MS4 Dry Weather Screening/Sampling
Division of Environmental Management

- Coordinate with Environmental Scientist (Leslie or Katie) to ID which River and which Outfalls are to be checked and Sampled

- Check the NOAA Weather service and determine that there has been no rain event in the past 72 hours.
    - The Internet address is: *www.erh.noaa.gov/iln/index.php*
    - Go to Climate/Local (on the left), under ***Observed Weather*** – select ***Preliminary Monthly Climate Data (CF6)*** – select ***Dayton*** – select **Most Recent** – select ***GO.*** Review the precipitation data under column 7-WTR. Precipitation less than .1" for each of the last three days (72 hours) is considered dry. (A "T" for trace is considered no rain).

- Gather the following supplies and load vehicle with supplies (DO NOT LEAVE SCREENING EQUIPMENT IN VEHICLES!):
    - Outfall listing with outfall ID and directions (Trimble and hard copy in metal clipboard)
    - Outfall Observation Forms- hard copy
    - HACH Test Kit (Colorimeter and Sension) and directions (Check kit to make sure you have all reagents)(CALIBRATED DAILY)
    - Sample Bags (to collect sample)
    - Scissors (to cut end of reagent pillows)
    - Trash Bags-Small and or white bucket
    - Stop watch
    - Sharpie pens
    - pens
    - Kim wipes or paper towels (to wipe vials)
    - Sample bags (in stainless bucket)
    - Deionized water (DI) (in stainless bucket)
    - Pipettes (in stainless bucket)
    - Kitty litter container (for liquid waste)
    - Sample reel with cord
    - Black case with clips and string for sampling bags
    - Jar for sample reel
    - Latex or nitrile gloves
    - Sterile wipes (for washing your hands without water) or antibacterial
    - Boots/hip waders (it may be muddy by the river)
    - Cell Phone
    - Safety vest
    - Bug spray/wasp spray
    - Suntan lotion
    - WATER

- Travel to the area and locate an outfall.
    - Answer dry weather screening data questions (if flowing :Screen the water for the required parameters)
    - Fecal Coliform Sample containers (Samples to be to Test America before 12:00pm (NEVER ON FRIDAYS, UNLESS EMERGENCY)
    - Chain of Custody Forms
    - Cooler
    - ICE

- Any additional sampling containers required for specific laboratory analyses (i.e. … Metals, Oil/Grease, VOC's … etc.). Make sure SOMEONE in the office knows approximately where you will be and what cell phone you have!!!
- Look for the Outfall ID somewhere near or on the outfall. If you cannot find a marking, locate outfalls on both sides of the unmarked outfall that are marked and verify the ID of the unmarked Outfall.
- Begin to fill out your observation report (outfall ID, Time, Date …all the visual info.)
- Measure the width of the outfall flow and the depth at the center of the flow. (Record your data)
- Using the float, and stop watch, measure the time it take for the float to travel 1 foot. (Record your data)
- With a fresh sample bag, grab a sample and pour it into a Coliform Sample Container, complete the label.
- Using the same Sample Bag, grab a sample and take it back to the truck.
- Place the Coliform Sample Container in the cooler and update your chain of custody.
- Prepare the rear of the truck as your mobile lab.
- Using the pH meter, measure the pH of the sample (record your data)
- Using the dropper supplied with the HACH test kit to extract portions of your sample for testing.
- Analyze each sample according to the HACH Kit directions. (Record your Data)
- Complete your observation form
- Highlight any values outside of our action levels (listed on the observation form)
- Add outfall to list of returns if any parameters are outside our action levels, we must return to these 3 times and then start an investigation if they continue to stay outside of our action level concentrations.
- Discard the remainder of your sample back to the outfall.
- Discard the used plastic sample bag in the trash.
- Move to next Outfall.
- Once you return to office, Outfall Observation Form data is to be entered into the computer