

Bacteriological Water Sample Collection Procedures



Safe Drinking Water Program

IDEXX Sample Bottles and Supplies

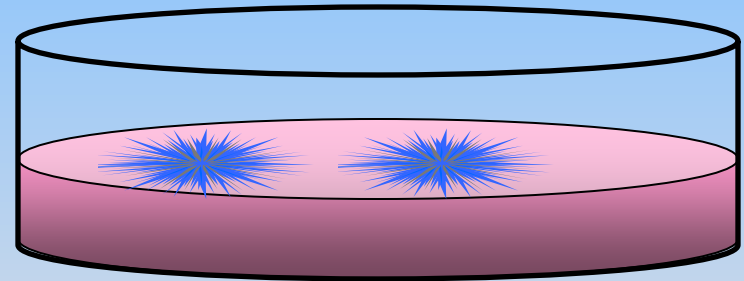
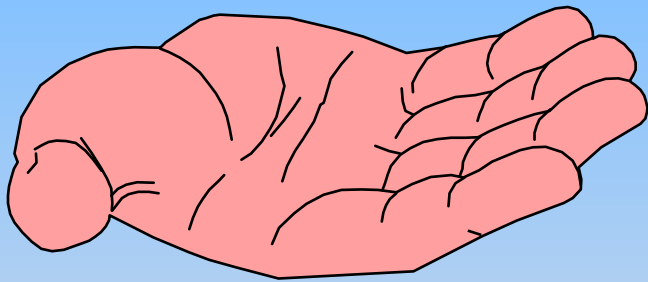


Use IDEXX bottles provided by DHH
available at same locations you drop off
samples and at labs

PWS will provide their own ice chest and
racks (if desired) for transport of IDEXX
sample bottles

Designated small lunch cooler with ice
pack - keep the sample bag clean,
secure, upright and chilled.

Wash Your Hands



Preparation and Handling

Preparation and Handling

- Wear clean clothing, wash your hands and try to keep them bacteria free for the collection process
- Watch for contamination sources
 - nearby activities – soil disturbances- sewer lift stations – animals/manure
- Avoid talking and disturbing the air while collecting (sneezing/coughing)
- Smoking during sample collection is not advised. If it is TC+ it will be you who has to recollect

Use IDEXX Sample Bottles

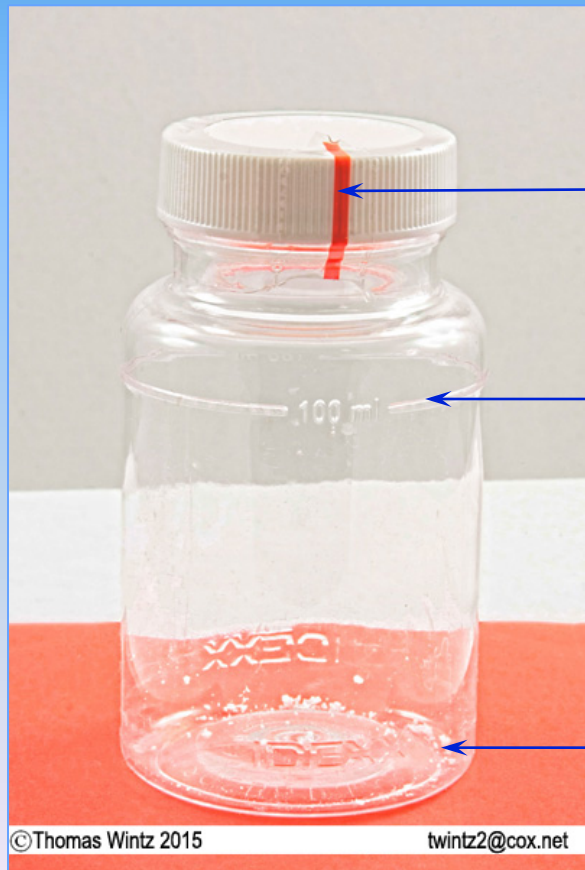
Bottles are provided by DHH and are available at same locations you drop off samples (Sample Depots)



