Environmental Crime
Scene Management
What do these pictures have in common?
Crime Scene or Accident?
Facility vs Residence
What Is Our Primary Role?

To identify, document, isolate and collect physical evidence which may be used to prove (or disprove) the allegations.
Crime Scene Management

- Proper Equipment
- Proper Personnel
- Proper Training
- Proper Policies/Procedures
Reminders

- “Plan the work and work the plan”
- Be flexible
- Know your assignments and your equipment
- Effect the entry safely, with swift actions, based on sound principles
- Secure the scene and employees
- Secure the evidence
- WHO is a safety officer?
Secure the Scene

Why?
- Protect public, emergency responders and our team
- Preserve evidence

How?
- Perimeter security
- HotZone security
Secure the Scene

- Assign a Public Information Officer
- Coordinate with emergency responders
  - Establish liaison with ER lead
  - Explain criminal/forensic considerations
  - Limit investigative discussions
- Assign a Senior Manager to address defense counsel
Basic Crime Scene Processing

“A-O-D-S-C-A”

1) Assessing – to decide proper course of action
2) Observing – the condition of the scene
3) Documenting – via written observations, photography, videography, sketching and mapping
4) Searching – initially a visual effort and then an intrusive, physical search
5) Collecting – which physically alters the context and content of the scene forever-ensure proper documentation
6) Analyzing – on scene and in laboratory/office settings following departure
Processing the Environmental Crime Scene

- Often requires law enforcement to pair with an emergency responder.

- Emergency responder: assess possible threat to environment, human health.

- Law Enforcement: identify possible evidence and collect it properly.
Assess and Observe

- Is there an ongoing crime?
- Can evidence be collected photographically, rather than physically?
- Weigh value of evidence, and hazards associated with collection
- Is the evidence worth physically collecting?
- Can I do a better job with my camera when collecting certain types of evidence?
Crime Scene Documentation: Overview

- Photography/videography
- Logbooks/written notes
- Diagrams-symbolic representations like flowcharts
- Sketches-rough drawings which represent what the investigator sees
- Mapping-precise measurements with appropriate survey tools
Crime Scene Documentation: Initial Video and Photography

- *In situ* “In its original place”
- Turn microphone “off”
- Exterior and Interior of locations
- Releases to the environment and wildlife/natural resources damages
- Staining of ground, vegetation die off, fish kills, active discharges of waste water, release of chemicals, etc.
- Labels, tire tracks, documents, personal protective equipment, drums, tanks, lab glassware and equipment, etc.
- Avoid photographing people while documenting scene
Crime Scene Documentation: Marked and Scaled Evidence

- Provides a tool for laboratory recreation and analysis
- Provides a gauge for the size in context of the crime scene
- Allows for visual context and relationship to other items at the crime scene
Crime Scene Documentation: Photography in PPE

- Prepare camera settings before entering scene
- Make sure camera is operational and media is installed prior to entering
- Shoot head slate prior to entering scene
- Be familiar with dexterity limitations while wearing PPE
- Practice with equipment prior to use
Crime Scene Documentation: Mapping

Methods

– Triangulation

– Rectangular Coordinates

– Baseline Measurements

– Polar Coordinates

– Photogrammetry
Crime Scene Documentation: Sketch
Label rooms and items with a consistent system

- Administration building = “I”
- President’s office = “I-F”
- President’s credenza = “I-F-1”
- President’s desk = “I-F-2”
- President’s bookshelf = “I-F-3”
- Laboratory building = “II”
- Inorganic chemist’s office = “II-A”
- Inorganic chemist’s desk = “II-A-1”
Documenting, Searching and Collecting

- Ideally work as a two person team

- One person to collect evidence, the other to document activity:
  - Photographer and scribe
  - Sketching if possible
  - Evidence collection and person filling out chain of custody.
Traditional Forensics
Crime Scene Collecting: Office Setting

- Use established labeling system
- Mark identifying information on document/folder
  - Seizing officer and initials
  - Location of seizure
  - Date/time
- Use folders/bands/clips to organize evidence coming from the same location
Proper Handling of Evidence

- Identification

- Chain-of-Custody
Chain of Custody

The meticulous process of showing the succession of persons who handled or had access to any evidence

What may be questioned by defense?

- Chain-of-custody forms
- Procedures and policies
- Testimony from those who handle the evidence
Evidence Is in "Custody" If...

- It is in the actual possession, control, and presence of the investigator
- It is in the investigator’s view
- It is in a storage place to which only the investigator or identified others have access
Chain of Custody Proves:

- No one switched the evidence
- No one contaminated the evidence
- Whatever is in the collection folder/sample container is what was collected at the crime scene
"Plan the work and work the plan" for the most defensible evidence and the best outcomes