

## Washington State Department of Ecology Benthic Lab

### Protocol for Shipping Specimens in Ethanol

First, determine volume of ethanol to be shipped. For “limited quantities”, total volume can’t exceed 1L (a maximum of 125 8mL vials/package). Volumes greater than 1mL must split into multiple packages. If total volume is less than .5L, it can be shipped as an “excepted quantity”.

#### Limited Quantities via FedEx, domestic air or ground:

Scientific specimens can be shipped using IATA special provision 180 of the ICAO Technical Instructions, which states that:

Non-infectious specimens, such as specimens of mammals, birds, amphibians, reptiles, fish, insects and other invertebrates containing small quantities of UN 1170, UN 1198, UN 1987 or UN 1219 are not subject to these Instructions provided the following packing and marking requirements are met:

specimens are:

- wrapped in paper towel and/or cheesecloth moistened with alcohol or an alcohol solution and then placed plastic bag that is heat-sealed. Any free liquid in the bag must not exceed 30 mL; or
- placed in vials or other rigid containers with no more than 30 mL of alcohol or an alcohol solution;
- the prepared specimens are then placed in a plastic bag that is then heat-sealed;
- the bagged specimens are then placed inside a another plastic bag with absorbent material then heat sealed;
- the finished bag is then placed in a strong outer packaging with suitable cushioning material;
- the total quantity of flammable liquid per outer packaging must not exceed 1 L; and
- the completed package is marked “scientific research specimens, not restricted Special Provision A180 applies”.
- The words “not restricted” and the special provision number A180 must be provided on the air waybill when an air waybill is issued.

#### MSMP Shipping Procedures:

##### 1.) Inside the box

- Inner packages (vials, jars) cannot exceed 30mL. Outer package must not exceed 1L.
- Place vials into a bag and heat seal.
- Place bag + absorbent material into a larger bag and heat seal.
- Double heat-sealed bag should be placed into a sturdy box with lots of cushioning material.
- I like to include a copy of the MSDS and the chain-of-custody form in the box as a “packing slip” of sorts.
- Tape box shut.

##### 2.) Outside of box

- Write “Fragile” on the box top.
- Place arrow sticker (indicating “this end up”) on the outside of the box.
- Outer package should be marked “Scientific Specimens, Not restricted – Special Provision A180 Applies.” This should also be put on the Air Waybill if there is one, and make sure “Dangerous

Goods, not restricted” is checked. Ecology doesn’t use a paper airbill so this should not be an issue.

**3.) Drop packages off at Ecology mailroom.**

- They will need the addresses/phone numbers of recipients and SIC code to charge (I like to notify Kari Heikkla via email in advance of dropping off packages).
- They also need to know the service (Express Saver is cheapest) and if a signature is required upon delivery.
- For international shipments, give a detailed description of the package contents for customs.
- FedEx will email you a tracking number and delivery confirmation.