

UNIVERSITY OF GUELPH HAZARDOUS (SUBJECT) WASTE MANAGEMENT GUIDELINE FOR THE REGIONAL CAMPUS AND RESEARCH STATIONS

Related University Program

[Hazardous Waste Management Program](#)

Intent

The purpose of this guideline is to assist the University of Guelph (U of G) Regional Campus and Research Stations in understanding their full obligations under provincial environmental legislation.

Procedure

The R.R.O. [Regulation 347](#) General - Waste Management sets out requirements for handling, storing, managing and disposing of Liquid Industrial or Hazardous Waste (also known as Subject Waste in Ontario). It includes a comprehensive system requiring waste producers (generators) to register and to track these wastes, through manifests, from the point of generation to their final disposal. The regulation sets out responsibilities for generators, carriers, and receivers of Hazardous (Subject) Waste.

The regional campus and each research stations are to designate one person plus an alternate, who will be fully trained and responsible for hazardous (subject) waste management. These persons will be the main contacts for Environmental Health and Safety (EHS) personnel.

The Hazardous (Subject) Waste Management self-inspection checklist included in Appendix A is to be sent to the designated contacts at the Regional Campus and Research Stations annually. Completed checklists are to be submitted to EHS by November 30 each year.

The following sections describe requirements for appropriate (hazardous) subject waste management.

Hazardous (Subject) Waste Handling:

- All waste must be placed in containers that are compatible with the material being packaged.
- Waste streams are to be stored separately.
- Containers must be filled, closed, secured and maintained so that no accidental releases can occur.
- Waste containers are to be provided with secondary containment (as appropriate) to contain any spills.
- Waste containers are to be kept closed except when adding wastes.
- Containers must be stored securely – not stacked too high, or on uneven surfaces.
- Liquid waste containers should never be filled to more than 75% capacity to allow for expansion of the liquids and headspace vapours.

Hazardous (Subject) Waste Labeling:

Prior to placing any hazardous subject waste into the waste container, a Hazardous (Subject) Waste label must be completed and affixed to the outside of the container. Containers must be labelled to clearly identify the contents and the associated hazards. As a minimum, labels for hazardous (subject) waste should include:

- Campus/station name
- Contact info for the person responsible for hazardous (subject) waste management (job title)
- Phone number
- Office/location
- Description of the waste (i.e. the contents of the container)
- Date when the waste was disposed into a container for the first time
- The physical state (e.g. liquid, solid, sludge)

Example of hazardous (subject) waste label:

Subject Waste	
Campus/Station: _____	
Contact: _____	Phone: _____
Building: _____	Room: _____
Waste Description: _____	
Date of the first waste disposal into container: _____	
Physical state:	
☐ Liquid	
☐ Solid	
☐ Other _____	

Hazardous (Subject) Waste Storage:

- All waste must be stored in a manner and location designed to contain potential spills.
- Stored waste is to be closed to prevent mixing of waste or contamination by rainwater/snow if outdoors.
- As required by Regulation 347, waste can be kept for no longer than 90 days without further reporting. The 90-day timeframe begins as soon as any amount of hazardous

(subject) waste is accumulated in the waste container. The 90-day storage period does not start when a container used to store the waste is full and ready to be shipped off-site for disposal.

- Ensure disposal of hazardous subject waste is scheduled and performed at least every 90 days.
- In the event hazardous (subject) waste is to be stored for longer than 90 days requires prior approval from EHS. Contact (519) 824-4120 ext: 54270 or labsafe@uoguelph.ca for more information.

Facility Registration:

- Facilities must register all hazardous (subject) wastes through the HWIN – Hazardous Waste Information system.
- The HWIN registration is maintained by EHS, Laboratory Safety Officer. Contact (519) 824-4120 ext: 54270 or labsafe@uoguelph.ca for more information.

HWIN

HWIN is a pay for use system with annual fees submitted at the beginning of each year to ensure that shipments of waste are permitted. Fees include an annual generator registration fee, a user fee per manifest and a tonnage fee for hazardous (subject) waste generated.

