

### PURDUE UNIVERSITY CAMPUS WASTE AUDIT

### 1.0 Introduction

Natural Resources & Environmental Science (NRES) students at Purdue University are performing a small-scale waste audit of both recycling- and landfill-stream waste by weight at a number of different locations on campus as part of a capstone project. This Health and Safety Plan outlines procedures to ensure the well-being of all participants during the audit. The plan aims to mitigate risks associated with handling waste materials while maintaining efficiency and compliance with health regulations.

### 2.0 Hazard Identification

- Biological Hazards: Exposure to bacteria, mold, and other pathogens from waste materials.
- **Chemical Hazards:** Possible contact with hazardous substances. e.g., cleaning agents, batteries, airborne contaminants.
- Physical Hazards: Risk of cuts, punctures, and strains from sharp objects from handling waste.
- **Environmental Hazards:** Potential for spills and improper disposal of waste during and after audit.

# 3.0 Personal Protective Equipment (PPE)

### All participants must wear:

- Nitrile Gloves
- ANSI A5 Cut Resistant Gloves (worn over nitrile gloves)
- Purdue EHS Approved Safety Glasses
- N95 Mask (recommended not required)
- Closed-toed shoes
- Long-sleeved shirt and long pants
  - (Tyvek sleeves/aprons)



## **4.0 Handling Procedures and Ergonomics**

- Trash bags will be acquired from bins in buildings, not from dumpsters. Thus, elimination
  of any safety risks of climbing into a dumpster to get trash
- Usage of tools, tongs, and small shovels to minimize direct handling of waste
- Tarps and buckets will be necessary to ensure proper sorting and containing leaks or spills
- Waste will be sorted on tables for ergonomic and efficiency purposes
- Avoid touching face, hair, clothes or any other body part while waste sorting
- Take breaks whenever necessary
- Ensure team communication for safety and efficiency

### **Example audit team:**

3-4 waste sorters

1 data analyzer (with computer, clipboard, camera)

## 5.0 Waste Disposal and Cleanup

- Properly bag and label waste before disposal
- Use same trash bags if applicable
- Keep landfill and recycling waste streams distinct and separate
- Dispose of all PPE properly and wash hands thoroughly
- Sanitize work space including tarp, table, buckets, tools, etc. post-audit
- Disposal of all audited waste to designated locations

## **6.0 Compliance and Training**

All participants must undergo a brief training session on waste handling techniques and safety procedures. The audit team will follow all of Purdue University's environmental, health, and safety protocols.

# 7.0 Emergency Procedures

<u>Minor Injuries:</u> Provide first aid using the available kit and report incidents to designated supervisor (Patrick)

<u>Major Injuries:</u> Call emergency services immediately and provide assistance as needed <u>Hazardous Material Exposure:</u> Cease operations, isolate the affected area, and notify Purdue EHS

Fire or Chemical Spill: Evacuate the area and contact campus emergency services





## **8.0 Contact Information**

### **Student Contact**

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### **NRES 497 Instructors**

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