Item/Sample Size	Quantity	Catalog Number
PET Vessels 120-mL Shrink-banded PET Vessels with Sodium Thiosulfate	200	WV120PET-200
Vessel Rack Heavy-duty rubber-coated metal. Holds 20 IDEXX vessels and fits in incubators (catalog numbers W1600 and W1600-EU)	1	WVR20
Adhesive Vessel Labels Roll of 1,000 labels, showing date, time, location and sample number, for use with IDEXX vessels (not shown)	1 roll	WLBL

Use of IDEXX Sample Bottles

Do not use bottles with broken or damaged sterile seal



Sterile Seal

100 ml Fill Line

Sodium Thiosulfate
Powder

Handling IDEXX Bottles



Sterile Seal should remain intact until time of collection (remove after collection & recording of chlorine residual)

Be careful not to lose the Sodium Thiosulphate Powder or dilute it by pouring out overflow

If you overfill the bottle, start over with a fresh bottle

Maintain aseptic conditions when filling the Bottle

- Break Sterile Seal on bottle *after* flushing the line and collecting the chlorine residual.



Maintain aseptic conditions when filling the Bottle

- Do not set the bottle or bottle lid down.
- Do not place the lid in your pocket.
- Do not touch the inside of the bottle or the lid with your fingers or allow the bottle to touch the sample tap.

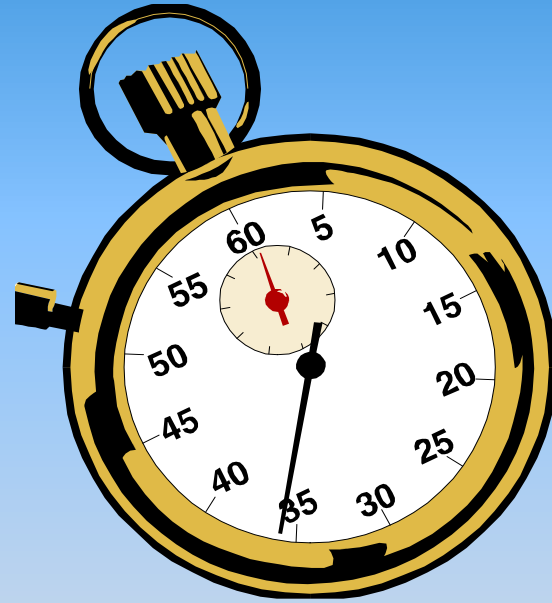
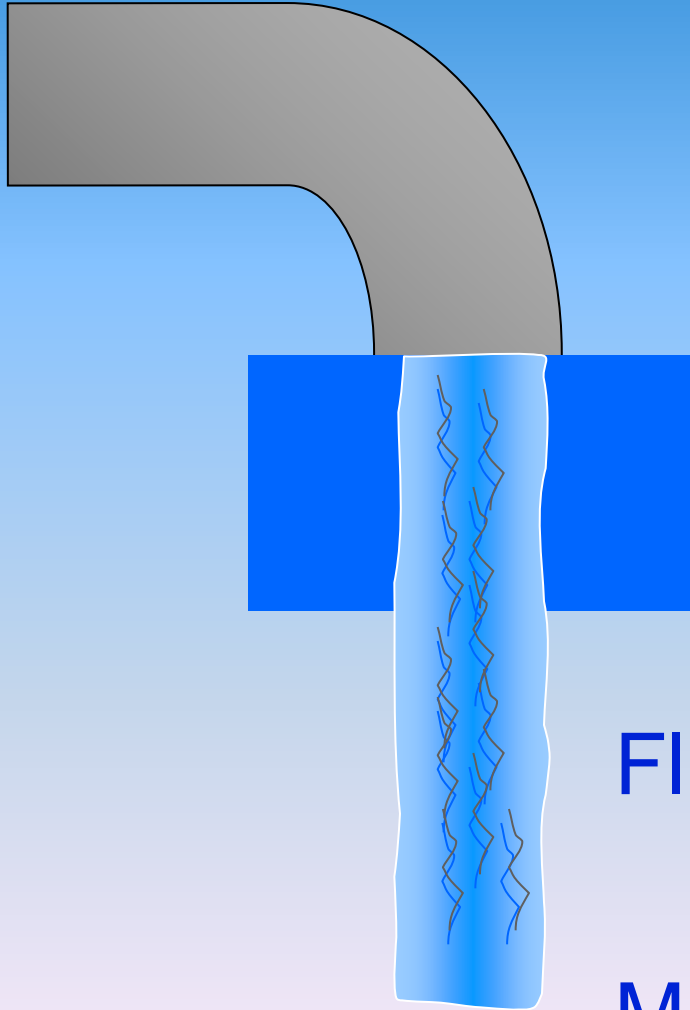
Maintain aseptic conditions when filling the Bottle

Do NOT Talk when collecting
samples.



