



SAMPLING

MICHAEL SAUNDERS

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Introduction

Michael Saunders – NVCA/HMGA

Sampling Overview

Sampling Process

Question Period



Farm Waste Water Treatment- why needed?

- Water quality issues: TP, BOD, TSS, etc
- Surface water effluent from agricultural operations tends to be above concentration limits dictated by MOECC standards (PWQOs)





Focus areas/sectors

- Processors (washing/packing)
- Root Vegetables
- Leafy Greens
- Holland Marsh (muck soil areas)
- Potato growers
- Nurseries
- Greenhouses
- *Dairy farms*



Sampling Overview

Protocol

- MISA – Municipal/Industrial Strategy for Abatement - Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater
- Facilitates use of data with MOECC

**STOPPING
WATER POLLUTION
AT ITS SOURCE**



MISA

Municipal/Industrial Strategy for Abatement



Sampling Overview

When and why it's important

- Before work is done
- After installation
- Future sampling

- Intensive vs non intensive weeks/periods

- 2 to 10 grab samples per site (based on system)





Equipment

- Sterilized equipment
 - Buckets (dedicated per sampling point)
 - Bottles
 - Sampling pole





Equipment

- Auto-Samplers (composite samplers)
 - Collect water samples at defined intervals
 - Example: 250mL water every 30 minutes for 12 hours





Equipment

- Field sampling
 - YSI – detects: pH, temperature, barometric pressure, dissolved oxygen, oxidation reduction potential (ORP)
 - Turbidity unit
 - Portable Colorimeter
 - TDS Meter





Equipment

- Flow Meter
 - Logs flow rate throughout the installed interval





Rinsing

- Sampling wand
- Buckets
- Bottles (except for preserved sample bottles)





Collecting

- Use of sampling wand – Mouth of bottle upstream
- Fill bucket





Fill Sample Bottles

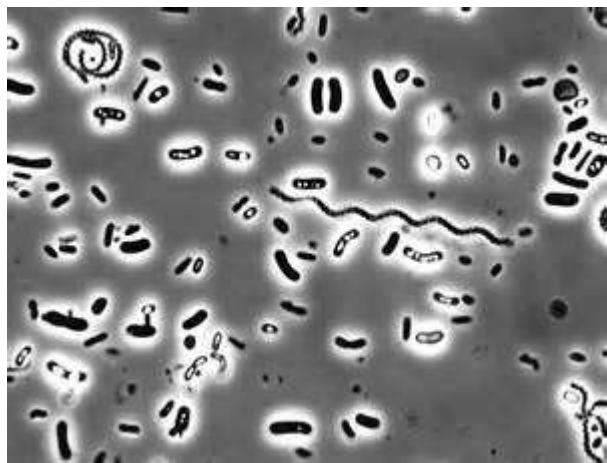
- Use biggest bottle to decant into smaller bottles
- Fill to shoulder of bottle
- Do not overfill preserved bottle(s)





Storage/Shipping

- Keep samples cold
 - Between 4 to 10°C
- Deliver to lab within 24 hours





Storage/Shipping

Samples get dropped off/shipped to lab

- Chain of Custody (CoC)

- After 5-7 days a lab report will be emailed



Thank You

Questions?

Michael Saunders

sampling@hmgawater.ca

msaunders@nvca.on.ca

<http://www.hmgawater.ca/>