.

Ferrous and non-ferrous metals are highly recyclable and depending upon volume will have cash value. Many metals used in the production of automobiles are toxic to the environment and should never be sent to landfill. Recycling yards such as Schnitzer's Steel, Richmond Steel and ABC Metals offer bin service and depending upon volume will pick up free of charge or pay you for the metal.

Intact, reusable plate glass may be accepted for reuse by a building materials store. It is not accepted for recycling with glass containers because of their different melting points. However, there may be a private recycler in your area. Some transfer stations and landfills collect and crush plate glass for use as fill or help in drainage.

Check with local disposal facilities for fees and restrictions.

11. Batteries (other) (Optional)

Alkaline (non-rechargeable) batteries are included in province-wide recycling program provided by Call2Recycle. Batteries can be returned to participating retail stores, as well as some municipal recycling depots and transfer stations. To reduce the impact of batteries on the environment, choose rechargeable batteries instead.

Other types of batteries accepted: consumer batteries used in items such as toys, remotes, flashlights and smoke detectors. Alkaline (AA, AAA, 9V), rechargeable (Ni-Cd, Ni-MH, Li-Ion), button cells, carbon zinc, lithium primary and small seal lead acid batteries. UPS batteries and cell phones are also covered.

To find the nearest recycling drop off point, visit the program website at www.call2recycle.ca.

12. Outdoor Vehicle Maintenance Areas

As a rule, avoid using outdoor areas for working on vehicles. If you do use any outdoor areas in this way treat them as an extension of your service bays. Create specific designated areas and isolate them from runoff wherever possible.

Do

- If possible, roof outdoor work areas.
- Surround outdoor work areas with berms to prevent runoff into storm drains.
- Do attend to spills, drips, and leaks immediately.
- Always use a drip pan.

Don't

- Don't pave any outdoor work area with asphalt. Use concrete. Automotive fluids may dissolve asphalt or be absorbed and released later.

Sample Environmental Policy

Every shop should have a posted environmental policy expressing their commitment towards the environment, sustainability and commitment to the becoming certified as an ARA *Green Garage*. The following template may serve as your company's policy. Simply add your business name and post in a central and visible location accessible to customers and staff. Or create your own.

_____ (Your Company) _____ believes in protecting the environment. This is why we continually strive to be a 'greener' and more environmentally friendly shop. As an active certified ARA *Green Garage* we endeavour to manage and dispose of all waste products in full compliance with legislated environmental standards. As a certified *Green Garage* _____ (Your Company) _____ commits to the following:

- Minimize waste by evaluating operations and ensuring they are as efficient as possible.
- Actively promote recycling both internally and amongst its customers and suppliers.
- Source products that minimize environmental impact.
- Meet or exceed all government environmental legislation that relates to our company.
- Use only licensed transporters to haul wastes.

It is our priority to encourage our customers, suppliers and all business associates to do the same. Not only is this common sense for all, but it is also a matter of delivering on our duty of care towards future generations.

Sincerely

_____ (SHOP OWNER) _____.

Green Garage Compliance Agreement

As a participant in the ARA *Green Garage* Program, we agree to meet all environmental standards with respect to the operations of our shop as described below:

All waste products and raw materials will be stored, transported and disposed of in accordance with all applicable federal, provincial and municipal laws.

We will only use suppliers that meet all applicable laws in handling and transportation of our waste products.

We will, whenever possible, endeavor to use less toxic materials in the repair of automobiles.

I am a member in good standing of the Automotive Retailers Association. Failure to maintain my good standing in the ARA or ceasing to be a member of the association will result in losing my certification status as a *Green Garage*.

I agree to abide by all program rules and acknowledge that as laws may change from time-to-time program requirements may also change.

If for any reason I cease to be a member in good standing, fail a random audit, or discontinue remaining environmentally compliant, I will immediately cease all use of promotional materials and identification as a certified *Green Garage* Shop.

Dated and signed this _____ day of _____ 20_____

I, _____ of _____

Agree to follow the above requirements of the *Green Garage* Program:

Signature