International Technical Working Group (ITWG): The Evidence Working Group

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ITWG: Evidence Working Group

- What is evidence?
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RN material

Evidence contaminated with RN materials

Mock Radiological Dispersal Device laboratory
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• What is ITWG?
  – Multinational
  – Informal
  – Nuclear Forensics
    • Laboratory scientists
    • Law Enforcement personnel
    • Regulatory officials
  – Reports informally to the Nuclear Safety and Security Group of the G-8
ITWG: Evidence Working Group

• Created in 2012
  – Collection
  – Transport
  – Analysis
  – Reporting
ITWG: Evidence Working Group

• First met in 2013 in St. Petersburg, Russia
  – 20 volunteers
  – From 10 different nations
ITWG: Evidence Working Group

Current relevant documents:

- ITWG “Guidelines for Evidence Collection in a Radiological or Nuclear Contaminated Crime Scene”
  6 June 2011
  - Planning
  - Communications
  - Actions
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Current relevant documents:

• Radiological Crime Scene Management
  – IAEA Document
  – Currently in publication process (NST013)
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Current relevant documents:

- IAEA Nuclear Security Series No. 2 – Nuclear Forensic Support
  - Model action plan
  - Good overall topics
  - 2006 version currently in revision (NST014)
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• Proposed Tasks

1) Develop a document to discuss chain of custody/continuity of evidence

2) Develop a series of topical papers on the conduct of traditional forensic examinations on evidence containing radioactive/nuclear materials

3) Development of an evidence collection plan framework document

4) Development of an Examination Plan Checklist
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- **Proposed Tasks**
  1) Develop a document to discuss chain of custody/continuity of evidence
  2) Develop a series of topical papers on the conduct of traditional forensic examinations on evidence containing radioactive/nuclear materials
  3) Development of an evidence collection plan framework document
  4) Development of an Examination Plan Checklist
1) Develop a document to discuss chain of custody/continuity of evidence:

- Chain of Custody/Continuity of Evidence = documentation + process
- Requirements vary from jurisdiction to jurisdiction
- Focus
  - Fundamentals
  - How to determine equivalency
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- Effects of radiation on the evidence
- Effects of radioactive/nuclear materials contamination control on the examination process
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4) Development of an Examination Plan Checklist
3) Development of an evidence collection plan framework document

- Link between
  - Investigators
  - Collectors
  - Laboratory
- Minimize risks
- Timely and probative results
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4) Development of an Examination Plan Checklist

– Master control of what happens to the evidence
  • Prioritizes and deconflicts multistep examination processes
  • Sets expectations and denotes limitations
Agreement Point #1

- The Nuclear Forensics International Technical Working Group’s “Guidelines for Evidence Collection in a Radiological or Nuclear Contaminated Crime Scene”, published in 06 June 2011 is the basis for our work.
Agreement Point #2

• Several volunteers agreed to begin working on Proposed Task #1 and Proposed Task #2. Volunteers for Proposed Task #1 will be using a draft version of a document begun in the ITWG Guidelines Working Group, while other volunteers will be developing Proposed Task #2 by drawing from published scientific works and personal experiences.
Agreement Point #3

- Proposed Task #3 and Proposed Task #4 require further discussions and were tabled until a later date to be determined.
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- What is evidence?