

# **Investigation Preparation**

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# **Bet you already know a lot about this topic!**

- Has anyone here not yet done any on-site compliance investigations?
- Try to guess what I'm going to say...
- Guess the five steps I've written down as parts of "Investigation Preparation."
- You could get chocolate for this.

# 5 Steps to Preparation

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- Locate/Read/Review facility file.
- Familiarize yourself with units/processes and their permits/authorizations/rules.
- Familiarize yourself with the particular investigation and equipment protocols.
- Create or locate a “checklist” you can follow while on site.
- Gather PPE and other equipment.

# Preparation

- Overall preparation time should take at least as long as the investigation itself.

# Facility File

- Allow plenty of time to review.
- Time invested here will more than pay itself back.
- Try to figure out what every single document in the file means – flag questions.
- Focus especially on permits and other authorizations, and rule applicability.

# Units & Processes

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- Do your best to understand, but...
- Refuse to let yourself be intimidated by the stuff you don't yet understand.
- Seriously. I mean it. Don't be intimidated. You can still do your job.
- (I have met many a company environmental rep. who doesn't recognize and understand all of the equipment and processes either.)

# Questions Toolbox

- Level 1 – When you don't mind admitting the true depths of your ignorance.
  - Congratulations! You have selected the express track to getting up to speed.
  - No loss of face for brand-new investigator
  - Just say, “What's ‘at?’” and “How's it work?” a lot. Take pictures and copious notes.
  - Especially rewarding when company rep. has a “helping” attitude.

# Questions Toolbox: Level 1 (continued)

- Won't slow you down at all in noticing things that might turn out to be problems
  - "Should that be smoking?"
  - "So if the still vent is being re-routed to the firebox, how come there's steam coming out of it?"
  - "What's the deal with all those vapors I can see coming from the top of that tank?"



# Questions Toolbox

- Level 2 – When you feel a little embarrassed; you think you “should” know more by now; you’ve forgotten stuff you used to know
  - DO NOT let your worries and insecurity cause you to rush through the investigation.
  - Let the permits and reg’s be your guide. Stick to them like glue. Go step by step.
  - Your best friend is the all-purpose question: “How does your company show you are complying with this rule?”

# Questions Toolbox – Level 2 (continued)

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- It's always best to have a working knowledge of the equipment and processes, but...
- To be perfectly candid, 90% of the time it's not a prerequisite to determining compliance with the rules.
- So get over it. You'll learn as you go.

# Questions Toolbox – Level 2 (continued)

- Consider spending more time accompanying other investigators on their investigations.
- Ask them your questions. (But maybe not directly in front of company rep.)
- Note that they may not know all the answers, either. See? This is realistic.

# Questions Toolbox – Level 2 (continued)

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- You can take steps that don't involve asking questions to others.
- Read trade journals.
- Refer to [Air Pollution Engineering Manual](#).
- Take some training.
- Check out [Howstuffworks.com](http://Howstuffworks.com)
- Other online resources.

# Questions Toolbox: Level 2 (continued)

- If the difficulty lies in understanding the reg's themselves...
- You're in a big, albeit largely unacknowledged and secret, club.
- To locate other members of the club, try walking up to them and saying, "So, I was wanting to talk to you about 40 CFR 60 Subpart *[whatever]*"
  - Note eye twitches, loud sighs, cursing, sudden yoga poses, holding of head, rocking in place with "faroff" expression on face, and open weeping.

# Questions Toolbox: Level 2 (continued)

- For the sufferers of CFR-induced PTSD
  - Read (and re-read) the Reg's.
  - Check out the available aids on EPA's website.
  - Ask other investigators if they have any checklists they have created themselves.
  - If out of prep. time: Just ask company rep., "Show me what you've got for KKK compliance." Take notes and evaluate later.

# Investigation & Equipment Protocols

- Theoretically, these should be easy-to-find and follow.
- Rely on more experienced investigators and your supervisor.
- “Snoop” by reading approved reports from other regions. Use them as templates.
- Equipment questions for which you cannot find an answer – call an expert (trainers, authors of the protocol, headquarters contact person)

# “Checklists”

- If you are doing an investigation with a pre-existing checklist, *rock on!* You are lucky.
- Many times you will have to create your own.
- Use it as a guide and to make sure you don't forget anything.
- Photocopy of plot plan can be helpful.



# Gather PPE & Equipment

- Check with company for PPE guidelines.
- “Fit” is not a vanity issue. Make sure your stuff fits.
- Know and follow proper use and care of equipment. Priority is to know ways in which the equipment is vulnerable to being damaged or broken, or giving “bad” data.

**(Hold questions until  
after Alice's part)**