



# Sampling Guidelines for Effluents and Receiving Waters

## Sampling Procedures

### 1. Containers

- clean 2.5 litre plastic containers for nutrient and pollution control parameters as supplied by the Provincial Laboratory on a yearly basis; and
- 250 millilitre sterile plastic container for bacteriological parameters as supplied by the Provincial Laboratory on a yearly basis.

### 2. When and Where to Sample

Sample as required by the current Permit.

In most cases this will require:

- sampling midway during the lagoon discharge period. Lagoons are normally discharged twice each year; once during spring runoff and again during the fall period; and
- collect receiving water samples in mid-stream after the lagoon effluent has been released and has reached the sampling point.

### 3. How to Collect the Samples

- persons collecting wastewater samples should take proper protective measures including the use of proper protective gloves; wash your hands carefully with soap and water before and after collecting the sample;
- rinse the 2.5 litre sampling container two times with the effluent or water to be collected;
- carefully fill the 2.5 litre sampling container for nutrient and pollution control parameters. The samples should be representative of existing conditions;
- care should be taken to avoid disturbing bottom sediments and allowing these or surface scum to enter the container;
- for bacteriological analysis use the sterile container supplied by the Provincial Laboratory. If the sterile seal is broken, do not use;
- take the cap off the sterile bottle and hold the cap in one hand. **Never rinse the bottle.** The container contains a tablet (sodium thiosulphate) used to neutralize any chlorine. Carefully fill the bottle within 6 to 7 millimetres (1/4 inch) of the top. Replace the cap to the bottle without touching the inside of the cap or the mouth of the bottle.

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#### 4. How to Fill Out Shipping Tags

The testing laboratory needs to know what the sample is, who it is from and what tests are required.

- ensure that samples are properly identified by attaching the tag to the 2.5 litre container for nutrient and pollution control parameters with the following information:
  - name and address of the community;
  - type of sample and exact sampling location;
  - date and time of sample collection and
  - which analyses are required (for sewage effluent – check off sewage; for receiving waters – check off use/compliance).
- for the bacteriological container, identify as the same location in the corresponding 2.5 litre container.

#### 5. Shipping

After completing the shipping tags and attaching them securely to each sample container, ship them immediately by bus to arrive at the Provincial Laboratory no later in the week than Wednesday.

Place the mailing container in an approved customer supplied insulated cooler. The cooler should contain absorbent material in the event a sample bottle leaks or is broken in transit. Place enough approved ice packs in the cooler so the sample will stay cool but will not freeze during transportation to the lab.

Coolers and ice packs are returned to the submitter as soon as possible and the laboratory is responsible for the cost of returning the coolers to the submitter. Please use a “flip-top” style of label with the laboratory’s address on one side and the submitter’s address on the other side. **The cooler will not be returned if the address is missing.**

If using the Provincial Laboratory, ship or deliver the samples to:  
Provincial Laboratory  
Environmental Services  
3211 Albert Street  
Regina, SK S4S 5W6.

The sample must be received within 48 hours of collection.

#### 6. Analysis Required

Samples will be analyzed for the following parameters:

- total Kjeldahl nitrogen, nitrate and ammonia nitrogen; total phosphorus;
- Biochemical Oxygen Demand; total and volatile suspended solids; dissolved organic carbon;
- total and E.Coli. bacteria; and
- conductivity; pH; alkalinity; chloride; bicarbonate, carbonate, sulphate, calcium, magnesium and sodium.

If you need more information on any of the above, please contact your Environmental Project Officer.