



E C O S

GREEN REPORT

State Compliance and Enforcement Inspector Needs Assessment: Improving Available Training Resources to Advance Environmental and Public Health Protection and Cooperative Federalism

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Introduction

Because inspection and enforcement are key elements of state and federal environmental programs, compliance and enforcement inspectors are critical to ensuring a strong system of environmental enforcement and public health protection. The essential work of inspection and enforcement requires states to retain and train skilled, knowledgeable, and professional staff. Inspectors must remain informed of current environmental regulations and operational procedures as well as new regulations that are promulgated at both the federal and state levels.

ECOS undertook an Environmental Compliance and Enforcement Inspector Training Needs Assessment to help state inspectors identify training gaps that should be addressed to help prepare inspectors for their work in the field. The assessment consisted of 26 questions on various aspects of training, such as format, frequency, delivery, and how these needs vary by experience level.

In 2017, ECOS distributed the questions to both the ECOS Compliance Committee and Regional Environmental Enforcement Associations (REEAs). ECOS received 207 responses from inspectors across state and local environmental agencies in 38 states and Alberta, Canada. The enthusiasm and volume of responses to our needs assessment show that state inspectors have many ideas on ways to make training more effective, and that the topic is of high importance to state environmental agencies.

We analyzed the responses to identify themes and make recommendations for improving inspector training access and offerings.

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RESULTS OF NEEDS ASSESSMENT

CONTENT

Assessment responses reflected a need for training across all areas, rules, and media. Several waste inspectors listed the Resource Conservation and Recovery Act (RCRA) as an area which generally could use more training; other inspectors went on to detail specific parts of RCRA that need attention. Among air inspectors, Volatile Organic Compounds (VOCs), Nitrogen Oxide (NOx), Maximum/Generally Available Control Technology (MACT/GACT), and Continuous Emissions Monitoring Systems (CEMS) were identified as areas with the highest need for training.

Inspectors, regardless of media-focus, highlighted the need for training on new regulations and for shorter refresher courses on older regulations. One respondent wrote, “Our state enforcement staff has many years of experience due to low turn over. It would be nice to have annual training on new federal rules when they come out.”

Furthermore, training is needed on specific types of technical inspections involving particular regulatory programs. A significant number of responses identified technical training needs, including procedures for conducting certain types of inspections such as boiler inspections, wastewater inspections, or waste sampling procedures.

The respondents were also asked to identify the skills for which there was the greatest need for training. ECOS compiled the number of mentions of skills from open-ended responses, which ranged from conducting interviews to writing inspection reports, taking photos, and enhancing communication and negotiation skills (Figure 1).

Figure 1. Respondents identified the skills with the greatest need for training.

| Skill | # of Mentions |
|----------------------------------|---------------|
| Interviews | 45 |
| Documentation/Evidence Gathering | 39 |
| Negotiation/Communication | 21 |
| Writing | 20 |
| Inspection | 14 |
| Photos | 14 |
| Enforcement | 12 |

Sample of Comment Received on Content of Training:



“Compliance staff have the highest need in training for inspection processes, rules and regulations pertaining to oil and gas operations, testing of emissions, and facility functions.”

Responses showed a significant need for proper negotiation and communication training. According to respondents, this training should address and provide practice in scenarios relevant to inspector field work, especially when it comes to verbal conflict. As one respondent wrote in response to which skills are needed, “Actual mock negotiations - not used-car haggling, but a sophisticated look at what elements can be negotiated based on circumstances/situations and what are the most likely motivations of the responsible party to negotiate, etc.” Specifically, 45 inspectors list interviewing techniques and how to conduct interviews as key skills that need focused training.

While interview skills garnered the most mentions, 39 responses mentioned documentation and evidence gathering as some of the skills most requiring proper training. In addition, a number of responses mentioned a need for training in conducting and writing inspection reports and properly inspecting onsite records.

When asked how training needs in both the skills and subject areas listed above correlated to experience level, 67% of responses indicated that the greatest training need is for entry-level inspectors.

FORMAT

Inspector training is offered in a variety of formats including webinars and online workshops, written materials, in-person and on-site training sessions, and other ways to ensure that the training resources available are accessible to state enforcement inspectors.

In this assessment, we asked respondents to rank the type of training format that best suited the experience level of the inspectors. Training format choices included in-person (classroom) training, on-the-job training, online training, webinars, and written instructional materials. The results, displayed in Figures 2-4, show that regardless of experience level, in-person and on-the-job training were ranked the most useful training methods for inspectors. While the usefulness of in-person training remained relatively constant across all three experience levels, on-the-job training decreased in usefulness as inspectors’ experience increased. Additionally, one inspector emphasized the value of refresher courses to keep more senior level staff updated on their work:

Sample of Comment Received on Format of Training:

“

“It does not appear that there are ‘refresher’ courses or trainings that are less time intensive but still provide professional development. It would be good to have training aimed at mid to senior level staff.”