To register any new waste streams that will be generated at your facility, modify registration information for hazardous (subject) waste being actively generated and or remove hazardous (subject) waste that is no longer being actively generated contact EHS, Laboratory Safety Officer (519) 824-4120 ext. 54270 or labsafe@uoguelph.ca.

All waste disposed of from your site must be properly registered on HWIN prior to shipping by a carrier.

Training:

- All persons handling wastes must be adequately trained and training records maintained by their supervisor. Training and/or current certification in WHMIS, TDG, as well as readily accessible Standard Operating Procedures (SOP) specific to the waste handling process at your location are mandatory.
- When in doubt, seek the advice of your supervisor or contact EHS, Laboratory Safety Officer at (519) 824-4120 ext: 54270 or labsafe@uoguelph.ca for advice on how to handle and dispose of any hazardous (subject) waste.

Hazardous (Subject) Waste Carrier:

- Any waste leaving your facility must be transported by a company with Ministry approval to transport waste. The approval will describe the waste classes and categories the carrier may transport. The current University contractor for chemical wastes is RPR Environmental Inc. Tel: 1-800-667-5217
- All hazardous waste contractors must meet the provisions of the [Hazardous Waste Management Program](#). Please contact EHS for assistance.
- EHS must be informed of all carriers contracted at your location

Regulatory audits:

- In the case of upcoming or unannounced audits by Ministry of the Environment, Conservation and Parks, contact EHS for assistance.

Records Maintenance:

Records that must be kept include generator registration reports, notice of storage, forms and records of all shipments of (hazardous) subject waste. These records can be kept in electronic and/or in paper format.

- Records of your generator registration reports are subject to ministry inspection. Records must contain sufficient information, so the Inspector can review any waste characterizations fully.
- Documents related to storing or moving (e.g. Manifests and Land Disposal Restrictions receiver notifications) of hazardous (subject) waste must be retained for at least two years and be available for review by a Ministry provincial officer during an inspection.

Manifests

The Manifest is a legal document under which all hazardous (subject) waste is shipped. An image of a manifest can be found in [Appendix B](#).

A manifest is divided into 3 sections:

- Part A: Generator –U of G designated and fully trained person
 - o a person/company who:
 - produces or stores hazardous (subject) waste, and
 - causes or allows more than the quantity of hazardous (subject) waste, as prescribed in regulation to be transported from the property where it is produced or stored.
- Part B: Carrier (Transporter)
 - o a person/company who transports more than the quantity of hazardous (subject) waste prescribed in regulation.
- Part C: Consignee (Receiver)
 - o a facility who receives more than the quantity of hazardous (subject) waste prescribed in regulation

Part A is the responsibility of and must be signed by the Generator:

- Part A (Consignor) must be completed fully and accurately.
 - o confirm that the physical state of the waste is identified (L=liquid, S=solid, G=gas)
 - o confirm a shipping name is assigned
 - o confirm the waste identification section is complete there are two parts to this section,
 - the provincial waste identification number (MOE waste class) which is derived from O. Reg. 347 and should always be a three digit number

followed by a letter (waste number + waste characteristic) for example, 252 L (waste number =252, waste characteristic = L)

- the TDGA (Transportation of Dangerous Goods Act) identification if it is regulated under TDG which will be a UN number. Not all material is regulated under TDG; if it is not, then this is not applicable and a horizontal line can be drawn through this box (usually better than writing N/A since NA used to stand for North American assigned designations that are no longer in use)
- o Confirm the quantity shipped is allocated with the corresponding units (note: the units need to either be litres or kilograms hence the quantity needs to be in these measurements).
- o Emergency Response Telephone Number – all shipping papers of dangerous goods must have a 24-hour emergency response telephone number. The phone number should be listed in the “Special Handling/Emergency Instructions” section of Part A. It should clearly be stated that it is a “24-hour Emergency Number”.
- o Ensure the date and time shipped is filled in, note to identify whether it is AM or PM.
- o Ensure that the scheduled arrival date is filled in – work in conjunction with the carrier to determine this expected arrival date.

Part B of the Manifest is filled out and signed by the Carrier (Transporter).

