

	Summer (May 01-August 31)	In-Session (September 01-April 30)	Annual Total
2012	27,500 lbs	67,500 lbs	95,000 lbs
2013	27,500 lbs	67,500 lbs	95,000 lbs
2014	27,500 lbs	67,500 lbs	95,000 lbs
2015	27,500 lbs	67,500 lbs	95,000 lbs
2016	27,500 lbs	67,500 lbs	95,000 lbs
2017	27,500 lbs	67,500 lbs	95,000 lbs
2018	27,500 lbs	67,500 lbs	95,000 lbs
2019	27,500 lbs		

Based off
Avg. Per Day
In session Days
Summer Days

F of...
200-250 lbs
270
95



Situation: With Southern New Hampshire University’s strong focus in the Environmental Sciences, disposal was not an option when the school replaced 240 sets of dorm furniture. SNHU asked their recycling and waste management contractor, Casella Resource Solutions, to provide a better option, and Casella reached IRN for assistance.

Quantity and Composition: 1,029 pieces, including ~240 each of beds, desks, chairs and wardrobes.

Setting: Suburban campus in Manchester, NH, 50 miles north of Boston.

Overview

Offering more than 20 Environmental Science degree programs, Southern New Hampshire University is one of the nation’s most dynamic schools in the field. So when SNHU replaced some 240 sets of dormitory furniture from the school’s Washington Residence Hall, throwing the old furniture away was not an option.

Associate Facilities Management Director Marc Guertin sought assistance from Casella Resource Solutions, which handles all recycling and waste streams on the SNHU campus. With a history of collaborative projects, Casella’s Krysten Desmond in turn reached out to IRN.

IRN identified recipients for SNHU’s surplus, and over three days IRN and a crew from Diamond Relocation filled nine shipping containers with SNHU furniture, destined for communities in five countries on three continents.

Composition

Item	Count	Item	Count
Captain’s Bed with Drawers	221	Desk	246
Double Wardrobe	243	Desk Chair	243
Mattress (see ‘Implementation’)	76	Total	1,029

Implementation

IRN and Diamond Relocation filled a total of nine overseas shipping containers: three trailers on each of three days.

Washington Hall has three stories plus basement, served by a single small passenger elevator, and little room for staging. To keep to the project schedule, IRN and Diamond Relocation carefully planned crew assignments to keep inventory flowing out of the building as fast as it could be loaded.

Tractor-trailer access to the building was good, but IRN had to block off about 40 parking spaces to provide adequate turning radius. With construction projects taking over many SNHU parking lots, it wasn’t easy to protect these spaces from poachers. IRN secured cooperation from SNHU’s Campus Safety office to keep these spaces empty, particularly overnight when no IRN representative was onsite.

IRN – The Reuse Network

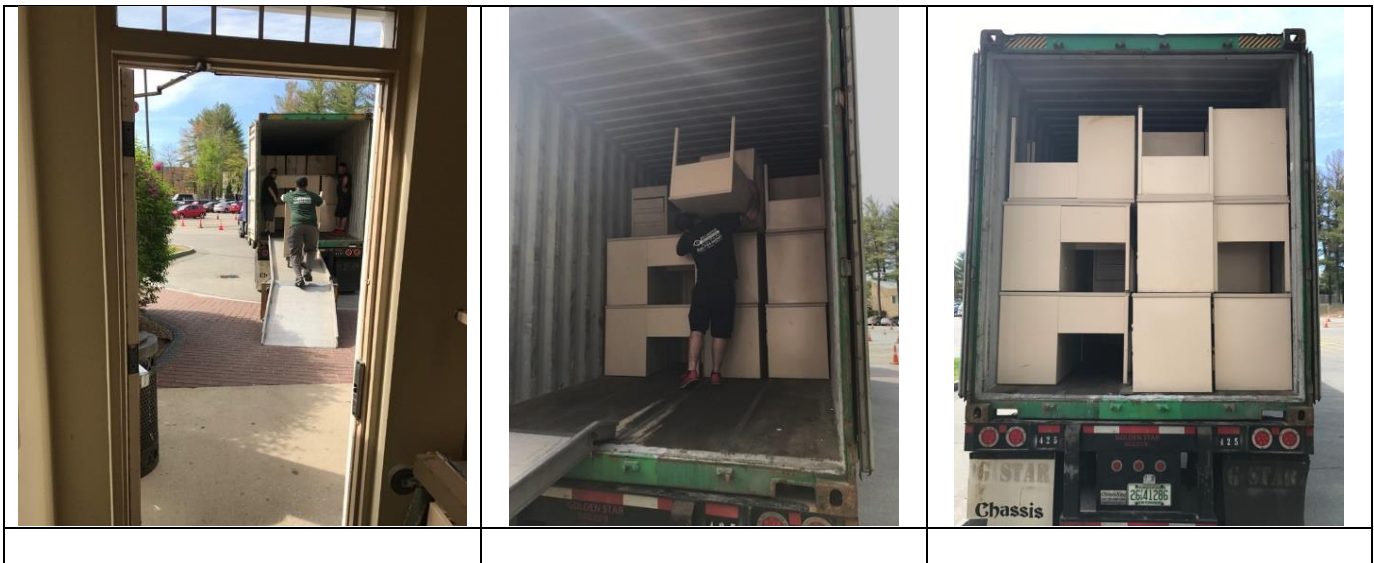
Nearly half of the inventory consisted of large, 300-pound wardrobes and wood platform beds with integral drawers. These were both a blessing and a curse. A curse because they were heavy, bulky, and could be moved down the elevator only one at a time. A blessing because they quickly filled the shipping containers. IRN placed a chair in most wardrobes, to maximize the piece count per trailer.

