

# Hazardous Waste Management Standard Operating Procedure

## ART DEPARTMENT

### DESIGNATION

---

*Designation is the process of determining whether a waste is regulated under WAC 173-303 and if so, what waste codes apply to it. See Master Forms List for the Designation Checklist form.*

Designation has been completed for the routinely generated waste (see below) and is kept on file with the Hazardous Waste & Academic Safety Manager (HWASM). Designation occasionally needs to be done for clean out items. This will be done by the HWASM as needed and initiated by the Art Department.

It is the responsibility of the Art Department to inform the HWASM of any proposed changes in commonly used products that could affect the current waste designation. Prior to all such changes the affected waste stream will be re-designated by the HWASM.

Waste Stream	Designation	Waste Codes
<b>Solid waste</b> (paper, and the like, contaminated with paint and ink)	Dangerous waste, toxic. May contain cadmium and chromium.	D006, D007
<b>Liquid waste</b> (water from washing paint brushes)	Dangerous waste, toxic. May contain cadmium and chromium	D006, D007
<b>Batteries</b>	Universal Waste	N/A
<b>Aerosol spray cans</b>	Flammable, toxic	D001, WT02

#### Additional Waste Stream Information:

- 1) Solid Waste: Miscellaneous paper, paper pallets, dry pastel bits, turlatin rags and paper towel contaminated with ink and paint products. These are collected in "solid waste" Dangerous Waste receptacles. Some of these products are oil-based ink other are paints that may contain cadmium or chromium pigments.
- 2) Liquid Waste (Paint Brush Washing): A variety of inks, paints and glazes are used in the various Art courses. Some of the ink products are oil based and most of the yellow and orange colors of ink and paint contain cadmium or chromium. In painting courses the only additive or solvent used is Windsor and Newton's Liquin medium. Liquin designates as Non-Hazardous waste. Mineral spirits are used to clean up oil based inks. Paint brushes and rollers are cleaned by first removing as much paint as possible with laundered rags. Then the brushes and rollers are cleaned in a "brush washer" until paint is no longer visible on the brush. Then they are given a final rinse in the sink. Glazes with hazardous components are generally only used in advanced courses. When used, the brushes will be cleaned with a brush washer. The waste water/solvent from these 'brush washers' designated as D001, D006 and possibly D005 and D007. They are combined with each other and disposed of with campus Dangerous Waste at the end of each semester.

- 3) Used Batteries: Batteries in digital devices are used in several Art classes. These are handled as Universal Waste. Batteries are collected in small containers in classrooms. They are emptied, as they become full into the main accumulation area in Facility Services by the Hazardous Waste Manager or his/her designee.
- 4) Spray cans: Spray cans of fixative are used in Drawing and Figure Drawing courses. When empty, these cans are placed in the empty can satellite accumulation receptacle in Lied Room 203. This receptacle is emptied at the end of each semester or sooner if necessary. The empty cans are taken to the university's puncture station, punctured, drained and then disposed of in the garbage by the Hazardous Waste Manager or his/her designee.
- 5) Dry Pastels: Used in Drawing and Figure Drawing courses. The only hazardous property of this product is the potential for cadmium in certain colors. They are generally used in a manner that does not produce waste. Small pieces that break off or are too small to be used will be placed in the "solid waste" stream described above.
- 6) Laundered Rags: Rags are used for a variety of cleanup and art processes. They are collected in "flam cans" which are emptied weekly into the main collection bin to be laundered by our contracted service provider.
- 7) Screens –Oil based ink: Screens are wiped clean with laundered rags.
- 8) Discharge to POTW: Screen-printing screens that are used only with non-toxic, water based, latex products are power washed and the run off discharged to the sewer. Other application devices for non-toxic, water based latex products are cleaned with soap and water in the sink. These products do not designate as dangerous waste.
- 9) Copper Etching: Copper etching is accomplished in a ferric chloride bath. Used ferric chloride is removed once every 2-4 years and bulked with similar Chemistry Department waste for proper disposal at a permitted TSD. This waste designates as D002 and likely WT02, although exact concentration is unknown.
- 10) Sand Blaster: Dust from the sand blaster will be characterized after collection and prior to disposal. This has not yet occurred, but it is anticipated that this will occur once every 2-4 years.
- 11) Glass Scraps: Glass frit is considered non-hazardous (the manufacturer doesn't even produce an SDS for their products). Glass scraps are collected in a broken glassware box, separately from other waste so as not to pose a laceration risk to custodial staff. When full, the box is sealed with tape by Art department staff and custodial services is contacted for disposal into the regular trash.
- 12) Ceramics: Sponges and other devices used with clay are washed out in a bucket of water. The clay is allowed to settle to the bottom. Then the water is discharged to the sewer and the clay is reused. Our clay and wash water do not designate as dangerous waste.