Part C of the Manifest is filled out and signed by the Consignee (Receiver).

Once the process is completed all three sections of the manifest need to have been completed thus closing the “cradle to grave” loop of waste generation to final disposal.

Maintaining Hardcopy Manifests:

A hardcopy manifest is a 6-part form divided as follows,

- Copy 1 – (white) goes to the Ministry (Generator to Ministry within 3 business days of shipment)
- Copy 2 – (green) retained by Generator for the legal requirement of 2 years
- Copy 3 – (yellow) goes to the Ministry (Receiver to Ministry within 3 business days of shipment)
- Copy 4 – (pink) retained by Carrier (legal requirement is 2 years)
- Copy 5 – (blue) retained by the Receiver (legal requirement is 2 years)
- Copy 6 – (brown) Receiver need to mail copy back to the Generator within 28 calendar days. Once the Copy 6 (brown) has been received file it with Copy 2 (green).

In Ontario, the Generator must receive the brown copy 6 within 28 calendar days (weekends and holidays are included in the 28-day count). If you don't receive the brown copy of the manifest within 20 calendar days, contact the waste carrier to request the brown copy of the manifest. If you don't receive brown copy of the manifest within 25 calendar days, contact EHS immediately for further assistance. A graphical representation is available in [Appendix C](#).

Frequently Asked Questions

What is Generator Registration?

Under the requirements of Ontario Regulation 347 Waste Management each generator of (hazardous) subject waste in the province has to be registered with the Ministry of the Environment, Conservation and Parks.

What is the Generator Registration Number (ON#)?

The Generator Registration Number (ON number) is a specific number assigned by the Ministry. This number is specific to location (municipal address). No hazardous (subject) waste is permitted to leave a location without the generator being properly assigned a generator registration number.

It is mandatory that this number be on all manifests.

The ON number will appear on the top portion of Part A of the manifest – always check to ensure the number is correct as it is regulatory requirement to include the correct generator registration number.

Does the University hold other ON numbers?

Yes – since this number is specific to the municipal address, the University holds a unique generator registration number specific to each of its locations. Hazardous (subject) waste must only be shipped using the appropriate generator number.

How are hazardous (subject) waste streams aligned to an ON#?

Under each ON number, a generator is legally required to have listed/registered each of the waste streams that are generated and shipped from that location.

How is hazardous (subject) waste registered for a specific ON#?

All hazardous (subject) waste in the province is registered and tracked through the HWIN (Hazardous Waste Identification Network) System. All uses of HWIN # are to be done through or with approval of EHS.

How do I confirm a waste is registered?

1. Go to the [HWIN website](#).
2. Click on “Registered HWIN Generators”
3. Search under “Generator Number”
 - i.e. enter ONXXXXXXX

Can new waste stream be added to an ON#?

Yes - New waste streams can be added to a Generator Registration Number by accessing the [HWIN system](#).

To register new waste stream please contact EHS, Lab Safety Officer ext: 54270 or EHS office ext: 53282.

What is a Manifest?

The Manifest is a Canadian form and similar for all provinces except Quebec. It is a legal document under which all (hazardous) subject waste is shipped.

What is the purpose of a Manifest?

The manifest is a 6-sheet carbon copy document that travels with the (hazardous) subject waste from the point of generation, through transportation, to being received at an approved facility.

What are the different parts of a Manifest?

The Manifest is made up of three sections A, B & C. It documents the type and the amount of waste, who shipped it (Part A- Consignor or Generator), who transported it, (Part B- Carrier or Transporter), who received it (Part C – Consignee or Receiver) and how it was handled. Each party is required to complete their section of the manifest, sign, distribute and keep the appropriate copies. The reverse side of the manifest provides instructions on how to complete and distribute the copies.

Who issues Manifests?

Manifests are issued by the Ministry of the Environment, Conservation and Parks and each manifest is numbered with a unique identifier number in the top right hand corner. The carrier comes on-site with the manifest.

Who can sign a U of G Manifest?

Only TDG and WHMIS trained, identified University of Guelph personnel should fill out and sign Part A of manifests on behalf of University of Guelph unless other formal arrangements have been made.