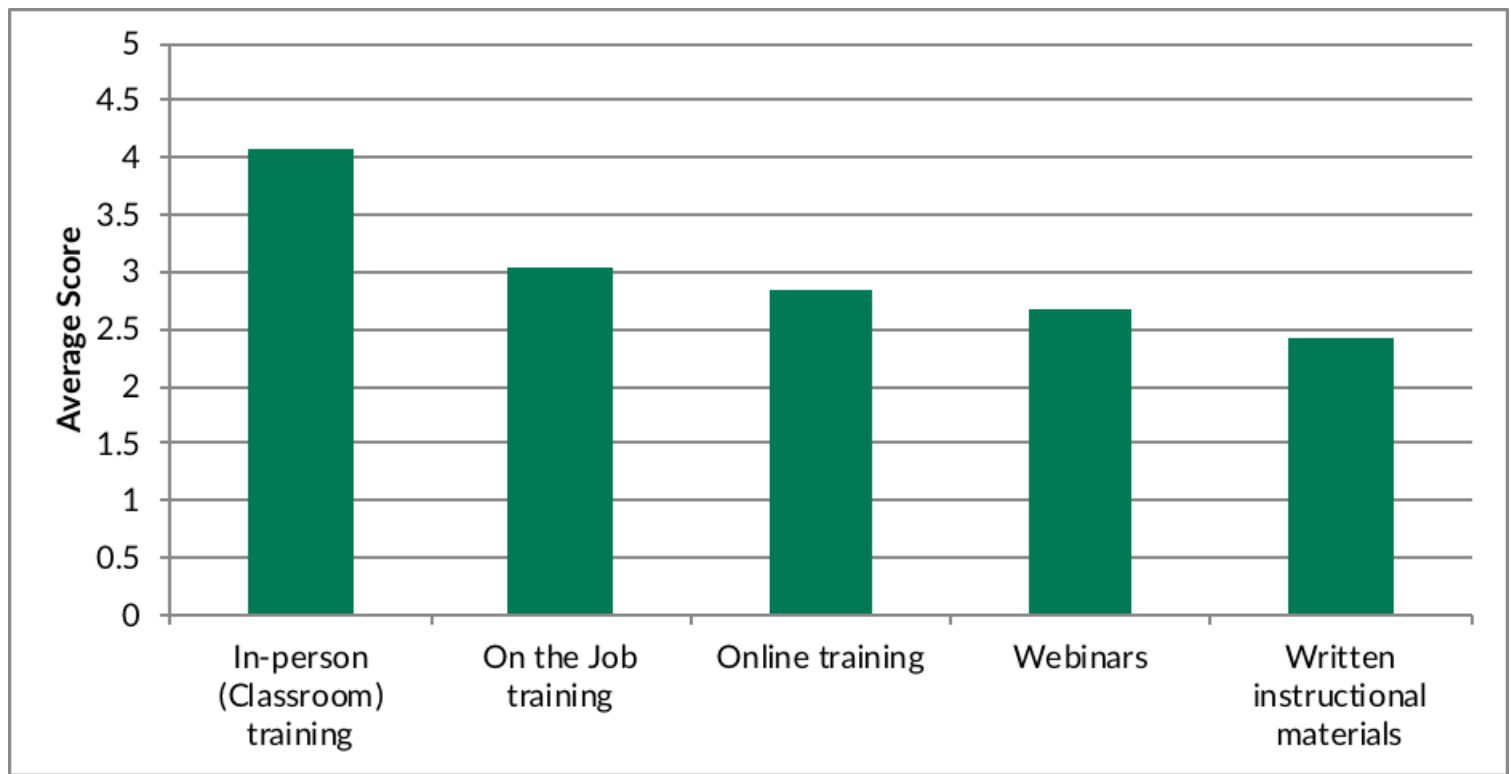
Figure 2. Respondents ranked training formats in the order of usefulness for entry-level inspectors, 5 being the most useful, and 1 being the least useful.



Figure 3. Respondents ranked training formats in the order of usefulness for mid-career inspectors, 5 being the most useful, and 1 being the least useful.



Figure 4. Respondents ranked training formats in the order of usefulness for senior-level inspectors, 5 being the most useful, and 1 being the least useful.



