KNOW WHERE to THROW!

Acceptable

- Contaminated waste: Masks, gloves, pipette tips, used specimen swabs
- Infectious waste (Pre-treated before throwing)
- Sharps placed in a closed and locked sharps container

Not Acceptable

- No chemicals
- No broken glass
- No pathology specimens
- No radioactive specimens
- No pharmaceutical waste
- No sharps not placed in sharps container
- No garbage: Food waste, styrofoam boxes, plastic bottles

Questions? Please Contact

National University of Singapore (NUS)
Office of Safety, Health & Environment
Tel: +65 6516 1084
Email: oshsec@nus.edu.sg

MANAGE CHEMICAL WASTE RESPONSIBLY

Ensure chemical is compatible with the waste container

Tightly capped

GHS label

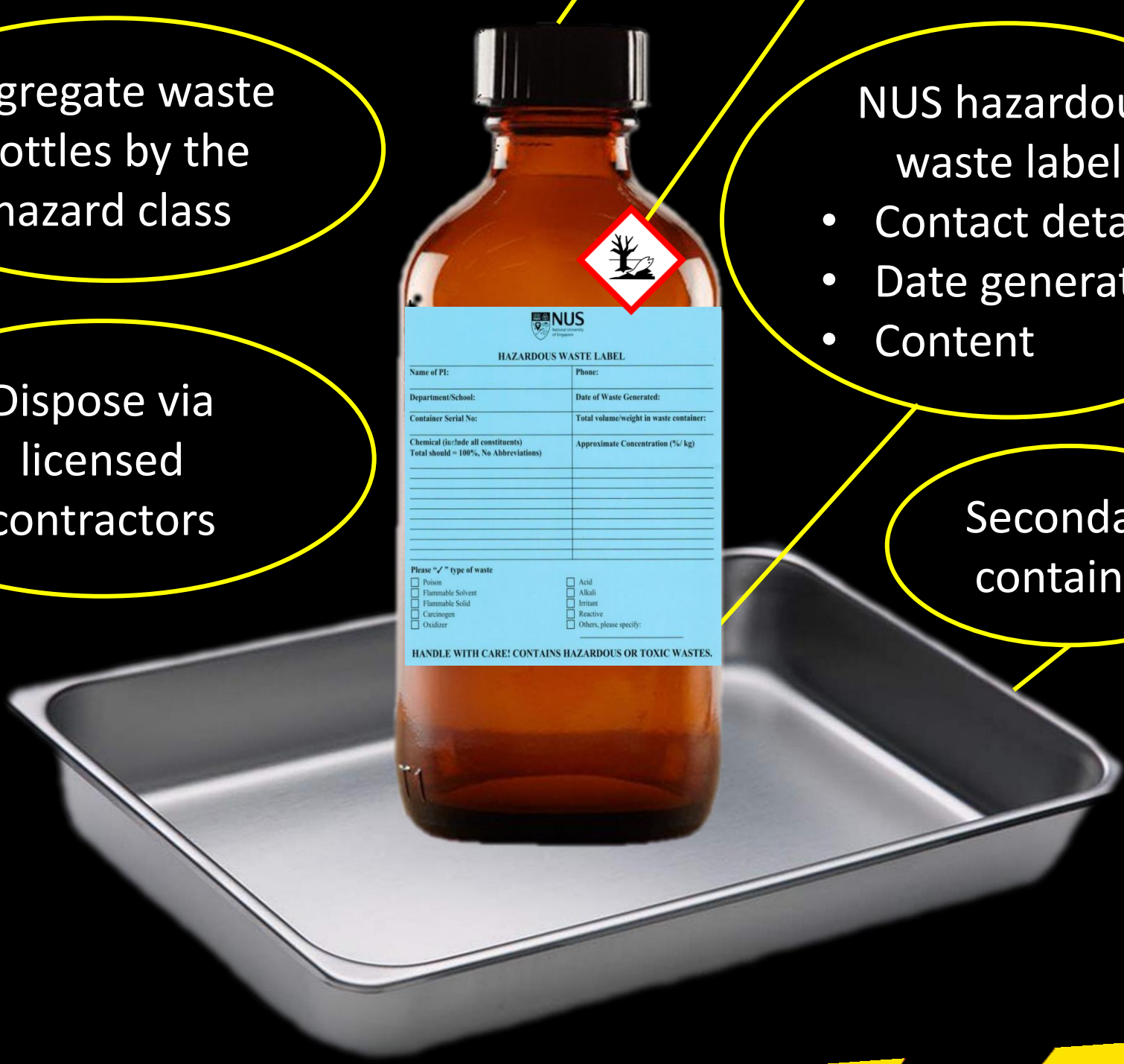
Segregate waste bottles by the hazard class

NUS hazardous waste label

- Contact details
- Date generated
- Content

Dispose via licensed contractors

Secondary container



MANAGE BIOLOGICAL WASTE RESPONSIBLY

Proper disinfectant for disposing of biohazard liquid waste

Dispose via licensed contractor

Contact details:

- PI's name
- Lab location
- Contact number
- Date generated

Double bagged

Radioactive Waste Management

Radioactive waste generated

Solid

Add Vermiculite

Liquid

Packed Separately In red colored waste bag.

