Appendix 1: Coliscan Sampling Procedures

Sampling Safety:

When possible, sample in teams of at least two people in case a sampler is injured or needs assistance. Sampling along bridges is convenient but can be the most dangerous spot to sample from. Only sample at a bridge site if it is the only option and the bridge is wide enough to accommodate pedestrians and traffic. Park your vehicle a safe distance from the bridge and have the car's hazard signal on. Use a volunteer to spot incoming traffic while another volunteer samples. Do not sample on bridge that have a no loitering or no fishing sign posted.

When sampling, use gloves or have alcohol sanitizer available to keep hands clean as the water may have sewage present.

If sampling along a streamside or in the stream, do not sample when water levels are dangerously high, such as after a major rainstorm. Do not wade into water that is swift flowing or unusually high. Sampling may occur where it is open to the public such as a public boat ramp and parks. If sampling occurs on private property, obtain landowner permission before selecting the site.

If sampling by boat, sample teams must wear a Personal Flotation Device (PFD) and is either knowledgeable in operating the boat or the boat is operated by a person with the necessary training.

Remember, it is not worth sacrificing safety for a sample. If a sampler feels uncomfortable with a sampling site, look for another location that the sampler will be comfortable with.

General Comments:

When sampling streams and rivers, it is critical to obtain a **representative sample**. This means that the water sample should be obtained from the main flow of the water body. In small streams (assuming it is safe), it is best to wade into the main flow of the stream. Collecting the sample from bridges using a sampling bucket is best for larger or deeper streams provided the bridge is safe to sample from. Prior to sampling, remember to remove the bottle of Coliscan medium from the freezer and allow it to thaw completely before the plating step.

Method 1 sampling using a bucket:

1. Lower a clean (not sterile) bucket from a bridge using rope and partially fill the bucket.

2. Retrieve the bucket and swirl the sample water and dump the contents away from the sample site.

3. Lower the bucket once more and fill part way with a water sample. Try not to collect excessive sediment, mud, or other debris in the bucket.

4. Retrieve the bucket.

5. Using a U motion, fill the sample bottle by moving it through the water from one side of the bucket to the other in such a way to prevent water from near the hand from entering the bottle. Fill the bottle about ½ to ¾ full.

6. Cap the bottle and label it with the station ID using a waterproof pen. For split samples, use -1 or -2 at the end of the station ID value to note which split sample it is.

7. Fill out the field sheet with the necessary information

8. Immediately place the sample bottle on ice for transport to the plating area.

Method 2 sampling directly in the stream:

1. Walk (or use a boat to move) upstream a few short distance with minimal disturbance of the sediment.

2. Facing upstream, open the sample bottle.

3. Carefully fill a sterile bottle by submerging it below the surface as you move the bottle **away** from your body in an **upstream** direction. This method ensures any bacteria from hands or boots (or boat) does not enter the bottle. Avoid mud and other debris from entering the sample bottle. Fill the bottle about ½ to ¾ full.

4. Cap the bottle and label it with the station ID using a waterproof pen. For split samples, use -1 or -2 at the end of the station ID value to note which split sample it is.

5. Fill out the field sheet with the necessary information

6. Immediately place the sample bottle on ice for transport to the plating area.