



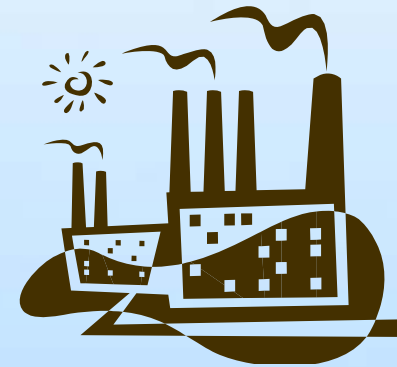
Emergency Response: On-Site Laboratories NEMC- Bellevue, WA

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Types of Events

- Natural disasters
 - ~ Hurricanes, Tornadoes, Floods
- Industrial accidents
 - ~ Explosions, spills, releases
- Transportation releases
 - ~ Derailments, crashes
- Large scale field activities
 - ~ Remediation activities, dredged material evaluations

Potentially chaotic events which many parties may be collecting samples for submittal to a variety of different laboratories.



Why set up an On-site lab?

- To get basic answers provided by analytical chemistry:
 - ~ What is it? How much of it is there?
 - ~ To determine depth and breadth of the impact
- What is the Need for Information?
- Which analytes and matrices?
- How quickly must I have it?
- Quantitative vs. Qualitative?
- Go only for the critical information needed? Less is more

To Mob or not to Mob

- Once we know the needs for information, as narrow a request as possible to meet the needs, then we ask:
“Can a fixed lab provide exactly what I need?”
- Setting up an effective/efficient courier system may be simpler than going mobile – need to evaluate
- But if the answer still points to mobile, then...

WHAT IS THE INTENDED USE OF THE DATA?

- **The answer will lead to needs/requirements of such support**
- **It will allow the stake holders to decide whether On-site support is the answer or even if feasible**
- **Defined Scope vs. Potential needs – partner with a lab that can evolve with the needs**
- **It comes down to the basics of an operation:**
 - ~ **People, Processes and Tools**

- **PEOPLE**
 - ~ The right numbers of qualified individuals that are needed to support the analytical needs for the length of time required by the project
- **PROCESSES/SYSTEMS**
 - ~ Tried and proven to meet the needs of the project. All systems brought in must have already been verified as able to provide the necessary outcome for the project – proven is key
- **TOOLS**
 - ~ Proven, portable systems able to deliver the needed information in a sustainable and continuous manner

About Supply Chains

- Critical to the success of an ongoing, sustained, mobile analytical effort

"Nine times of ten an army has been destroyed because its supply lines have been severed"

- Macarthur, August 1950 to the Joint Chiefs of Staff

Requirements

- People: Technically qualified, sustainable numbers, food, shelter, transportation readily available
- Processes/Systems
 - ~ Analytical, administrative, logistical. Intake/receipt, sample management, sample integrity, sample control, Quality Assurance, Health and Safety, SOP, Information Management, Data Reporting, Data integrity/control, purchasing/supply chain, communication, Waste collection/disposal, Effective Command/control process
- Tools
 - ~ Analytical Instruments, supplies (gases, parts, maintenance, supplies), power/energy, phones/data lines, lab grade water, AC/Heat, transportation

On-Site Analytical Support



Parties of Interest

- Potentially Responsible Parties
- Local, State and Federal Authorities
- U.S. EPA
- Legal Counsels
- Consultants/ Field teams
- Third Party QA Providers
- Laboratories
- Media
- Public
- Affected individuals

Essentials of On-Site Support

- Confidentiality, Trust and Reliability
- Legal support
- Quality Assurance systems
- Professional Conduct/Projection
- Health and Safety – a must!
- Communication
- Partnership mentality
- An established Incident Command Structure (ICS)
- Total Commitment to Service the needs of the project



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