The SNHU project did not include mattresses. Our charitable partner World Vision wanted to send a shipment of beds to Somalia, but only if mattresses could be included. So IRN brought 75 mattresses from a concurrent IRN project in Boston, 50 miles away, and made up World Vision’s Somalia shipment.

Destinations
 IRN’s longtime partner World Vision requested the entire inventory, then divided it among five recipient nations. Of the nine trailers loaded, four were provided to communities in Mongolia, two to Armenia, and one each to Somalia, El Salvador, and Nicaragua.

Item	Destination				
	Mongolia	Armenia	Somalia	El Salvador	Nicaragua
Desk	119	49		36	42
Chair	116	65		32	30
Wardrobe	116	65		32	30
Bed	87	40	72	10	12
Mattress			76		
Total	438	219	148	110	114

QUOTE?



WASTE MANAGEMENT PLAN

MARCH 25, 2016
SOUTHERN NEW HAMPSHIRE UNIVERSITY

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1 Introduction

The Waste Management Plan was developed to provide guidance in the management of hazardous waste and other types of regulated waste. Universal waste, as a subset of hazardous waste, would be included in the plan. SNHU is a small quantity generator of hazardous waste, and a small quantity handler of universal waste with an EPA Identification Number of NHD510079015. The majority of the hazardous and universal waste generated at SNHU is waste generated by Facilities in support of University operations (i.e. batteries, lamps, oils). However, there is currently one chemistry laboratory used for teaching and research, which generates small quantities of flammable, corrosive and toxic wastes, and one bio-laboratory that generates very small quantities of corrosive, toxic, and biohazardous waste.

This plan is dynamic, and will be reviewed frequently, and amended to take into consideration changes occurring at SNHU and revisions to federal and state regulations.

2 Definitions

Asbestos	A mineral fiber that occurs in rock and soil frequently found in building materials because of its fiber strength and heat resistance. Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered
Biohazardous Waste	Biohazardous waste is any waste containing infectious materials or potentially infectious substances such as blood. Of special concern are sharp wastes such as needles, blades, glass pipettes, and other wastes that can cause injury during handling.
Hazardous Waste	A solid, semi-solid, liquid or contained gaseous waste (or any combination of these waste) which: <ul style="list-style-type: none">• Because of either quantity, concentration, or physical, chemical, or infectious characteristics may cause or contribute to an increase in mortality or an increase in irreversible or incapacitation reversible illness or• Poses a present or potential threat to human health or the environment when improperly treated, stored, transported, disposed or otherwise mismanaged.
Ionization Smoke Detector	A type of smoke detector that contains a small quantity of radioactive material, Americurium 241.

Small Quantity Generator	A hazardous waste generator who, in each and every calendar month, generates less than 220 pounds of hazardous waste, 2.2 pounds of acutely hazardous waste, or 220 pounds of any residue or contaminated soil or debris resulting from the clean-up of a spill of any acutely hazardous waste
Small Quantity Handler	A universal waste handler who accumulates less than 5000 kg (approximately 11000 pounds) combined universal wastes
Universal Waste	A sub-set of hazardous waste, generally less hazardous, including batteries, pesticides, mercury containing devices, lamps, cathode ray tubes and anti-freeze. Universal Waste are managed under the Universal Waste Rules rather than the Hazardous Waste Rules.