Waste Disposal

Waste segregated in Perspex waste bin

< 0.1mRem/hr

Cytotoxic waste management

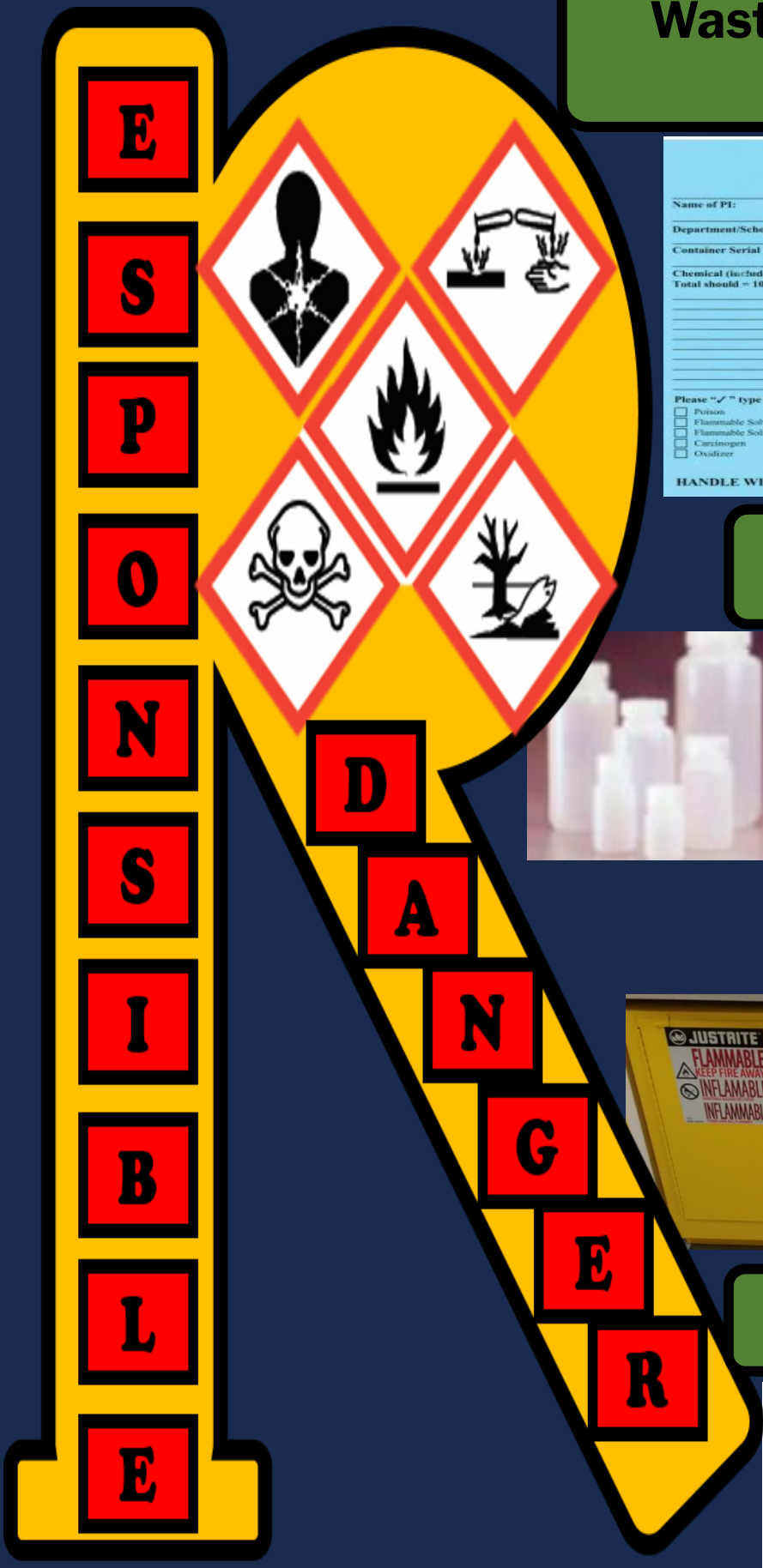
Identify

- Check substance against the NIOSH List of hazardous drug
- For non-listed drugs check safety data sheet (SDS), published literature or the substance mechanism of action (MOA)

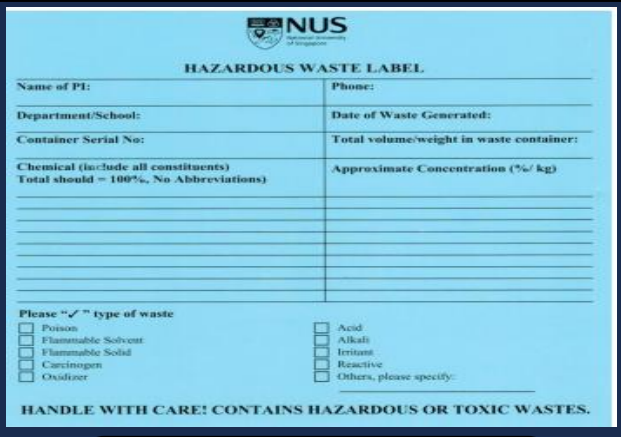
Dispose

- Through licensed waste disposal vendors
- Solid waste in purple cytotoxic waste bags
- Liquid waste stored in Secondary containment