If you sneeze or drop the bottle
while it is open, **use a fresh bottle.**
Always take extra bottles along for
use when needed.

Flush the Tap

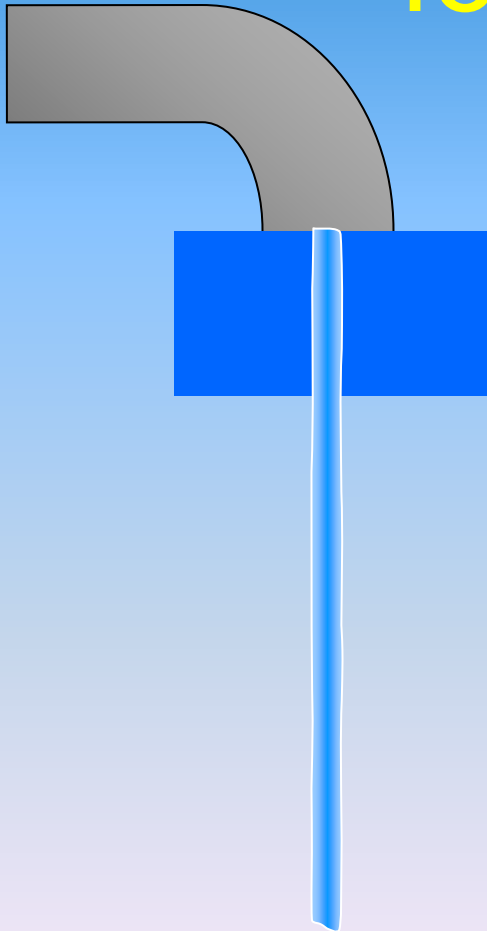


Flush Tap 2 to 3 minutes

(or until temperature changes)

Measure chlorine residual

After Flushing the tap
for 2-3 minutes



Establish
a small
controlled
stream

Collecting the Sample



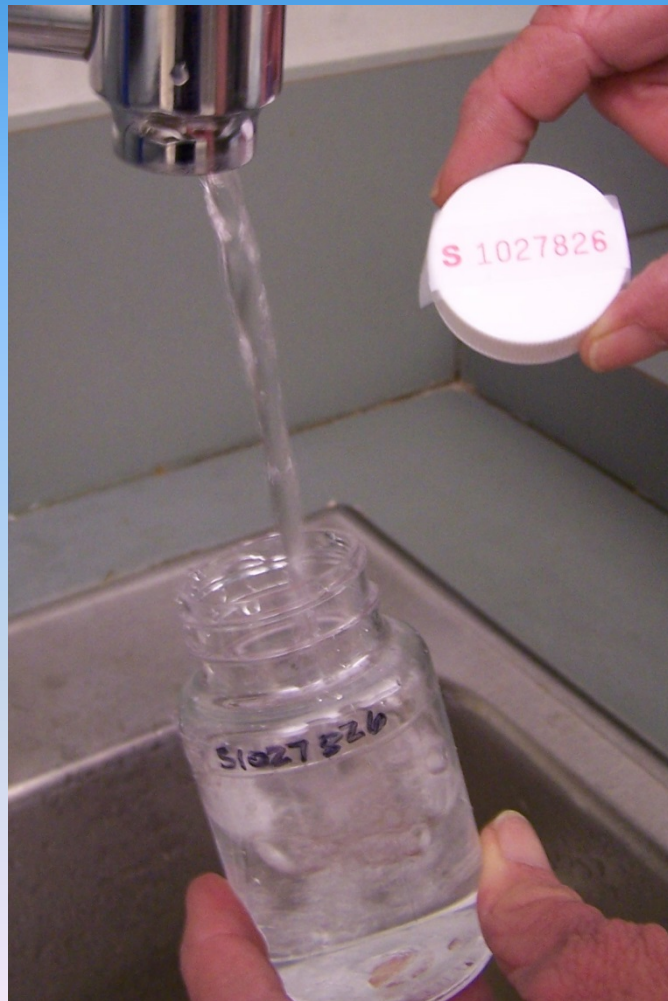
Hold the bottle by the base only.