3 Policy

3.1 Scope

This plan applies to all University operations that generate hazardous and universal waste streams. It does not apply to municipal solid wastes, recyclable paper/glass/plastic, or wastewater.

Asbestos waste and biohazardous waste are also beyond the scope of the WMP. Asbestos management, including management of asbestos waste, is covered in the Asbestos Management Plan. The management of biohazardous waste is covered in the Facilities Exposure Control Plan for Bloodborne Pathogens.

3.2 Purpose

The intention of the WMP is to detail the methods the University will use (1) to evaluate wastes and determine if they are regulated as a hazardous waste, (2) and properly accumulate, store, transport and dispose of hazardous waste.

This plan was developed to be in compliance with the following regulations: Hazardous & Universal Waste: EPA Resource Conservation and Recovery Act regulations (40 CFR parts 260 through 273), and NH Department of Environmental Services Hazardous Waste Rules (Env-WM 100-1100).

3.3 Roles and Responsibilities

Affected Employees

- Follow the guidelines of this plan
- Attend training for Hazardous Waste

Supervisors

- Follow the guidelines of this plan
- Ensure employees are trained
- Attend training for Hazardous Waste

Warehouse Supervisor

- Follow the guidelines of this plan
- Perform weekly inspection of the waste storage area
- Attend training for Hazardous Waste
- Attend training for DOT Hazardous Materials Shipping (if Rich will be signing manifests)

Safety Program Manager

- Provide support to employees in universal and hazardous waste management
- Act as backup to Warehouse Supervisor in performing weekly inspections
- Develop and deliver universal and hazardous waste training to employees
- Attend Hazardous Waste Training
- Attend DOT Hazardous Materials Shipping Training

4 Waste Management Procedures

4.1 Waste Determination

All waste and unused chemical products (i.e. cleaning chemicals, plumbing/grounds/carpentry chemicals) will be presumed to be hazardous unless determined to not be by the Safety Program Manager. The Safety Program Manager will determine if a waste is hazardous based on their knowledge of the process generating the waste, ingredients listed on a Safety Data Sheet, and/or chemical analysis of a waste or product.

Chemical waste determined to not be hazardous will be stored and managed similarly to hazardous waste, and disposed of via a transporter registered with New Hampshire to an authorized disposal facility.

4.2 Waste Generation

Hazardous and universal waste generated by University activities will be collected by Facilities employees at the point of generation in a sealable container that is compatible with the contents. The waste will be secured in a SNHU owned vehicle in a way that will prevent spilling during transport. Once at the Operations Center storage area, the employee will gain access to the storage area via the Warehouse Supervisor, the Associate Director, or the Safety Program Manager. The waste will be labelled with a hazardous or universal waste label, words that describe the waste, and the date the waste is placed in the storage area. The waste will be logged into the Operations Center Waste Log (see Appendix B) so that generation rate and accumulation can be determined.

Hazardous waste generated by the laboratory in Robert Frost 334 will be shipped directly from the laboratory by the waste transporter. Alternately, the laboratory waste may be prepared for transfer to the Operations Center by the Safety Program Manager. In this case, the Safety Program Manager will:

- Ensure the waste container is compatible with the waste and non-leaking
- Label the container (if not already done) using a hazardous waste label with a detailed description of waste and date.
- Log each waste stream into the Waste Transfer Log (see Appendix C)
- Box up the hazardous waste for transport to the Operations Center
- Transport the waste to the Operations Center

4.3 Waste Storage

The main storage area for hazardous and universal waste on campus is the Facilities Operations Center. The storage area is locked with access limited to the Associate Director of Facilities, the Warehouse Supervisor and the Safety Program Manager. SNHU, as a small quantity generator, will comply with the following storage requirements when storing hazardous wastes:

- Waste will be stored in chemically compatible containers that are in good condition and remain sealed at all times, except to add or remove waste.
- Waste will be stored on impervious surfaces with no functional floor drains
- Waste will not be stored outside, unless stored under cover. Liquid waste, if stored outside, will be stored under cover and in secondary containment.
- Containers of waste will be labelled at the time they are first used to store waste with:
 - ~ The words "Hazardous Waste" if the waste is a hazardous waste
 - ~ The words "Universal Waste" if the waste is a universal waste
 - ~ Words that identify the contents of the container
- Spill control equipment and fire control equipment will be maintained inside the storage area
- A 'No Smoking' sign will be posted near ignitable and reactive wastes
- A minimum of 2 feet of aisle space will be maintained to allow for detection of leaks and deteriorating containers

SNHU may accumulate up to 220 pounds of hazardous waste for an indefinite amount of time provided the University complies with the above requirements. Additionally, the University may accumulate more than 220 pounds up to 2200 pounds of waste as long as the following requirements are met:

- Hazardous waste containers are inspected weekly
- The hazardous waste is under the control of a designated hazardous waste manager or Emergency Coordinator
- An Emergency Coordinator is designated and available to coordinate all emergency response measures.