FREQUENCY AND AMOUNT OF TRAINING

Respondents were also asked how often training is needed for inspectors. As indicated in Figure 5, roughly 48% of respondents answered that inspectors need annual training, with 32% saying that training is needed semiannually. When asked how many hours they can commit to train, 37% of respondents indicated that inspectors could commit to approximately 40-80 hours of training annually, as shown in Figure 6.

Figure 5. Respondents estimated how often training is needed for inspectors.

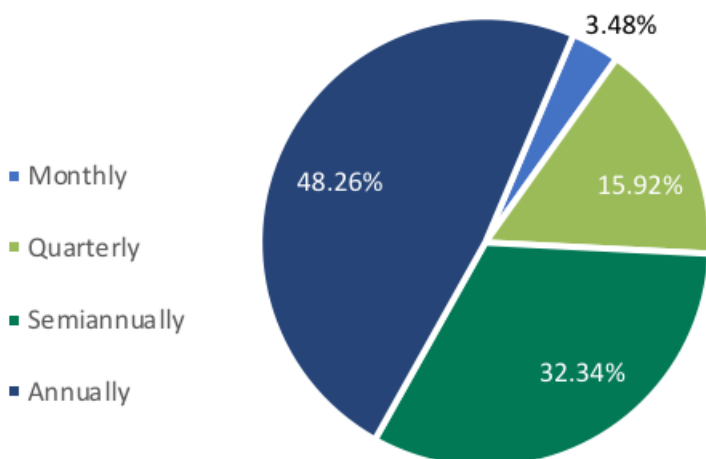


Figure 6. Respondents estimated how much time their staff could commit to attending training annually.

| | | Percentage |
|-------------------|--------------------|------------|
| Responses: | Less than 40 hours | 33% |
| | 40-80 hours | 37% |
| | 80 or more Hours | 9% |
| | Depends/Ambiguous | 21% |
| | Total: | 100% |

Sample of Comments Received on Frequency of Training:

“

“Entry level inspectors spent much more time than senior staff for training purposes.”

“

“Training needs for inspections varies by career level. Entry-level inspectors require more training, and I make sure that they are able to attend more trainings per year because of this. Currently, entry-level staff are able to attend quarterly in-person trainings.”

POTENTIAL BARRIERS TO TRAINING

Finding and Locating Training

Respondents were evenly divided as to how easily information on trainings can be found. While some inspectors responded that it was very easy for them to locate trainings, others found it very difficult. A number of inspectors who found it easy mentioned that they find out about trainings through email.

Due to the difficulty in establishing consistent coordination between the various entities offering training, some respondents noted that their state agencies have assigned the role of training coordinator to a staff member. This individual compiles and distributes information concerning current and relevant training for inspectors and other staff. Respondents who mentioned a training coordinator said it makes it easier to learn about upcoming trainings: “[We find out about trainings] easily - we have an in-house training coordinator...He routinely coordinates with a regional training office.”

Of the options provided, the U.S. Environmental Protection Agency’s (EPA) National Enforcement Training Institute was the training resource respondents were most aware (63%). Yet only 52% of respondents indicated that their states had used EPA training at some point.

59% of responding inspectors were aware that EPA Regional Offices offered any form of inspector training. However, 26% of respondents to this question had not received any training from their respective EPA Regional Office. Inspectors are aware that EPA Regional Offices provide basic trainings, specific technical trainings, updates on regulations and procedures, and other pertinent subjects with which agencies have indicated they need help.

In addition to training provided by EPA, many states currently maintain in-house training offerings. However, states noted that it would be helpful to access other states' training materials. This indicates a potential opportunity to provide enforcement trainings across multiple states, as 33% of respondents said their states do not require state specific trainings for inspectors.

Travel and Cost

Although responding inspectors identified it as most useful, hands-on training is often the most expensive and difficult to organize. 79% of respondents mentioned "budget" or "cost" as a logistical barrier to training, especially in conjunction with travel. As one inspector wrote, "Cost is the biggest barrier, along with family commitments and optics. I'm not sure how you address cost. Out of state training will always be expensive."

To effectively solve this issue, many inspectors recommended bringing training to state agencies rather than having individuals travel long distances to attend a regional or national training. One inspector wrote "having trainings brought to our region has saved considerable time and expense by not having to send staff out of state and allowed many more to attend." Although state agencies generally must pay fees for this sort of service, the cost is offset by eliminating travel and the costs associated with missing additional work to travel for training.

Sample of Comment Received on Travel and Cost:

“

"Our agency has been able to receive excellent in-person training hosted in our region. They are one of the highest values in potentially available training for our personnel."

KEY FINDINGS

Based on the information gathered from the needs assessment, ECOS highlights these key findings on ways to improve compliance and enforcement inspector training.

