



Packaging wastewater samples for shipment

This document provides guidance for packaging wastewater samples for shipment. The shipment of wastewater in Canada is not regulated under the Transportation of Dangerous Goods (TDG) Act. Though wastewater is not regulated, good shipping practices should be employed to prevent and mitigate spills. Inspiration for these shipping practices are drawn from the regulations governing the transport of UN3373 Category B dangerous goods. Sample leakage may be prevented by sealing the lid with sealing tape or film and maintaining the sample bottle in an upright position via void fill/cold packs and directional “up” arrows on the outer packaging. The use of primary and secondary re-sealable bags along with absorbent matched to the volume being transported are good measures to contain and mitigate a spill. Cold packs are the preferred method of temperature control. The use of wet ice is discouraged, but if necessary, should be packaged within a sealed double bag.

Packaging Directions

1. Complete the blank label on bottle before sampling, with the date, time, sampling site and any additional comments if required
2. Do not fill the sample bottle completely full. The bottle should be filled to just below the shoulder. Firmly hand tighten the lid
3. Seal bottle by stretching and wrapping one parafilm strip along the bottle lid and body. The film should be wrapped in the direction as if tightening the lid. Verify that the broken sterility sticker is not obstructing the seal before wrapping

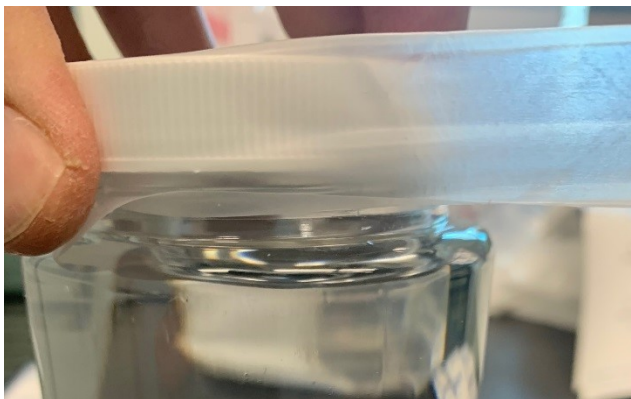


Figure 1 Stretching and applying the parafilm



Figure 2 Parafilm sealed bottle



4. Place the now sealed bottle(s) into the first re-sealable bag between the absorbent strips. Fold over the top of the bag and expel as much air as possible before sealing the bag closed.



Figure 3&4 Examples of one and two bottles in primary re-sealable bag with absorbent

5. Place the sealed bag with bottle(s) into the second re-sealable bag. If shipping a single bottle, place a bubble wrap “buddy” roll inside the secondary bag along side the bagged single bottle. The “buddy” roll will help to keep the sample upright during shipment.



Figure 5 Double bagged single bottle and buddy roll

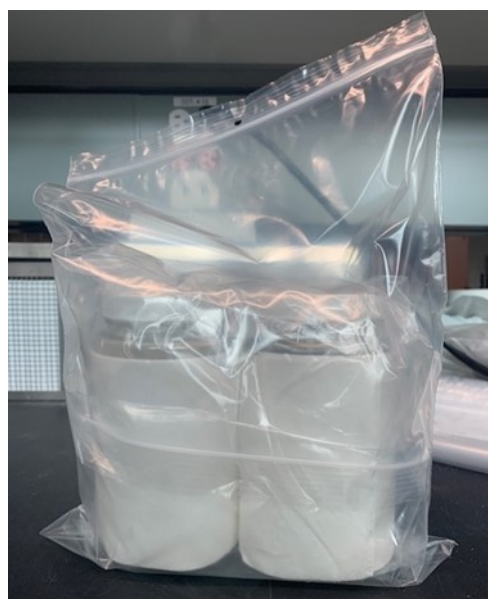


Figure 6 Two bottles double bagged



6. Place the double-bagged sample(s) standing upright with lid at the top.

Figure 6 - If 2 ice packs have been provided, 1 ice pack may be placed on either side of the bottle.

Figure 7 - If 3 or 4 cold packs have been provided, cold packs may be placed on 3 sides of the bottle, and the fourth is placed on top of the bottles (**Figure 8**).