Do not allow the bottle to touch the tap.

Hold the rim of the lid- do not set the lid down.

Do not touch the inside of the bottle or the cap.

Collecting the Sample (2)



Fill to 100 mL Line

Too little water

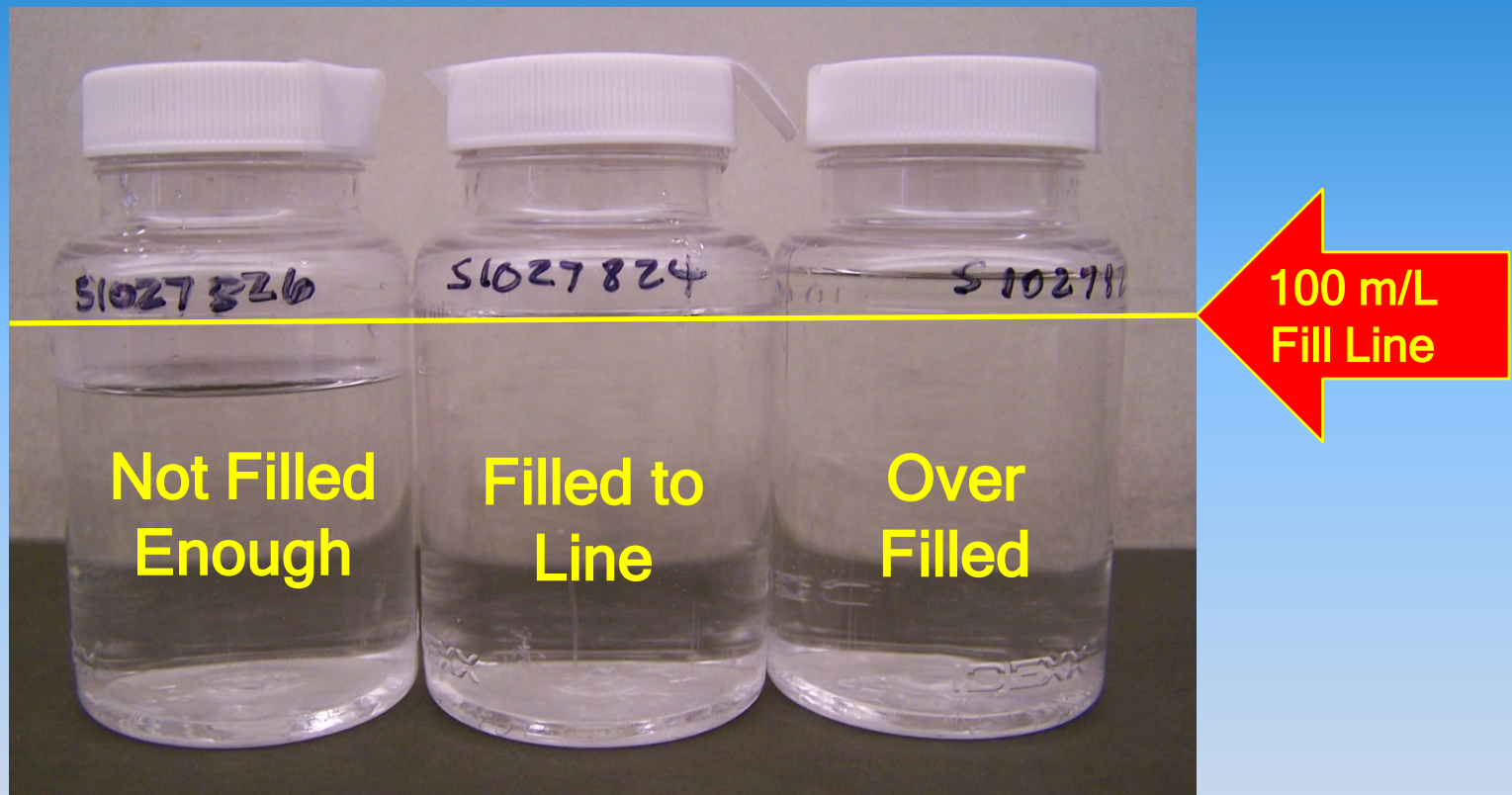
Or

Too much water

Sample will be rejected
and you will be asked to
recollect.