Summary Checklist:

Do:

- Confirm all waste containers are in good condition
- Inspect storage area every month.
- Confirm packaging is compatible with waste and in good condition
- Apply proper labelling
- Confirm containers are closed to avoid the mixing of waste or contamination
- Confirm spill containment procedure is in place and all necessary absorbents are available to clean spills
- Designate a TDG and WHMIS trained person and a “back-up” person responsible for signing manifests
- Schedule all hazardous (subject) waste pick up prior to 90 days.
- Confirm that the waste being taken (type and quantity) is the waste identified on the manifest.
- Sign the manifests only at the time of shipping.

- Keep green copy of the manifest in your file and send the white copy to the Ministry of the Environment (MOE) within 3 days.
- Keep track of having received brown copy 6 of the manifest, staple matching green and brown copies and retain for 2 years.
- If the brown copy is not received by 20th day after shipping contact Lab Safety Officer ext: 54270 or EHS office ext: 53282
- Call EHS if you have capacitors, transformers, light ballasts etc. at your facility

Don't:

- Pre-sign manifests
- Receive waste from off site
- Dispose of waste to a sewer
- Transport waste off site yourself
- Store waste close to sewers or drains

Contact EHS, Laboratory Safety Officer at ext: 54270 for additional information.

Appendices

Appendix A – Sample Waste Management Program Audit Form

Waste Management Program Audit Form

Audited By:

Location:

Date:

Program Elements

Storage Area Monthly Inspections	YES	NO	N/A	COMMENTS
Is hazardous (subject) waste storage area free of spills/leaks?				
Are empty waste containers in good condition?				
Is spill prevention/response equipment and secondary containment in good condition?				
Is Personal Protective Equipment (PPE) available (eye protection (safety glasses /chemical goggles), respiratory equipment if required?				
Is eye wash station available?				
Is exhaust and/or make up air system working properly?				
Are emergency phone numbers available should a spill occur?				
Is the secondary containment compatible with the chemicals to be stored?				
Is the monthly waste inspection form completed and filed for record keeping?				
In case of problems found and corrective actions taken, is the follow - up inspection scheduled?				

(Hazardous) Subject Waste Handling	YES	NO	N/A	COMMENTS
Are all waste streams stored in containers compatible with the waste?				
Is access to waste storage area restricted to designated person(s) and safe from vehicles – i.e. safe from someone backing into it with a farm vehicle, forklift, car etc.?				
Are waste containers in good condition (intact, not rusty)?				
Are materials that could adversely interact with each other separated by secondary containment and/or distance?				
Are containers filled, closed, secured and maintained so that no accidental releases can occur?				
Are waste containers provided with secondary containment to contain any spills?				
Are there spill cleanup procedures in place related to waste?				
Are waste containers kept closed (except when adding waste) to prevent mixing of waste or contamination?				
Are containers stored securely – not stacked too high, or on uneven surfaces?				
Are waste containers filled at maximum 75% capacity to allow for expansion of the liquids and headspace vapours?				

Hazardous (Subject) Waste Labeling	YES	NO	N/A	COMMENTS
Are all waste containers clearly labelled?				

Hazardous (Subject) Waste Labeling	YES	NO	N/A	COMMENTS
Are (hazardous) subject waste containers are labelled to indicate: • A campus/station name • Name of the person in charge of hazardous (subject) waste management • Phone number • Office/location • Description of the waste (i.e. the contents of the container) • Date when the waste was disposed into a container for the first time • Physical state (e.g. liquid, solid, sludge)?				

Hazardous (Subject) Waste Storage	YES	NO	N/A	COMMENTS
Are containers stored in a manner and area to contain spills?				
Is hazardous (subject) waste retained less than 90 days?				
Is a schedule established with a contractor ensuring disposal of hazardous (subject) waste is performed at least every 90 days?				
Do you ensure storage area is inspected on a regular basis?				

