USTUR 1000: WASTE MANAGEMENT

Purpose	Identify, designate, collect, prepare, package, and dispose of wastes properly in accordance with WSU's broad scope license, local, state, and federal regulations	**Method Number**	USTUR 1000
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1. Principle of Method

1.1. USTUR Radiochemistry Procedures may result in generation of various wastes which must be managed in accordance with federal, state, local, and WSU requirements. Prior to beginning any experiment using hazardous materials at USTUR an evaluation of potential wastes must be conducted, appropriate waste management procedures identified, and preparations made to safely collect and manage resulting wastes.

2. Identification and Procedure Applicability

2.1. The US Environmental Protection Agency, and the State of Washington have determined that all wastes resulting from industrial operations such as laboratory experiments are "solid waste," regardless of physical form. This means that gasses, liquds, and solids are all captured under the definition of "solid waste" for the purposes of waste management regulations and must be evaluated to deterine which sections of the regulations apply. For the purposes of this procedure the versions of all regulations, municipal codes, and WSU policies published on the proponent(s) web sites are deemed to be the current, applicable version. Any hard copy versions found in USTUR records are for reference only.

2.2. Municipal Solid Waste (MSW) - MSW are those wastes which do not meet the criteria to designate as radioactive, mixed, dangerous or hazardous (synonymous terms in Washington), biohazardous, regulated medical waste, or those wastes discharged to wastewater treatment systems. These wastes are commonly referred to as "trash" or "garbage" and are the least hazardous type of wastes. The consist of those unwanted materials which don't present an extraordianry chemical, radioactive, or biological hazard to the public and which can not readily be recycled or reused as a feedstock in a commercial process. Examples of these wastes at USTUR are used containers, benchtop covers, gloves, disposable gowns and aprons, broken glassware, etc These wastes may be discarded in the MSW recepticle. They should not contain free liquids. USTUR's MSW is regulated only by City of Richland Municipal Code Title 15. If any material which would normally designate as MSW is contaminated with any hazardous material the entire mass is regulated as waste of that type and shall be managed in accordance with the applicable USTUR procedure. There is no separate MSW procedure at this time.

2.3. USTUR-1010: Incinerator Ash Analysis is no longer in use.

2.4. Biohazardous and Regulated Medical Waste (BW) – BW are those USTUR wastes which may contain or be contaminated with pathogens which may impact human health. BW shall be managed in accordance with USTUR Procedure 1020.

2.5. Dangerous Waste (DW) – DW are those chemical wastes which are hazardous to human healt and/or the environment. A description of such wastes and rules for properly identifying and managing them can be found at WAC 173-303. DW shall be managed in accordance with USTUR Procedure 1030.

2.6. Mixed Waste (MW) – MW are those wastes which are both radioactve and chemically hazardous in nature. They are regulated by WSU's license, state, and/or federal rules. Experiments which generate MW are not to be undertaken without the written approval of the USTUR Director and a written MW management procedure approved by RSO and EHS. MW procedures will be developed on a case-by-case basis and will not be assigned a procedure number unless they are the result of an ongoing radiochemistry procedure for which there is no alternative available which would not result in the generation of MW.

2.7. Radioactive Waste (RW) – RW are those wastes which contain radionuclides regulated by WSU's Broad Scope Radioactive Material License. RW shall be managed in accordance with USTUR Procedure 1050. Procedure 1050 includes both liquid and solid RW management instructions as well as waste minimization and MW avoidance techniques. Users shall consult Procedure 1050 for any experiment involving radioactive materials.

2.8. Combined Hazard Waste (CHW) – CHW are those wastes, other than simple MW which contain a combination of hazards. They may be BW and DW, MW and BW, or RW and BW. Experiments which generate CHW are not to be undertaken without the written approval of the USTUR Director and a written waste management procedure approved by the appropriate WSU service agencies (RSO, EHS, Biosafety Officer).

2.9. Non-hazardous Wastewater (NHW) – NHW are those wastes that may be discharged to the sanitary sewer as allowed by City of Richland Municipal Code, Title 17, and USTUR's RMA. Such wastes may result from dishwashing, rinsing, non-contact cooling water, etc. There is no separate NHW procedure at this time.

3. References

3.1. WAC 246 -220 (State of Washington, Office of The Code Revisor)

3.2. WAC 173-303 (State of Washington, Office of The Code Revisor)

3.3. City of Richland Title 15, Solid Waste (City of Richland, Clerk)

3.4. City of Richland Title 17, Wastewater (City of Richland, Clerk)

3.5. WSU Safety Policies and Procedures Manual (WSU, VP Business and Finance)

3.6. WSU Institutional Biosafety Committee Manual (WSU Institutional Biosafety Committee)

3.7. WSU Hazardous Waste Identification Guide (WSU EHS, web site only)

3.8. WSU Radiation Protection Program Manual (WSU, RSO)

3.9. WSU Broad Scope Radioactive Materials License WN-C003-1 (WSU, RSO)

3.10. USTUR Radioactive Material Authorization (USTUR, Director)