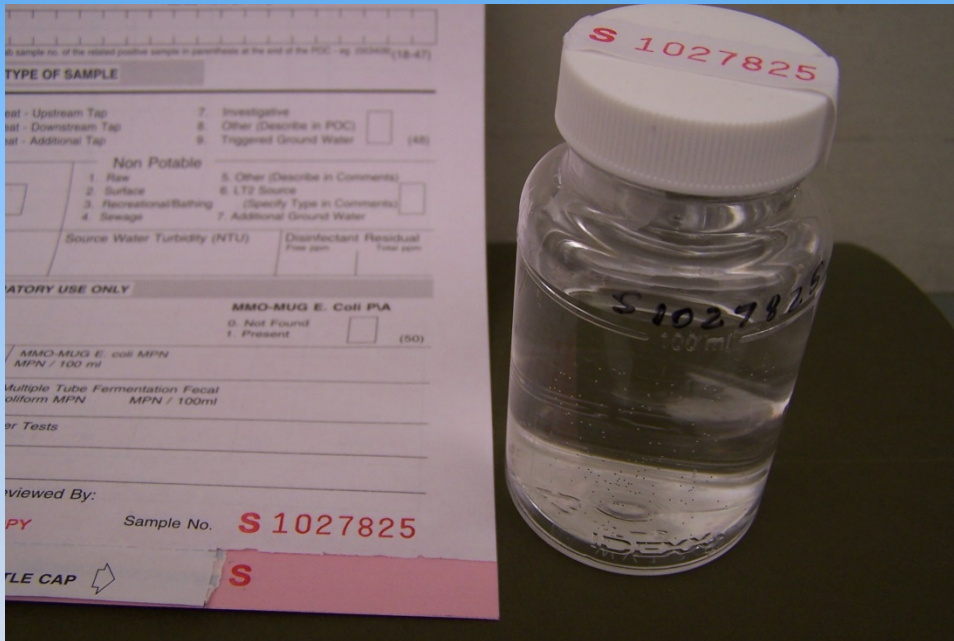
*If you overfill the bottle, start
over with a fresh bottle*

Fill Bottle to 100 m/L fill line



Leave enough head space (airspace) to allow for shaking contents. There also must be a minimum of 100 m/L of water.

Label each Sample Bottle



Write the Lab 8 Sample number on the bottle side with waterproof sharpie marker. Place just above the fill line ridge on shoulder

Affix the Lab 8 Tear off Label from the bottom of the Lab 8 Form to the lid of the bottle- secure with tape

Transporting Collected Samples

- Transport Samples to an assigned or agreed upon Sample pick up location
- Place the filled and labeled IDEXX Bottle in a wire rack or supported by other bottles
- Place rack or bottles in ice chest with ice packs

DO NOT USE LOOSE (WET) ICE

(If using ice cubes place in sealed zip lock bag)



70 Quart Cooler- holds 80 bottles
Four 20 count racks and ice packs



Six-Pack Racks
can be used for
smaller coolers

With use of rigid IDEXX
Bottles, racks may be
optional – not as critical

Transport Samples – 2 options

- The samples are dropped off at a designated sample depot at the times appropriate to be put on the State Sample Truck.
- The Sample Truck goes to a few State Offices, usually just one day per week. Check for drop-off times
- You can drive the sample to one of the 3 State Labs. Baton Rouge - Amite - Shreveport