- The name and telephone number of the emergency coordinator, emergency phone numbers and location of emergency equipment is posted next to the nearest telephone to the hazardous waste storage area.
- All employees are familiar with proper waste handling and emergency procedures relevant to their responsibilities
- University complies with 40 CFR 265 Subpart C, Preparedness and Prevention, including:
 - Equipment
 - a. An internal communications or alarm system capable of providing immediate emergency instruction (i.e. fire pull station)
 - b. A phone or two-way radio capable of summoning emergency assistance
 - c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment
 - d. Water at adequate volume and pressure to supply water hose streams, automatic sprinklers or water spray system
 - Testing and maintenance of equipment
 - Access to communications or alarm systems
 - Aisle space
 - Arrangement with local authorities
- When the 2200 pound limit is reached the waste is shipped offsite within 90 days of the date that the limit is reached
- Containers will be clearly marked with the date that the accumulation limit was reached

4.4 Waste Transport and Disposal

Universal wastes will be disposed of within one year of the accumulation date. To reduce confusion, the oldest date marked on a container of universal waste will be the start date for disposal of all universal waste.

Hazardous waste (other than universal) may be accumulated indefinitely, as long there is less than 2200 pounds accumulated. Once more than 2200 pounds of hazardous waste is accumulated, SNHU must ship the hazardous waste to an authorized disposal facility within 90 days of when the 2200 pound limit was reached.

SNHU will use only registered transporters to transport hazardous waste to authorized disposal facilities.

4.5 Waste Minimization

To reduce potential environmental impact and minimize disposal costs, SNHU will make every effort to reduce the quantity and toxicity of its hazardous waste. To make these reductions, SNHU will implement the following control measures:

- Only purchase the quantity and type of materials required for use

- Select the least hazardous chemical to accomplish the task
- Avoid the collection of trial samples
- Recycle or reuse materials when possible
- Avoid 'unknowns' by labelling chemical materials, and replacing deteriorating labels
- Avoid mixing of incompatible chemicals or waste after they have been generated.
- Bulk materials and waste of the same or similar type whenever possible (i.e. waste oils, waste paints)

4.6 Waste Spills

Response to hazardous materials and waste spills will be covered in detail in the Facilities Emergency Action Plan. Spill control and clean-up of oil is covered in detail in Oil Spill Prevention, Control, and Countermeasure Plan (Oil SPCC).

4.7 Training

4.7.1 Hazardous/Universal Waste

Employees who generate or handle hazardous waste will receive training for hazardous waste, appropriate to their hazardous waste responsibilities. At a minimum, training will include the known types of hazardous waste employees will encounter, how to handle hazardous waste, and emergency procedures relevant to their duties.

4.7.2 Hazardous Materials Shipping Training

The US Department of Transportation requires that any employee who prepares a hazardous material (including hazardous waste) for transport requires hazardous material shipping training. This includes signing manifests. Any employee who signs manifests will have hazardous materials shipping training relevant to their responsibilities at least once every three years.

4.8 Recordkeeping and Reporting

4.8.1 Notifications

A Hazardous Waste Activity Notification form is used to notify the State of New Hampshire Department of Environmental Services (NHDES) of a company's hazardous waste activity or to update information that the Division has on file for a company. After the initial Notification, the State will assign an EPA waste identification number to the generator. SNHU's EPA ID number is NHD510021413. Anytime SNHU has a change in

type or estimated quantity of waste generated, or if there is a change in company name, street address of generating site, company ownership, or property ownership, SNHU must submit an updated Notification.

Copies of the Notification Forms will be retained for the life of the University.

4.8.2 Manifests

Uniform manifests will be used as a shipping and tracking document for any shipment of a hazardous waste. Manifests must be retained for at least three years after the date of shipment. However, SNHU will retain manifests for the life of the University.

After a shipment of hazardous waste, SNHU will mail a copy of the manifest to NHDES (the Generator state) and the destination state (unless the destination state has indicated that they do not want to be mailed the facility copy of the manifest.) The disposal facility will mail back a signed copy of the manifest to SNHU. If the return copy is not received within 35 days, SNHU will make efforts to determine the status of the waste. If after 45 days, a copy of the manifest still has not been received, SNHU will file an Exception Report with NHDES.