Finding #1

The frequency of training needed by inspectors does vary by an inspector's experience levels. Entry-level inspectors require more frequent trainings while mid-level and senior-level inspectors can be trained on a less frequent basis (i.e. annually).

Finding #2

In-person training - classroom and on the job - is reported as the most effective method of training.

Finding #3

Hosting in-person training courses at state environmental agencies allows inspectors to eliminate some of the travel and cost barriers that make accessing training difficult.

Finding #4

Inspectors highlighted the need for negotiation and communication training. This includes hands-on training, such as mock negotiations based on situations likely encountered in the field and during an administrative enforcement action or assistance with legal procedures (e.g. providing testimony).

Finding #5

Many respondents mentioned having an easier time finding out about training opportunities when their agency had a designated training coordinator.

CONCLUSION

The results of the needs assessment in this report serve as guidance for future planning in addressing the training needs of state environmental and enforcement inspectors. Training opportunities identified in the report point to a need for solutions to address the substantial training needs of entry-level inspectors while also managing the difficulties and costs of accessing training workshops, providing inspectors with the skill sets needed to conduct successful inspections, ensuring that trainings are well communicated and more easily accessible by inspectors, and leveraging collaboration opportunities on a regional scale. While this assessment focused on state needs, ECOS believes it will help improve the overall state/federal cooperative relationship when implementing a cohesive enforcement program designed to advance our nation's system of environmental and public health protection.

APPENDIX

Needs Assessment Questions

1. Which training format is most useful for training entry-level inspectors? (Rank in order of usefulness, 5 being most useful, 1 being least useful)
2. Which training format is most useful for training mid-career inspectors? (Rank in order of usefulness, 5 being most useful, 1 being least useful)
3. Which training format is most useful for training senior-level inspectors? (Rank in order of usefulness, 5 being most useful, 1 being least useful)
4. How often is training needed for your inspectors?
5. How much time can your staff commit to attending training annually? Does this vary by career level?
6. What are the greatest barriers to attending out of state training? How would you address these barriers?
7. Please use the following space for any additional comments on the logistics and format of compliance and enforcement inspector training.
8. What types of facilities, regulatory conditions, and pollutants do you most commonly encounter during inspections? E.g. "I'm an air inspector; I frequently visit coal facilities and find paperwork violations."
9. For which area, rule, or subject does your state have the highest need for compliance and enforcement inspector training? Please include which type of training (web based, in person, etc.) is appropriate for the area, rule, or subject. (You may list several) Example: My state enforcement staff have the highest need for in-person training for Copper and Lead Rule enforcement.
10. For which skills does your state have the highest need for compliance and enforcement inspector training? (e.g. how to conduct interviews, how to take photos, etc.)
11. Describe how the training needs identified in Questions 9 and 10 vary by level of staff experience (i.e. entry-level, mid-career, senior-level).
12. Related to Questions 9 and 10, for which level of training does your state have the highest need for compliance and enforcement inspector training?
13. Please use the following space for any additional comments on the content of compliance and enforcement inspector training.
14. How easily do you find out about training offerings?
15. Are you aware of the following sources of compliance and enforcement inspector training? (Select all that apply)
16. Have you used these training resources? If not, why not? If yes, which trainings have been the most beneficial? What can be improved?
17. What other training resources would be helpful in addition to those currently being utilized (other than additional funding)?
18. Whose training resources does your state currently rely on to meet its inspector training needs? Ex. EPA, Western States Project (WSP), Midwest Environmental Enforcement Association (MEEA), Northeast Environmental Enforcement Project (NEEP), Southern Environmental Enforcement Network (SEEN) Training, state run programming, etc.

19. Does your state provide its own compliance and enforcement inspector training? What steps can your state take to address training needs?
20. Does your state require certain training? To what extent does your state have a training curriculum for its credentialed compliance and enforcement inspectors?
21. How often does your state review and revise its training offerings?
22. Are you using any training sources that are not listed? If yes, what are the names of these training resources?
23. What, if any, training have you received from the EPA Regional Offices?
24. Please use the following space for any additional comments on the sources of compliance and enforcement inspector training.

ACKNOWLEDGEMENTS

ECOS would like to thank its collaborators in this project, including the EPA Office of Enforcement and Compliance Assurance and the REEAs that assisted in the development and distribution of the needs assessment. ECOS also thanks the state compliance and enforcement inspectors whose responses informed ECOS research and have made these findings possible.

This project has been funded in part with assistance from EPA under its cooperative agreement no. X5-83596001 with ECOS. The contents of this document do not necessarily reflect the views and policies of EPA, nor does the EPA endorse trade names or recommend the use of commercial products mentioned in this document.

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