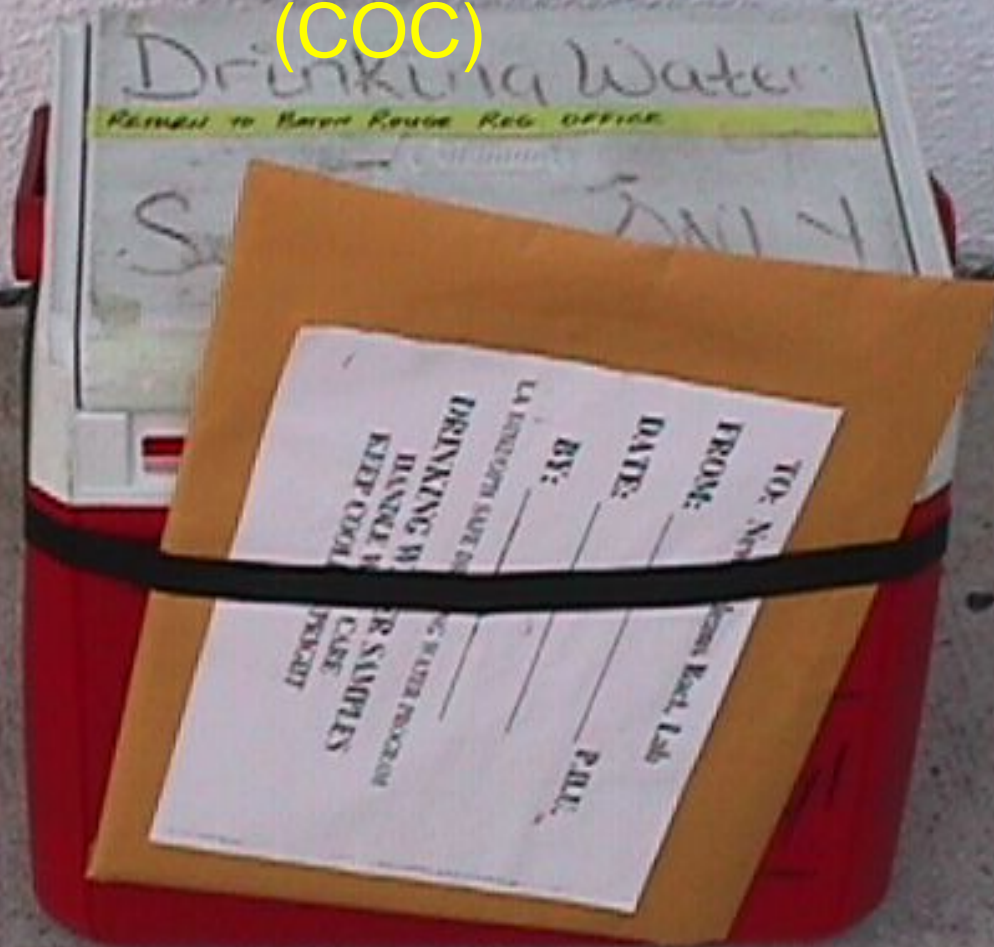
Time Sensitive !

Lab will not accept samples if more than 30 hours old.

Routine Samples shall be collected on M-T-W and up until 2 pm on Thursday. The lab will accept RP/TG on Fri and Holidays but must be pre-arranged.



Maintain your Chain-Of-Custody (COC)



Lab 8 Forms and COC forms should be kept together with samples and ice chest for transport



Chain of Custody

Sample Sign in Sheet

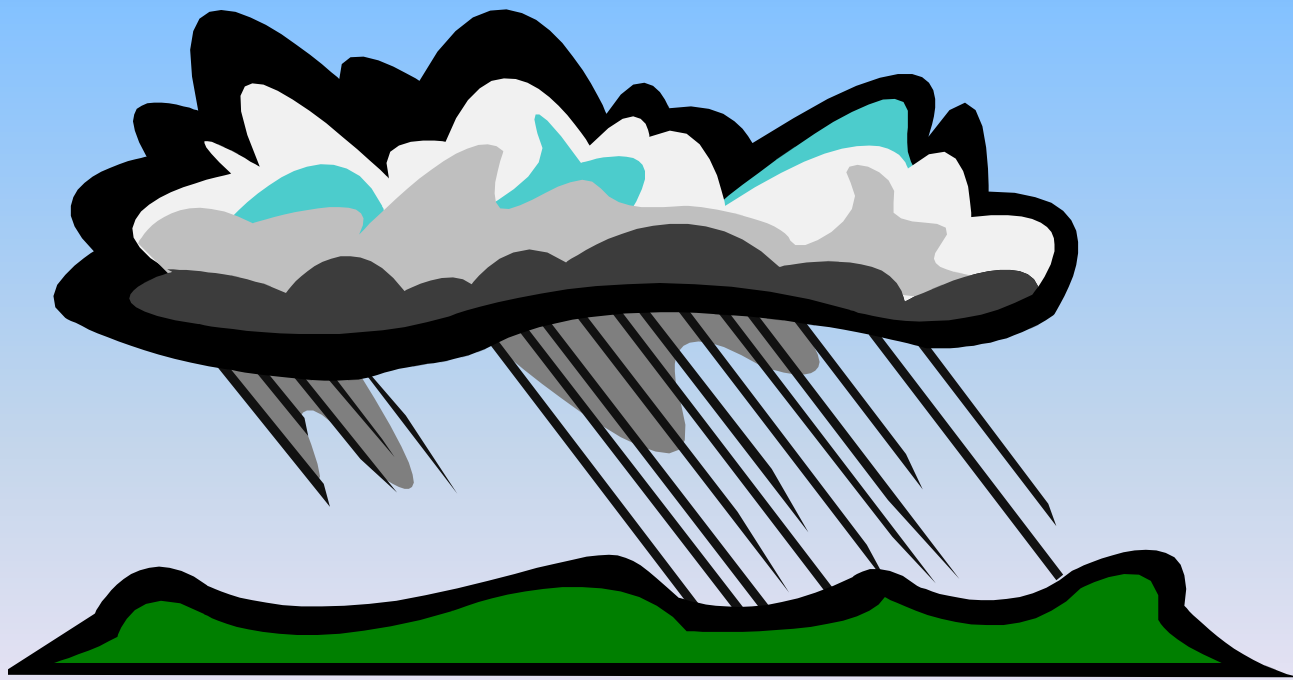
- Who Transported Sample to Health Unit/Sample Depot
- Date and Time of Delivery/drop off
- Number of Samples dropped off