4.8.3 Exception Reports

An Exception Report will be filed with NHDES if a copy of the manifest signed by the destination facility has not been received by SNHU within 45 days of shipment. The Exception Report consists of a copy of the manifest, a letter detailing the actions SNHU has taken to track down the waste, and the results of those efforts.

An Exception Report will also be filed if there is a discrepancy between the original and the returned manifest.

Exception Reports will be retained for the life of the University.

4.8.4 SQG Self Certification

A Small Quantity Generator is required to review its hazardous waste management procedures, conduct a self-inspection of its facility and certify compliance to DES every three years. SQGs that are not in compliance must develop a Corrective Action Plan, specifying how they plan to come into compliance within 90 days from the date the declaration is due. SQGs must also submit a fee of \$90 per year, payable every three years at the time of certification. The next self-certification is due January 1, 2017.

SQG Self-certifications will be retained for the life of the University.

4.8.5 Quarterly Reports

SNHU will receive a quarterly report for any quarter that hazardous waste was shipped. This report allows SNHU to check the data received by NHDES with our actual shipments, and allows NHDES to assign a per pound fee for the waste generated during that quarter. If any errors are found, changes are made to the report, and returned with a copy of the manifest in which there was a discrepancy. The report must be signed and returned with the appropriate fee.

Quarterly reports will be maintained for the life of the University.

4.8.6 Inspections

Small quantity generators are not required to complete weekly hazardous waste storage area inspections, until the quantity of waste stored is over 2220 pounds. For ease in managing the program, weekly inspections are performed even when there is less than 220 pounds of combined waste. Appendix D contains the inspection form used by SNHU. Problems discovered through inspections must be corrected immediately and corrective actions noted on the inspection form.

Inspection Records will be retained for at least 3 years.

4.8.7 Analytical Data

Waste may be sampled and sent to an analytical laboratory certified in EPA method analysis to help in waste determinations. The results of analysis will be retained for the life of the University.

4.8.8 Training Records

Training records will be retained for at least 5 years or for the length of time that the trained employee is employed by SNHU.

5 List of Appendices

Appendix A: Waste Labels (example)

Appendix B: Operations Waste Log

Appendix C: Waste Transfer Log

Appendix D: Inspection Log

6 Related Policies

Asbestos Management Plan (in Draft)

SNHU Exposure Control Plan for Bloodborne Pathogens

Facilities Emergency Action Plan

Oil Spill Prevention, Control, and Countermeasure Plan

APPENDIX A: WASTE LABEL (EXAMPLE)

**HAZARDOUS
WASTE**

ACCUMULATION
START DATE 12/18/15

CONTENTS Deglosser with a hydro-
carbon solvent, methylene chloride, methanol

HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES

REG LABEL FACTORY® (800) 871-8888 www.labelmaker.com

**UNIVERSAL
WASTE**

SHIPPER SNHU

ADDRESS 2500 N-River Rd

CITY, STATE, ZIP Manchester, NH

CONTENTS Fluorescent Lamps

ACCUMULATION START DATE 10/21/15

REG LABEL FACTORY® (800) 871-8888 www.labelmaker.com

APPENDIX B: OPERATIONS WASTE LOG

WASTE LOG

DATE	WASTE	HAZ?	# CONTAINERS	CONTAINER TYPE	APPROX WEIGHT (lb)	RUN WEIGHT HAZ

1 GALLON= 8.3 LBS

LAMP WEIGHTS

T12=.61#,T8 = .41#, T12=.24#

APPENDIX C: WASTE TRANSFER LOG

APPENDIX D: INSPECTION LOG

SNHU

HAZARDUS WASTE WEEKELY INSPECTION RECORD

COLLECTION SITE: CENTRAL RECEIVING OTHER

DATE: / / TIME:

Containers	YES	NO
(All "YES" answers require remedial action)		
1. Evidence of leaks?		
2. Signs of corrosion?		
3. Bungs/covers loose or missing?		
4. Words "Hazardous Waste" missing or unreadable?		
5. Accumulation date missing or unreadable?		
6. Accumulation date older than 90 days?		
7. Waste identification missing or unreadable?		
General Area		
(All "NO" answers require remedial action)	YES	NO
8. Telephone available and emergency response phone numbers posted?		
9. Two foot space between container rows?		
10. All lables visable?		
11. Spill cleanup material available?		
12. Portable fire control available/operative? (Flammable/combustible waste only)		

INSPECTOR'S SIGNATURE _____

Note: This record must be retained for three years.

Record comments on the back of this sheet. Define all remedial actions taken.