

## DAILY SEABINS WASTE CHARACTERIZATION

**Purpose:** This SOP is intended to collect the bare minimum amount of data necessary to estimate the amount of anthropogenic litter diverted from the Great Lakes by Seabins. **Please empty every Seabin at each location every 24 hours, or when the Seabin is full. For best result, implement this into your daily routine.**

### Safety Notes:

- Prior to walking on the dock to obtain the Seabin put on your life-jacket.
- When collecting the debris from each Seabin, ensure that the power is off so the Seabin is no longer pumping water.
- When retrieving the bin use an extension pole or pike pole.
- We recommend wearing gloves to remove the waste from the bin.
- If dangerous materials are found dispose of it with care; e.g., a used syringe should be placed in a Sharps Container.

### Materials:

- Trash Scale (luggage scale)
- Gloves
- This protocol
- Clipboard (unless using the app)
- Datasheets on waterproof paper (unless using the app)
- Pencil or Fine-tip Sharpie (unless using the app)
- Camera or cell phone camera (if using app, you'll take a picture with the same device your app is on)
- Garbage bags

### Directions:

- With the provided datasheet, or the app, fill out your name, the location, date and time at which the bins were deployed and removed.
- Mark whether this bin captured a "wet event" (to be considered a wet event, the amount of rainfall must be  $> 10\text{mm}$  over a 24h period).
- On the datasheet tick off the weather conditions.
- On site, unplug the Seabin ensuring the vacuum is off.
- Take the extension pole and remove the catch bag from the Seabin.
- Shake the catch bag to remove as much water as possible.
- Next, weigh the catch bag with the debris using a trash scale. Record the weight on the datasheet or in the app.
- Record how full the catch bin is (full to the brim, half full, quarter full).
- Take a picture of the catch bag from the top before it is emptied.
- Dispose of items in the catch bag according to your organization.
- Place catch bag back into the Seabin and turn the power back on.

**If you are not using the app, please take a picture of the datasheet and send it together with pictures of the contents of the catch bag to: [cassandra.sherlock@mail.utoronto.ca](mailto:cassandra.sherlock@mail.utoronto.ca)**