

Industrial Inspections

Tom Bowling, Jr.
Pretreatment Coordinator
Bureau of Water Quality
tjbowlng@msdeng.com

Industrial Inspections

- What is an Industrial Inspection?
 - On-site inspection of a facility
 - Complete and thorough review of all aspects associated with the facility
 - Used to gain a good understanding of who, what, and how the facility is operating

Industrial Inspections

- Can be announced or unannounced
- Usually occurs during normal business hours
- May be mandated by regulatory regulations or discharge permit
- Collection of information

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- Establish some type of inspection form
- Want to record the time and date of inspection
- Have Company Representative sign and date
- Have your organization personnel sign and date

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- Actions Before Inspections
 - Review past inspection forms
 - Review past analytical results
 - Review past industrial reports to the Control Authority
 - Do a drive around the facility
 - Inspect facility discharge before inspection

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- Actions to Commence Inspection
 - Properly identify yourself
 - Request your meeting with the appropriate company person
 - State the reason for your visit
 - Ensure that you have all the necessary PPE as required by the facility
 - Conduct yourself in a professional manner

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- Background information
 - Name and address of facility
 - Who is the responsible official and what is this person's title
 - What is the responsible official's email
 - Telephone and fax number of the facility
 - Person contacted for inspection

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- Background Information
 - Number of employees and shifts worked
 - Date the operations began
 - How long has the company been at its current location
 - What is the facility's product or service and SIC code

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- Background Information
 - What is your source of intake water
 - Is your source metered and how
 - Does the facility have a spill plan
 - Does the facility have solvent management plan
 - Has the spill plan and solvent management plan been approved

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- Background Information
 - Does the facility have any additionally issued permits
 - Examples are storm water, underground remediation or air
 - Is there any other on-going enforcement actions against the facility

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- Discharge Permit Information
 - When was the permit issued and when is its expiration date
 - Is the permit on file at the facility
 - Is the permit current and representative of their operations
 - Is the permit per or post streamlining

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- Are self-monitoring reports required
- Are the self monitoring reports current and complete
- Has all necessary permit samples been collected
- Is the analytical results performed according to 40 CFR 136

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- Facility Discharge Information
 - Is the discharge continuous or batch
 - How long and how often is the continuous or batch discharge
 - Types wastewaters and gallons discharged into collection system

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- Is the flow rate metered
- What type of flow meter is utilized
- Last calibration date for the flow meter
- Are all waste streams metered
- Are all the appropriate regulated waste streams metered

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- Facility Discharge Information
 - Wastewater loss from other purposes
 - Examples are non-contact cooling water, sanitary waste waters, boiler blowdown
 - Facility's sampling location
 - Control Authority's sampling location
 - Sampling location wastewater makeup

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- Manufacturing processes
 - Facility's major and minor processes
 - Types of raw materials
 - Chemicals used in production
 - Solvents used in production
 - Cooling towers and water additives
 - Do you have all the MSDS

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- Manufacturing Area Inspection
 - Inspect all chemical storage areas
 - Inspect all solvent storage areas
 - Is there only one storage area or are multiple satellite areas used
 - Ask for copies of all new chemicals or solvents discovered

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- Review the maintenance shops
- Look for discharge points and floor drains
- Compare what you find to the schematics submitted with discharge permit application

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- Areas Outside of Manufacturing
 - Located inside or outside of facility
 - Used for the storage of virgin materials, by-products, or waste products
 - Is virgin material separated from waste material
 - Is hazardous waste commingled with non-hazardous material

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- Does facility have any outside storage tanks or tank farms
- Does the facility have a hazardous waste storage area
- Are these areas properly secured to prevent spillage or unwanted episodes for occurring

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- Pretreatment Information
 - On-site pretreatment processes and equipment
 - Certified operator/other operators
 - Necessary chemicals and solutions
 - Hours of operation
 - Standard operator procedures manual

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- Sludge/ waste generation
 - Classification of wastes generated
 - Types of wastes generated
 - Quantities of wastes stored
 - Facility's EPA generator number

