Training: Inspector Needs and Resources for NPDES Inspectors

Office of Compliance

ACWA Inspector Needs Survey

Nationally, EPA and State inspectors have expressed an increased need for CWA NPDES training due to a lack of recent in-person training, high employee turnover, and a loss of organizational expertise over time.

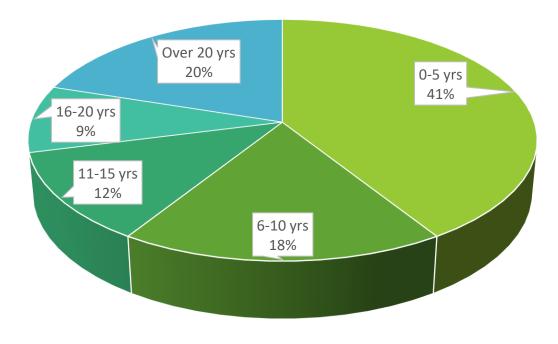
In March 2022, ACWA sent a survey to state NPDES inspectors to capture their ideas for the types of inspector trainings/resources needed and the best mechanisms for delivery.

ACWA shared this state inspector survey data with EPA's Office of Compliance. We are actively working to integrate these results into an overarching CWA NPDES Training Development Plan.

Inspector Needs Survey Results

- 290 responses received
 - At least one response each from 43 states
 - Mostly inspectors (vs. supervisors)
 - Largest experience level represented was 0-5 years (see chart)

Experience Level by Percentage of Respondents



■ 0-5 yrs ■ 6-10 yrs ■ 11-15 yrs ■ 16-20 yrs ■ Over 20 yrs

54% of survey respondents felt they have not received adequate NPDES inspector training.

Inspector Needs Survey Results

- Preferred type of training/resources:
 - 1. Live, in-person field-based training
 - 2. Updated guidance manuals
 - 3. Live webinars with inspection video component
 - 4. Checklists
 - 5. Live, in-person classroom training

Inspector Needs Survey Results

- Preferred training on inspection processes:
 - 1. On-site documentation
 - 2. Inspection
 - 3. Pre-inspection checklists
 - 4. Interview skills
 - 5. Smart Tools
- Preferred NPDES program areas to receive training:
 - 1. Municipal Wastewater
 - 2. Industrial Wastewater
 - 3. Industrial Stormwater
 - 4. Municipal Stormwater
 - 5. Construction Stormwater

Current EPA Training Resources

- Inspector Wiki
- FedTalent
- <u>3500.1 Inspector Training</u> <u>Requirements</u>
- NPDES Compliance Inspection Manual (2017)
- <u>Technical Assistance</u>
 <u>Webinars</u>



EPA Order 3500.1 Inspector Training Requirements

- 3500.1 provides a basic curriculum for inspectors seeking credentials
 - Mandatory for EPA or anyone inspecting on behalf of EPA
- The training requirements include:
 - Required readings
 - Self-study courses
 - eLearning modules
- EPA's required training can be found in FedTalent

Attachment 1

Requirements for New CWA NPDES Program Inspectors CWA NPDES FedTalent Program Link

Mandatory Training Courses for All New CWA NPDES Inspectors

The following training courses are required by <u>all</u> New CWA NPDES inspectors. Inspectors that will conduct inspections in specific sub-programs must complete these requirements along with the "Mandatory Training Courses for CWA NPDES Inspectors in Specific CWA NPDES Sub-Programs" below.

- CWA NPDES Basic Inspector Course
- Web-Based NPDES Permit Writers' Training (approx. 9 hours)

Inspectors may substitute the NPDES Permit Writers' Training classroom course for the web-based version. The five-day classroom training is offered on a regular basis by EPA's Office of Water.

Mandatory Self-study for All New CWA NPDES Inspectors

All new CWA NPDES inspectors must read through the following material and gain an understanding of the content. Self-study courses designated with a chalk-board course icon in FedTalent include a knowledge check that inspectors must complete. Inspectors that will conduct inspections in specific sub-programs must complete these requirements along with the "Mandatory Training Requirements for New CWA NPDES Inspectors in Specific Sub-Programs below.