Facility Registration	YES	NO	N/A	COMMENTS
Are all hazardous (subject) wastes registered in the Hazardous Waste Information system? (HWIN)				
Did you provide an update to EHS on all hazardous (subject) waste planned to be generated, being actively generated and waste that won't be generated in the upcoming year? (Typical hazardous (subject) waste includes: fluorescent tubes, batteries, waste oil, sharps and needles, used chemicals, insecticides, herbicides, pesticides, hydraulic fluids, parts washer fluids)				

Facility Registration	YES	NO	N/A	COMMENTS
Did you obtain EHS approval for any waste to be stored longer than 90 days?				

Training	YES	NO	N/A	COMMENTS
Has a primary and "back-up" person been identified for completing and signing manifests? (Note: must be an identified and trained U of G person)				
Are persons handling hazardous (subject) waste adequately trained and training records maintained? • WHMIS, • TDG				
Are all persons trained in TDG in possession of their TDG Certificates? (Note: subject to MOE audit)				

Subject Waste Carrier	YES	NO	N/A	COMMENTS
Are you hiring the current University contractor to transport the hazardous (subject) waste off site?				
If you are hiring another company, did you contact EHS to confirm approval?				
Did you provide EHS with list of all carriers contracted at your location?				

Record Maintenance	YES	NO	N/A	COMMENTS
Are manifests accurately filled out (Generator Section A requirements)? • Generator Information • Physical state identified • Provincial Waste Identification Number (waste number + waste characteristic) • TDG Identification (if applicable, if not indicated so) • Quantity shipped with corresponding units - needs to line up with physical state • If TDG classified: packing group, packaging contents, packaging codes • Emergency Response Number • Date and Time shipped and Am or PM identified • Scheduled arrival date				
Are manifests completed and signed by an identified and trained UOG person?				
Are white copies (Copy1) of the manifest sent to the Ministry within 3 business days of the shipment?				
Are green copies (Copy2) of the manifest retained?				
Are brown copies (Copy 6) of the manifests received and filed with the pertaining green copy (Copy2)?				
Are brown copies (Copy 6) received within the legislative requirement of 28 calendar days?				
Is a process in place to notify EHS of brown copies of the manifest not received within the legislative 28 calendar days?				
Did you contact EHS to assist with obtaining brown copy of the manifest if you didn't receive the brown copy after 25 days from the shipment and after official request was made to the carrier?				
Are you retaining copies of the manifests for two years?				

Regulatory audit	YES	NO	N/A	COMMENTS
Did you inform EHS about potential upcoming or unannounced audits by the Ministry?				

Good Practice	YES	NO	N/A	COMMENTS
Do you verify the information on the manifest each time the hazardous (subject) waste is transported off site?				
Do you ensure that the waste being transported off site (type and quantity) is the waste identified on the manifest?				
Do you sign manifests only at the time of shipping?				
Do you call EHS if you have capacitors, transformers, light ballasts etc. at your facility?				
Did you inform EHS if you generate polychlorinated biphenyls (PCB) containing waste? (light ballasts)				

Appendix B – Image of Manifest

Sample Manifest/Movement Document

MOVEMENT DOCUMENT / MANIFEST DOCUMENT DE MOUVEMENT / MANIFESTE

This Movement document/manifest conforms to all federal and provincial transport and environmental legislation.
Ce document de mouvement/manifeste est conforme aux lois fédérales provinciales et provinciales sur l'environnement et le transport.

