



Emergency Response- Field Support for Sample Integrity NEMC- Bellevue, WA

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Reality vs. Expectation



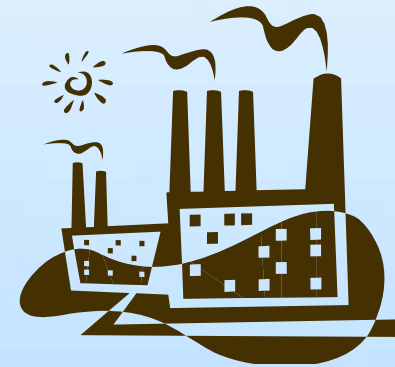
Or



Types of Events

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

Potentially chaotic events with multiple parties collecting samples for submittal to a variety of different laboratories.



Goals and Objectives

Sample Receiving Office



- Improve defensibility and usability of data: quality control of supplies & consistency of handling.
- Shipping of samples in compliance with DOT requirements
- Adherence to the data quality objectives of the project, if they have been established
- Provide independent peer review of sample integrity and COC documents in the field prior to lab submittal
- Minimize data rejection due to field issues
- Reduce the need to re-sample: lost, broken, or compromised samples

Parties of Interest

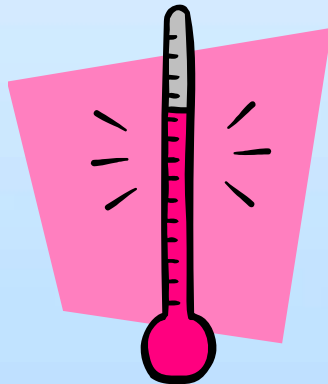
- Responsible Party
- Local, State and Federal Authorities
- U.S. EPA
- Legal Counsels
- Consultants/ Field teams
- Third Party QA Providers
- Laboratories
- Media/ Public

Common Sample Receipt Issues

Chain of Custody Receipt

Sample ID	Sample Description	Analysis Requested	Received By	Date	Time	Signature
101	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
102	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
103	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
104	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
105	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
106	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
107	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
108	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
109	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]
110	Water	DO, pH, Temp	J. Smith	10/10/10	10:00	[Signature]

- Incomplete Chain of Custody (COC) records
- Misidentified Samples
- Inappropriate sample containers
- Noncompliant sample submitted for analyses
- Broken sample containers
- Samples arriving to lab outside of temperature requirements



Special Considerations

- Conflict of interest and confidentiality
- Documented procedures
- Training of staff
- Hours of operation
- Health and Safety concerns
- Site Conditions
- Volume of samples anticipated
- Cost

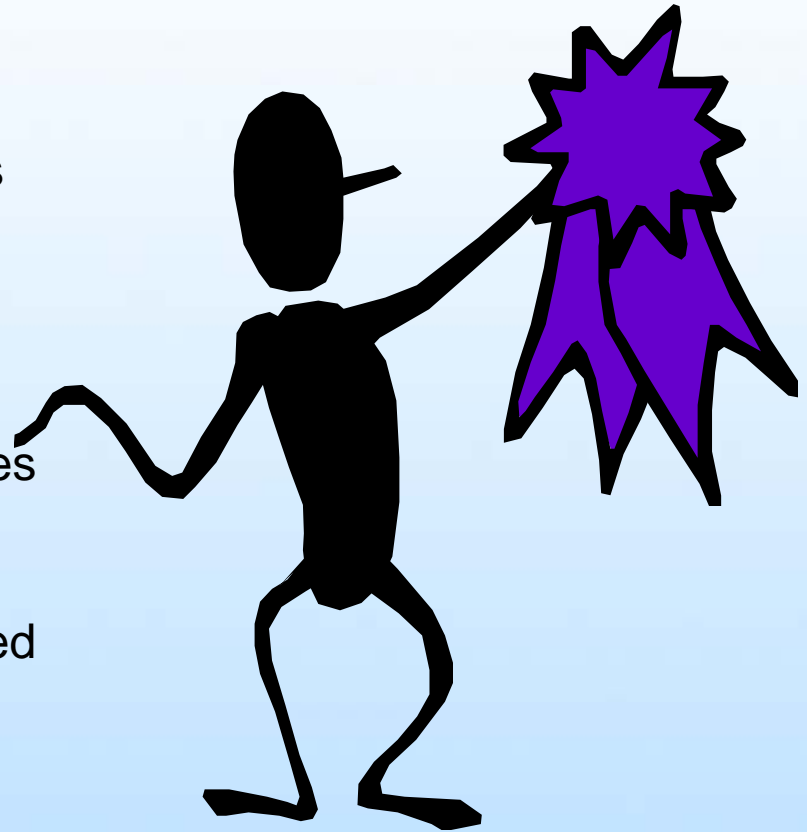


Roles and Responsibilities

- Coordinate outgoing sample kits and supplies
- Track the quality of the sample containers being used
- Inform field teams of special method or regulatory requirements
- Inspect and document sample labeling against the chain of custody
- Document any anomalies
- Appropriately pack and ship samples to receiving laboratories

Value of Service

- Traceability of field supplies
- Known quality of sample containers
- Peer review of COC prior to lab receipt
- Extended field time by assigning responsibility to sample custodian
- Real-time resolution of discrepancies
- Faster processing time in the laboratory
- Higher quality of data being collected



Contingency Planning

- Know the hazards and contaminants of concern
- Identify emergency responders
- Response decision tree
- Identify subcontractors and duties
- Develop a written response plan
- Teaming agreements with responders and vendors
- Document lessons learned

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