- Clean Water Act (CWA) Section 308 Inspection Authority
- NPDES Compliance Inspection Manual (2017), Chapters 1-7 includes information on 40 CFR
 2: Public Information, Subpart B: Confidentiality of Business Information (CBI)
- Primer for Municipal Wastewater Treatment Systems
- Clean Water Act Section 301 Discharge without a Permit, Effluent Limits
- 40 CFR 122.41 Standard Conditions in a Permit
- NPDES Compliance Monitoring Strategy (CMS) (2014)
- Technology Fact Sheets
 - Conventional gravity sewers
 - Lift station sewers
 - Force main sewers
 - Sewer cleaning and inspection
 - Screening and grit removal
 - Oxidation ditches
 - Trickling filters
 - Fine bubble aeration
 - Chlorine disinfection
 - Dechlorination
 - Ozone disinfection
 - UV disinfection

Mandatory Training Requirements for New CWA NPDES Inspectors in Specific Sub-Programs

New CWA NPDES Inspectors that will conduct inspections in specific sub-programs must complete the following training requirements in those sub-programs for which they will conduct inspections.

EPA Order 3500.1 Inspector Training Requirements

- In addition to *Mandatory Training Courses*, there are also NPDES subprogram requirements
- The sub-programs include:
 - Stormwater
 - Sanitary Sewer Overflows
 - Combined Sewer Overflows
 - Pretreatment
 - Biosolids
 - Concentrated Animal Feeding Operation
 - Vessels

Attachment

The CWA NPDES sub-program requirements are in addition to the requirements in "Mandatory Training Courses for All CWA NPDES Program Inspectors" listed above.

Stormwater (Industrial, Construction, and Municipal Separate Stormwater Sewer Systems (MS4s)) Stormwater FedTalent Program Link

- Complete the following training course:
- CWA NPDES Advanced Inspector Training Stormwater
- 2. Read the following:
 - NPDES Compliance Inspection Manual (2017), Chapter 11 and Chapter 14
 - 40 CFR Part 122.26 (a) & (b) Storm Water Discharges (Applicable to State NPDES Programs)
 - MS4 Program Evaluation Guide with Appendix A, Appendices B-D

Sanitary Sewer Overflows (SSOs) SSO FedTalent Program Link

- Complete the following training course:
 - CWA NPDES Advanced Inspector Training Sanitary Sewer Overflows (SSOs)
- Read the following:
 - NPDES Compliance Inspection Manual (2017), Chapter 13 Sanitary Sewer Overflows
 - Sanitary Sewer Overflows and Peak Flows Presentation
 - Sanitary Sewer Overflows FAQs

Combined Sewer Overflows (CSOs) CSO FedTalent Program Link

- Complete the following training course:
- CWA NPDES Advanced Inspector Training Combined Sewer Overflows (CSOs)
- 2. Read the following:
 - NPDES Compliance Inspection Manual (2017), Chapter 12—Combined Sewer Overflow
 - 1994 CSO Control Policy Clean Water Act Section 402(q)—Congress amended the CWA in 2001, adding Section 402(q) to require all permits, orders, and decrees issued to control CSOs, to conform to EPA's 1994 CSO Control Policy.

Pretreatment Pretreatment FedTalent Program Link

- Complete the following training course:
 - CWA NPDES Advanced Inspector Training Pretreatment
- Read the following:
 - NPDES Compliance Inspection Manual (2017), Chapter 9 Pretreatment
 - 40 CFR 403.1 to 403.6, 403.8, and 403.12
 - Introduction to the National Pretreatment Program, (June 2011)
 - Industrial User Inspection and Sampling Manual for POTWs

Biosolids Biosolids FedTalent Program Link

- Complete the following training course:
 - CWA NPDES Advanced Inspector Training Biosolids
- Read the following.
 - NPDES Compliance Inspection Manual (2017), Chapter 10: Sewage Sludge

The Inspector Wiki is your 'first-stop' comprehensive resource where EPA, state, local and tribal inspectors can access information about inspections, mandatory inspector training requirements, past training materials on a variety of subjects, inspection equipment and new technologies, compliance assistance, and more.

- https://inspector.epa.gov
- Wiki Access
 - 2-steps process
 - 1. Requires Login.gov account
 - 2. Wiki account request
- EPA 3500.1 Inspector Training Requirements
- Links to FedTalent Inspection Skills Refresher Training
- Compliance Presentation Library

FedTalent



EPA's Inspector training is managed in FedTalent.

All inspectors must obtain a FedTalent account to use the site's inspector training resources.