APPROPRIATE AUTHORITIES / AUTORITÉS RESPONSABLES *EMERGENCY NUMBER / *NUMÉRO D'URGENCE

A Generator / consigneur Producteur / expéditeur Registration No. / Provincial ID No. N° d'immatriculation - dist. provincial Company name / Nom de l'entreprise Mailing address / Adresse postale City / Ville Province Postal code / Code postal E-mail / Courriel électronique Tel. No. / N° de tél. () Shipping site address / Adresse de lieu de l'expédition City / Ville Province Postal code / Code postal Intended Receiver / consignee Réceptionnaire / destinataire prévu Registration No. / Provincial ID No. N° d'immatriculation - dist. provincial Mailing address / Adresse postale City / Ville Province Postal code / Code postal E-mail / Courriel électronique Tel. No. / N° de tél. () Receiving site address / Adresse de lieu de réception City / Ville Province Postal code / Code postal												B Carrier Transporteur Registration No. / Provincial ID No. N° d'immatriculation - dist. provincial Company name / Nom de l'entreprise Mailing address / Adresse postale City / Ville Province Postal code / Code postal E-mail / Courriel électronique Tel. No. / N° de tél. () Vehicle / Véhicule Trailer - Flat car No. 1 1 ^{er} remorqueur - wagon Trailer - Flat car No. 2 2 ^e remorqueur - wagon Port of entry / Point d'entrée International use only Port of exit / Point de sortie International use only Carrier Certification / I certify that I have received waste or recyclable material from the generator / consigneur for delivery to the receiver / consignee as set out in Part A and that the information contained in Part B is complete and correct. Attestation du transporteur : J'atteste avoir reçu les déchets ou matières recyclables du producteur / expéditeur en vue de leur livraison au réceptionnaire / destinataire, les données figurant à la partie A et que les renseignements inscrits à la partie B sont exacts et complets. Name of authorized person (print) Nom de l'agent autorisé (caractères d'imprimerie) Year / Année Month / Mois Day / Jour Signature Tel. No. / N° de tél. ()												C Receiver / consignee Réceptionnaire / destinataire Registration No. / Provincial ID No. N° d'immatriculation - dist. provincial Receiver / consignee information same as in Part A. Les renseignements du réceptionnaire / destinataire est la même qu'à la A. ☐ Yes / Oui ☐ No, complete the box below / Non, remplissez la case ci-dessous Company name / Nom de l'entreprise Mailing address / Adresse postale City / Ville Province Postal code / Code postal E-mail / Courriel électronique Tel. No. / N° de tél. () Receiving site address / Adresse de lieu de destination Date received / Date de réception Year / Année Month / Mois Day / Jour Time / Heures ☐ A.M. ☐ P.M. If waste or recyclable material to be transferred, specify intended company name / Si les déchets ou matières recyclables doivent être transférés, préciser le nom du destinataire Registration No. / Provincial ID No. N° d'immatriculation - dist. provincial Quantity received / Quantités reçues Units / Unités L or / ou Kg Comments / Commentaires Handling Code / Code de manipulation Shipment / Envoyé Accepted / Refused Decant / Vider If handling code "Other" (specify) Si code de manipulation « autre » (spécifier) Receiver / consignee certification / I certify that the information contained in Part C is correct and complete. Attestation du réceptionnaire / destinataire : J'atteste que tous les renseignements à la partie C sont exacts et complets. Name of authorized person (print) Nom de l'agent autorisé (caractères d'imprimerie) Signature Tel. No. / N° de tél. () Special handling / Manipulation spéciale ☐ Attached / Ajoint ☐ As follows / Comme Date shipped / Date d'expédition Year / Année Month / Mois Day / Jour Time / Heures ☐ A.M. ☐ P.M. Scheduled arrival date / Date d'arrivée prévue Year / Année Month / Mois Day / Jour											
Prov. code / Code prov. Shipping name / Appellation réglementaire Class / Classe (Sub. classes) / (Sous-classes) Sub. UN No. / N° UN Packing / Rtg. / Rtg. or / ou Kg Quantity shipped / Quantités expédiées Units / Unités L or / ou Kg Packaging / Conteneur No. / N° Codes tel - tel. Phys. state / État phys.												National code in country of / Code du pays Notice No. / N° de notification Notice Line No. / N° de ligne de la notification Shipment / Envoyé CM / De D or R code Code E ou R C code Code C Steel Annex VII or OSCD Code Annexe VII de Bâle du Code OSCD H code Code H Y code Code Y Export / Exportation Import / Importation Customs code(s) / Code(s) de douanes																							
international use only																																			
Generator / consigneur certification / I certify that the information contained in Part A is correct and complete. Attestation du producteur / expéditeur : J'atteste que tous les renseignements à la partie A sont exacts et complets. Name of authorized person (print) Nom de l'agent autorisé (caractères d'imprimerie) Signature Tel. No. / N° de tél. ()																																			

Appendix C – Graphic Representation of Manifest Distribution