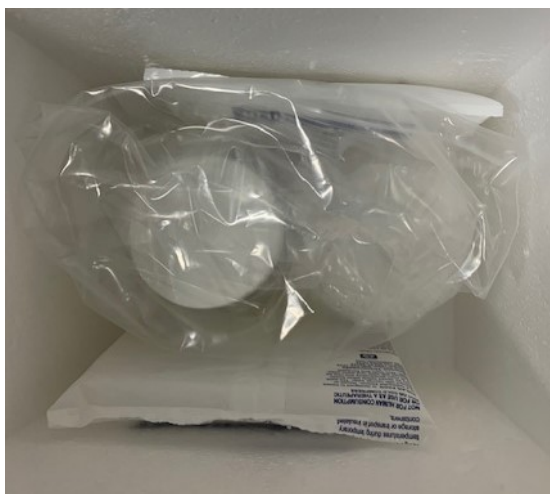


Figure 6 Two cold packs on either side

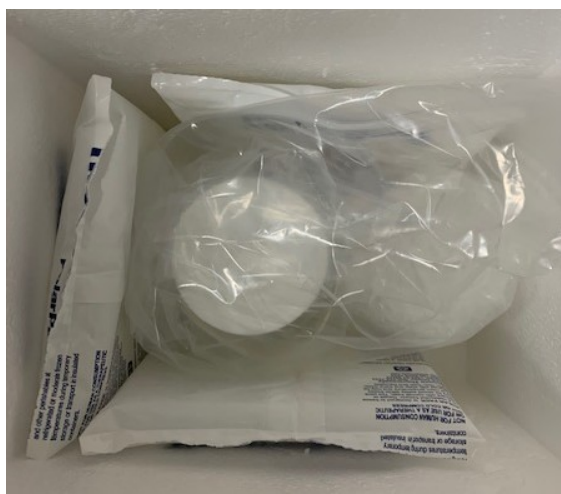


Figure 7 Three cold packs surrounding the bottle

7. Place the final ice pack on top of the bottle and cover with void fill to minimize movement.



Figure 8 Fourth cold pack placed on top

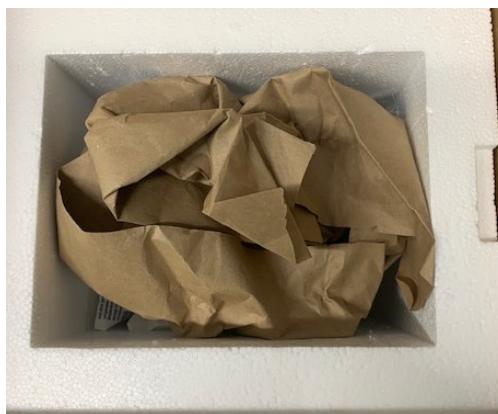


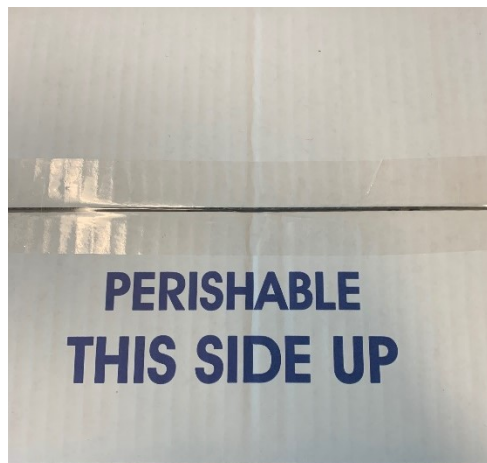
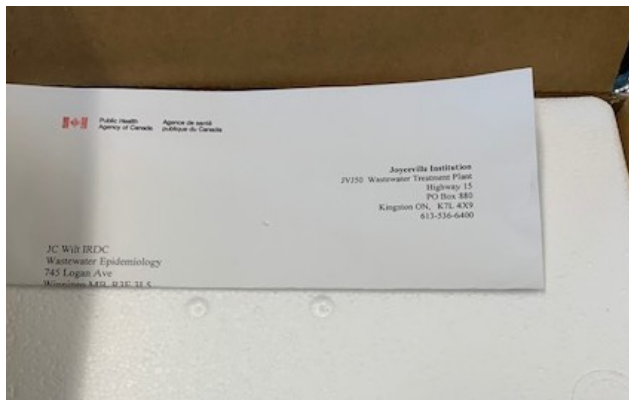
Figure 9 Void fill to prevent shifting



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8. Apply lid to top of cooler. Complete testing the requisition form and place on top of the closed cooler. Fold down side flaps first then the other flaps and seal where flaps meet with packing tape.



Shipping:

Arrange for express shipping to the address below:

ATTN: Dr. Chand S. Mangat
Public Health Agency of Canada
JCWIDRC rm J1103
1015 Arlington St
Winnipeg MB, R3E 3R2
Tel: 204-789-6508

Should you have any questions, please contact: chand.mangat@phac-aspc.gc.ca