- Non-EPA inspectors access FedTalent at: https://epafedtalent.ibc.doi.gov/login/index.php ?saml=off
 - Non-EPA inspectors must first request access to FedTalent.
- Email <u>inspector-training@epa.gov</u> with any Inspector Wiki or FedTalent questions

NPDES Compliance Inspection Manual (2017)

- Chapter 1 Introduction Inspection Types, Responsibility for EPA Inspectors, Legal Authority
- Chapter 2 Inspection Procedures
- Chapter 3 Document/Record Keeping and Reporting
- Chapter 4 -- Facility Site Review of WWTPs
- Chapter 5 Sampling
- Chapter 6 Flow Measurement
- Chapter7 Laboratory Procedure and Quality Assurance
- Chapter 8 Toxicity
- Chapter 9 Pretreatment
- Chapter 10 Sewage Sludge (Biosolids)
- Chapter 11 Stormwater
- Chapter 12 Combined Sewer Overflows
- Chapter 13 Sanitary Sewer Overflows
- Chapter 14 Inspecting Green Infrastructure Controls
- Chapter 15 CAFO Program Inspections
- Chapter 16 Vessel General Permit
- Chapter 17 -- Pollution Prevention
- Chapter 18 Multimedia Concerns
- Chapter 19 Appearing as a Witness
- Appendices



Technical Assistance Webinar Series

- Monthly series focused on improving compliance at Small Wastewater Treatment Systems
- Geared toward owners and operators of smaller systems (flow of less than 1 million gallons per day).
- Supports the CWA NPDES Significant Noncompliance National Enforcement and Compliance Initiative (SNC NECI).
- Over 10,000 people have participated since 2019
- Others who would find the webinar series beneficial include:
 - any WWTP owner/operator,
 - design engineers,
 - municipal leaders,
 - NPDES technical assistance providers,
 - permit writers,
 - compliance and inspection staff from state, local, tribal, and federal governments.
- Additional information can be found at: https://www.epa.gov/compliance/technical-assistance-webinar-series-improving-cwa-npdes-permit-compliance



CWA NPDES National Technical Inspector Workshop

- The 2022/23 Workshop was held in December 2022 in CO.
- This Workshop, geared toward EPA and State NPDES Inspectors, has been held almost annually for the past 16 years.
- In-person attendance consisted of 105 people.
 - 77 EPA attendees from all 10 EPA Regions and HQ
 - 22 State inspectors from four different Region 8 states
- This training also offered a remote option with approximately 250 people attending via ZoomGov.

CWA NPDES National Technical Inspector Workshop

- Field exercises site visit options:
 - municipal wastewater treatment plant
 - a direct industrial discharger
 - an industrial user location, or
 - construction and industrial stormwater sites.
- Primary objectives of the Workshop:
 - train NPDES inspectors
 - facilitate knowledge transfer between new and experienced inspectors
 - Most Workshop attendees agree that the most beneficial part of the Workshop is the ability to collaborate, network, and exchange information with other regions and states.





Under Construction

New training ideas: short-term vs. long term

Short-term

- Developing new bimonthly NPDES Inspector Training webinar series available to both EPA and State inspectors
 - Starts late March 2023 registration details to go out soon
 - March 30, 2023 Opening Conferences, David Esparza, Region 6
 - Coming soon to the Inspector Wiki!
 - With registration, we'll add you to our subscription list
- Continue annual in-person CWA NPDES National Technical Inspector Workshop with hybrid option to broaden outreach



Under Construction

New training ideas: short-term vs. long term

Long-term

- Create a new CWA training development plan
 - Modernize current NPDES training
 - Create new training with interactive eLearning modules
 - Develop on-site video demonstrations
- Create a centralized training clearinghouse to more easily find relevant NPDES-specific training

Feedback

- We appreciate your feedback!
- What training topics are of particular interest to you?
 - O How can EPA CWA NPDES training be improved?
 - Do you have a preferred method of training?
 - Do you have subject matter experts who can help us with our new training development?
 - Presenting
 - Content creation
 - Videos/voiceovers

Reach out to us!

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Wrap Up

- We are aware of the need for additional State and EPA CWA NPDES training.
- The Inspector Wiki, FedTalent, NPDES Inspector Workshop and webinar series will help with this
 - o https://inspector.epa.gov
 - Non-EPA inspectors access FedTalent at: https://epafedtalent.ibc.doi.gov/login/index.php?saml=off
 - Technical Assistance Webinar series:
 https://www.epa.gov/compliance/technical-assistance-webinar-series-improving-cwa-npdes-permit-compliance
 - NPDES Inspector Webinar Series registration information coming out next week.
- Feel free to reach out to us with your training needs and ideas