## SATELLITE ACCUMULATION

---

*Satellite Accumulation is a location at or near the point of waste generation where hazardous waste is initially accumulated prior to consolidation at the 180/90day accumulation area.*

Each satellite accumulation area must be identified and secured. The Art Department is responsible to ensure that the waste containers are secured in such a way as to prevent the improper addition of waste. This includes training students to place their waste in the proper receptacle. The Art Department is also responsible to maintain the emergency response and contact information posted in each accumulation area.

## 180/90 DAY ACCUMULATION

---

*180/90 day accumulation areas are places where waste is kept when it is removed from satellite accumulation and is awaiting shipment for treatment and disposal.*

The Art Department does not have a 180/90day accumulation area in Lied and therefore makes use of the campus 180/90day accumulation area in Robinson Science Hall room 145.

## INSPECTIONS

---

*Weekly inspections of all containers in 180/90day accumulation areas is required by WAC 173-303-630(6). Inspections must include the integrity of containers as well as accuracy and completeness of labels.*

Even though inspection is not required in the satellite accumulation areas in Lied, the solid waste collection bins are inspected weekly by the Hazardous Waste & Academic Safety Manager (or his/her designee) in conjunction with waste transfer.

## TRANSFER OF WASTE

---

*Transfer of waste from satellite accumulation to 180/90 accumulation occurs when containers are 'full'.*

Once the waste is received in the 180/90 day accumulation area in Robinson the HWASM is responsible to ensure that it is logged, labeled, accumulated and disposed of properly and in accordance with Whitworth University's hazardous waste management program as well as all applicable state and federal regulations.

Waste Stream	Satellite Accumulation Location	Method of transfer
Solid waste	Lied 205 (painting studio) Lied 207 (print studio)	The HWASM or designee inspects weekly and collects when full. Then it is brought to Robinson 145 to be logged and await disposal.
Liquid waste (brush washing stations that use recirculated water to clean brushes)	Lied 205 (painting studio) – There are five parts washers in this room. Lied 207 (print studio) – There is one parts washer in this room. Lied 105 (ceramics studio) – There are two parts washers in this room.	Once or twice per semester, at the request of the instructor, the liquid waste is removed from the brush washers by the HWASM and placed into waste containers that are kept in Robinson 145 to await disposal.

Batteries	Lied 202 (front office) Lied 101 (computer lab)	Emptied as containers become “full” or as requested by Art Department staff, the HWASM will remove batteries and place them in universal waste accumulation containers in Facility Services.
Aerosol cans	Lied 203 (drawing studio)	Once per semester, or as requested by Art Department staff, the HWASM will remove empty cans and pass them to Facility Services for puncturing and disposal. See Aerosol Can Management SOP for more information.

## SOP EVALUATION AND REVISION

---

The Art Department waste management SOP is evaluated every two years by the HWASM and the Art Department Chair to ensure it is effective in practice and that it complies with all applicable regulations. Revisions are made in consultation with university safety personnel.

## APPROVAL

---

Dean of the College of Arts & Sciences:	Noelle Wiersma	Date: Dec 3, 2018
Hazardous Waste & Academic Safety Manager:	Joy Diaz	Date: Nov 7, 2018
Chair of the Art Department:	Gordon Wilson	Date: Nov 9, 2018