CHEMICAL WASTE MANAGEMENT



Waste Labelling and Marking



NUS

HAZARDOUS WASTE LABEL

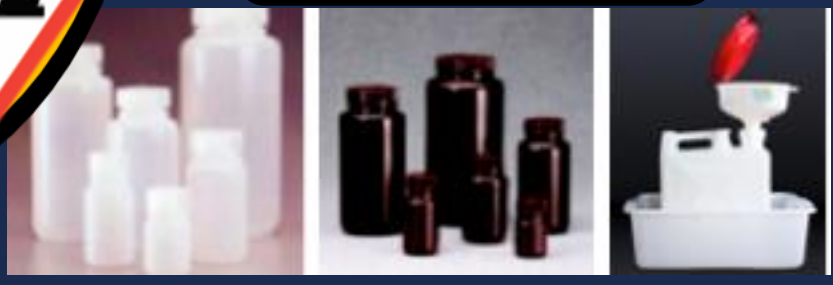
Name of PI:	Phone:
Department/School:	Date of Waste Generated:
Container Serial No:	Total volume/weight in waste container:
Chemical (include all constituents) Total should = 100%, No Abbreviations)	Approximate Concentration (%/ kg)

Please "✓" type of waste

- ☐ Poison
- ☐ Flammable Solvent
- ☐ Flammable Solid
- ☐ Carcinogen
- ☐ Oxidizer
- ☐ Acid
- ☐ Alkali
- ☐ Irritant
- ☐ Reactive
- ☐ Others, please specify:

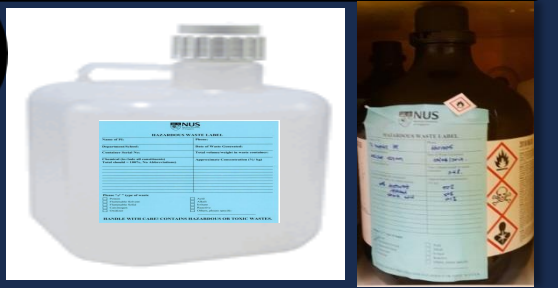
HANDLE WITH CARE! CONTAINS HAZARDOUS OR TOXIC WASTES.

Segregation



Storage

Waste Disposal



Wear Personal Protective Equipment

1. Appropriate Eye-wear
2. Long Sleeve Labcoat
3. Protective Gloves
4. Covered Shoes

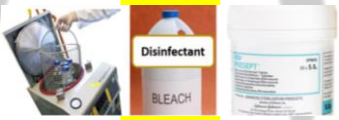
NUS National University of Singapore

Before Handling Biohazard Wastes

Segregate the Biohazard Wastes:

BIOHAZARD WASTE MANAGEMENT

Solid Biohazardous Waste	Pathological Biohazardous Waste	Sharp Biohazardous Waste	Liquid Biohazardous Waste
Used gloves & PPE with specimen or culture material	Human or animal organs, tissues and body parts	Needles, syringes & scalpels	Cell & Microbial Cultures
Used plastic-wares with biological agents		Microscope slides & broken glass	Body Fluid
Label the leak-proof container with biohazard symbol and layer with double biohazard bag.		Dispose into impervious, rigid and puncture proof container and sealed after ¾ full.	Decontaminate with appropriate chemical disinfectant (contact time at least 30 minutes or autoclave).
Decontaminate on site through autoclaving or dispose through an licensed waste collector.			
Label on biohazard bag with name of PI, laboratory location, date of disposal & contact number.			



Discharge treated liquids down the sanitary sewer by way of the lab sink with large volume of water.

Biological Waste: How to Handle Safely

Types of Biological Waste

- Sharp Objects 
- Solid Biological Waste 
- Liquid Biological Waste 

Key Hazards

- Physical Cuts 
- Slips and Falls 
- Infections 

Handling Procedures

Sharp Objects

- Sharp objects such as metal lancets, scalpel blades, needles, broken glassware, cover slips, and glass slides are to be disposed in the sharps container
- When the sharps container is ¾ full, seal and place it into double layers of biohazard bags before disposal

Solid Biological Waste

- Non-sharp solid items that are contaminated with biological materials waste should be kept in a solid-walled, leak-proof container which has been lined with double layer of biohazard bags
- The container should be covered and labeled as biohazard

Liquid Biological Waste

- Biological liquid waste should be kept in a covered, leak-proof container
- Use chemical or autoclaving disinfection on waste before disposal
- When flushing, use sufficient clean water to purge the drain

Do not leave biohazard bags & containers at hallways or along the corridor. Biohazard bags must be labeled with PI's name, laboratory location, disposal date and contact number before being stored in Department's Biohazard bins for vendor's collection.