## Section 1 - Personal Protective Equipment

1. Wear a proper fitting, buttoned-up lab coat for entire procedure.
2. Ensure closed-in shoes are worn, and long hair tied back.
3. Wear disposable gloves (e.g. latex or nitrile)
4. Wear safety glasses
5. If fumes are hazardous wear a respirator (located in the spill kit on level 4).

## Section 2 – Potential Hazards + Safety precautions

1. Ensure you are aware of the risks associated with the chemical waste you are dealing with – read the SDS for all the chemicals involved. If you are unsure, check with your supervisor. Know the location of spill kits, eyewashes, safety showers, fire extinguishers and fire blankets before starting work.
2. If biologicals are mixed in with the chemical waste (e.g. bacteria, DNA, animal tissues, tissue culture) you may need to sterilise the biological components before disposing of the material as chemical waste. This is especially relevant if the material contains pathogenic microbes or recombinant DNA. Consult with your supervisor or the School Safety Officer if unsure.
3. Ensure decanting process is performed in a fume hood, with proper ventilation and lighting. Always use a suitable sized funnel for transferring liquid into waste containers.
4. Chemicals are to be poured or disposed of into appropriate plastic drums, suitable Glass bottles or “Wet GarBags” (SOLID WASTE ONLY) with accurate labels displaying contents, approximate concentration and hazardous symbols, i.e. CORROSIVE, FLAMMABLE, IRRITANT...... etc.
5. Waste Acids are not to be mixed with Organic Reagents or Phenolics, at all times keep similar reagents together. Strong acids should not be mixed with Strong bases (alkalis). Oxidising agents should not be mixed with flammables. Acids should not be mixed with bleach. NEVER MIX CHEMICALLY DIFFERENT WASTE. Check the SDS for information on chemical compatibility.
6. Ensure waste drum is labelled with lab origin (name and room number).
7. Perform decanting over absorbant benchcote, so if spillages occur they can be easily cleaned up. Do not fill large containers completely AND do not over fill bags with solid waste. Keep the weight to a manageable level.
8. If Spillage occurs refer to spill kit located in the level 4 foyer and follow clean up procedure.
9. Workers with pre-existing medical conditions (e.g. allergy, immunocompromised state, chemical sensitivity) and workers who are pregnant or expecting pregnancy must consult with their supervisor AND medical specialist AND the university’s WHS services before performing this procedure. If there are any serious concerns expressed by any of these individuals, this task must not be performed.

## Section 3 – Procedure

1. Move generated waste to fume hood containing waste containers via trolley and/or via secondary containment, such as a metal bin.
2. Transfer into correctly labelled container using a safe decanting procedure. Ensure all protective equipment is worn. Ensure hood is properly functioning, use a large enough funnel.
3. When transferring solid waste into a Wet GarBag or similar hazardous waste disposal bag, ensure it is located in a area of minimal traffic and is firmly secured.
4. Once Waste container or bag is filled, appropriately seal and label as described above.
5. Complete Chemical Cleanout Form and email to Waste Disposal Officer.
Laboratory Waste –
* The sections/columns to fill in on the Chemical Cleanout Manifest are: Date, Contact Name, Landline, Chemical Waste Description, Waste Type (CHEMALERT, Google or Chemical Companies SDS’s can help with this), Pack Type, Pack Size, Number of Packs.
* Note with pack size that small red-lidded drum/containers are 5L, larger red-lidded containers/drums are 15L, wide mouthed white drum/containers are 20L.

Laboratory Chemical Cleanout –
1. Determine that the unwanted chemical is ready to be disposed of. If there is a substantial amount of unwanted chemicals to be disposed of, contact the Hazardous Waste Disposal Officer.
2. Check that the unwanted chemical is labelled correctly
3. Check that the unwanted chemical is in an appropriate container
4. Can the Unwanted Chemicals be recycled, reused or neutralized?
5. Fill out a Chemical Cleanout Manifest (Manifest details required to be filled in include – Contact Name, Landline, Ref #, Chemical Waste Description and Waste Type)
   - A number Reference # must be stuck on the container (masking tape is a good option for example) that corresponds with a Ref# on the Chemical Clear-out form should correspond with number on the bottle.
   - White Tote boxes, which can be obtained from room 225, can be used to hold the unwanted chemicals
   - Completed Chemical Clear-out Form’s chemicals must be kept separate from each other. The forms should be labelled in brackets within the date section after the date. The label should include laboratory generator and form number (e.g. Teaching page 1, Teaching page 2), and correspond with the boxes that the chemicals are placed within.
   - The Waste Type can be found by using CHEMALERT. If this is unsuccessful, a Google search should be tried. Leave blank if no information is forthcoming.
   - Please note that if a label has more than one hazard type, the primary hazard is the waste type that is selected
   - Unwanted liquid and solid chemicals will also be accepted for collection in the supplier's original packaging
   - Duplicate chemicals can be entered into the form on the same line with the Ref# expressing the number range (e.g. 1-4 or 10, 11, 12, 13 if there was four items). If the same chemical is in packaging of different sizes, each different sized packaged chemical will need to be entered on a separate line.
   - Chemical Contaminated refers to laboratory consumables and not containers that chemical bottles are purchased or stored in.

6. Then transfer via trolley and/or secondary containment to the chemical waste room 225.

Section 4 – Spills / Incidents
1. If a spillage occurs follow the spill procedure located with the Spill Kit on Level 4.
2. If an incident or injury occurs during decanting procedure ensure an online incident report is lodged and your supervisor notified.
3. Refer to safety information data (SDS’s or CHEMALERT) on how to best treat any exposure to chemical. If feeling unwell, seek medical attention.

Section 5 – Repairs / Certification / Validation
1. Ensure all waste containers and bags used do not leak and can be firmly sealed. For bottles and drums use the correct tops. For Bags use zip lock seals.
2. When transferring Bags to waste room, ensure secondary containment (e.g. a metal bin) Ensure trolleys are functioning properly. Do not carry large amounts of waste by hand.
Section 6 – Relevant safety data sheets

1. Refer to SDS’s for the specific chemicals involved for safety information and risk hazards. These should be housed in the Lab where the waste is generated.

Section 7 - References

1. Risk assessment – Disposing of Hazardous Chemical Waste
2. Other: SOPs for Flammable liquids (SMB013), Corrosives (SMB009).

SOP Consultation, Training and Approval

Print names and enter signatures and dates to certify that the persons named in this section have been consulted/trained in relation to the development and implementation of this Standard Operating Procedure. WHS Representative (WHS Committee) certifies that consultation has taken place.

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Name Authorising (Printed): DIANNE FISHER.................................................................

Signature: ..........................................................Date: 2/3/15 ..........................

WHS Committee Representative Name (Printed): MARKUS HOFER ......................

Signature: ..........................................................Date: 2/3/15 ..........................

Creation date: 02/04/2014  Next review due: 2/3/2017  Page 3 of 3