Common Issues that can lead to undesired results

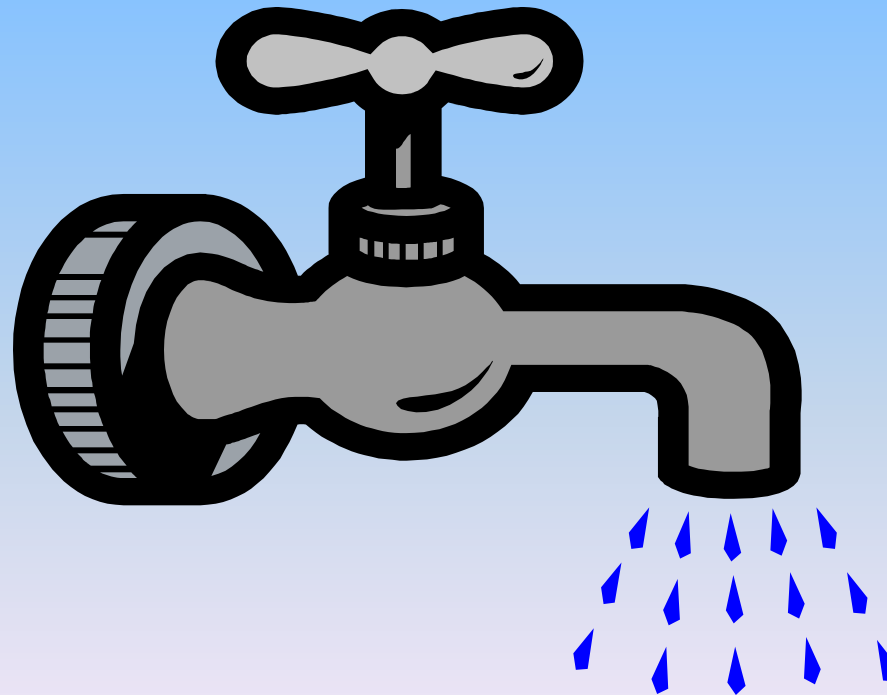
Improper Sampling Techniques

- Ω Not Flushing the Tap
- Ω Improper Handling of sample bottles
- Ω Bottle over-filled or under-filled
- Ω Exceed 30 Hour Holding Time

Avoid Sampling in the Rain



Keep your faucets
maintained – no spray



Who's Responsible??

The WATER SUPPLY PERSONNEL are responsible for insuring that all water samples are collected during the correct compliance period.

Beginning August 1, 2012 the water system is also responsible for collecting the sample in accordance with DHH specifications and delivering it to an approved drop off/pick up location on a timely basis.

Laboratory Results go to DHH

- You will be notified by Region/District or Lab if you have a TC+ Sample
- Collect Repeats and Triggered Source samples within 24 hours or as scheduled
- May require corrective action be taken to resolve contamination

QUESTIONS