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- Does the facility have hazardous waste manifests, general wastes, or both
 - General wastes can be bill of lading
- Review hazardous waste manifests
- Have the forms been properly filled completed
- Who is the disposal facility
- Who is the transport company

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- What is the Sludge/Waste Storage
- Inside and/or outside storage areas
- Classification of wastes stored
- Quantities of wastes stored
- Compatible or incompatible storage practices

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- Sampling Requirements
 - All permit required parameters monitored
 - Methods utilized to obtain samples
 - In-house or contractual laboratory
 - All sampling performed to 40 CFR part 136 requirements

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- Individuals responsible for sampling and analytical work
- Proper preservation, containers, chain of custody ,and custody seals used
- Samples taken from correct sampling location
- QA/QC program

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- Sampling Requirements
 - Equipment utilized for sampling and analysis
 - Separate area or room for analytical procedures
 - Any non-reportable in-house analysis performed

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- Approved sampling methods
 - Composite or grab
- Composite sample flow proportional or time weighted
 - Is time weighted and/or grab method approved by the control authority
- Proper sample method utilized with regulated parameter.

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- Chain of Custody?
- Where I find most errors
- EPA defines of chain of custody as:
 - A legal document
 - Guarantees the identity and integrity of the sample collected and/or data analyzed
 - From the sampling to the reporting of analytical results

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- When is something in your custody?
- EPA considers a sample or data to be in your custody when
 - In your physical possession
 - In your view after being in your physical possession
 - In your possession and then locked so no tampering can occur
 - Kept in a secured area with access restricted

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- EPA chain of custody guidelines
 - Keep the number of people involved to a minimum
 - Only persons associated with project should possess the samples and/or data
 - *Document all transfers of samples and data*
 - Always accompany samples and data with Chain of custody
 - Identify all samples and data in legible written permanent ink (*preferably not black*)

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- Outside Laboratories
 - Name of laboratory
 - Location of laboratory
 - Laboratory reports on file
 - Sample collection methods
 - Chain of custody procedures
 - Laboratory QA/QC

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- Additional Considerations
 - Changes in production processes or materials used
 - Changes in personnel
 - Acquisitions of properties or businesses
 - Any processes, products proprietary in nature (trade secrets-as defined by EPA)

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- Inspection Closing Remarks
 - Review inspection with appropriate people
 - Discuss concerns you may have or discovered
 - Ask if they have any questions
 - Allow facility to make a copy of inspection report for their records

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- Ask about any anticipated future production process changes
- Ask about any anticipated future property acquisitions of properties or businesses
- Any anticipated increases or decreases in waste water flows (significant is greater than 20%)

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- Questions ??????????????
- Contact information
 - Tom Bowling, Jr.
 - 765-808-1479 cell
 - 765-213-6444 fax
 - tjbowling@msdeng.com

Composite Sample Definition

- Composite sample – A sample which results from the combination of multiple aliquots taken manually or automatically, either discretely or continuously, at selected intervals, using either flow-proportional or time-proportional methods. If discrete sampling is employed a minimum of 12 aliquots should be composited. It is recommended that influent and effluent operational data be obtained through 24-hour flow proportional composite samples only.

Composite Sample Definition

- When flow-proportional methods are not practicable the Director must first grant permission to utilize the alternative time-proportional methods. Composite samples should be representative of the entire process flow. For each sampling event, these samples are collected during times of discharge at the sampling location(s) specified in this permit. Each sample taken must be documented as to person collecting sample, location, date, time, volume collected and sample preservation (if required)

Composite Sample Definition

- In the event a continuous sampling device is used, the following must be documented: sample start date and time, the time interval between samples (or number of flow pulses) between samples, volume of sample collected at each time interval, sample stop date and time, time sample is collected, person responsible for programming the sampler, sample location, person collecting composite sample, and total volume of composite sample collected.

Grab Sample Definition

- Grab sample – an individual sample taken from a waste stream on a one time basis without regard to flow collected over a period of time not exceeding 15 minutes. This shall consist of a single sample taken at the sampling location(s) specified in this permit. The following must be documented: person collecting sample, location, date, time sample collected, volume collected, and sample preservation (if required).