

QUALITY ASSURANCE AND QUALITY CONTROL

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OVERVIEW

- What is Quality Assurance and Quality Control (QA/QC)
- How have you all been using it already and what to expect over the next year
- Updating our Quality Assurance Plan (QAP) for the Investigation of Underground Storage Tank Releases

The Umbrella of Quality



DocXellent



DEQ'S QUALITY MANAGEMENT PLAN (QMP)

- DEQ QMP, updated 2019
 - approved by the director, deputy director and Agency QA lead, Bob Habeck and EPA.
- QMP = describes the agency's quality system, policies and management guidelines.
- A quality system is required when EPA funding is used and is required by a variety of state/federal rules and mandates.

QUALITY SYSTEM GOAL

- Goal: ensure program produce defensible, data that meets the needs and functions of the agency.
- The quality system intent
 - ensure data integrity, so data is of known and documented quality,
 - consistent in business processes,
 - meet agency business requirements with efficient use of resources, and
 - continual improvement of operations

QUALITY ASSURANCE

K&C





QA ACTIVITIES

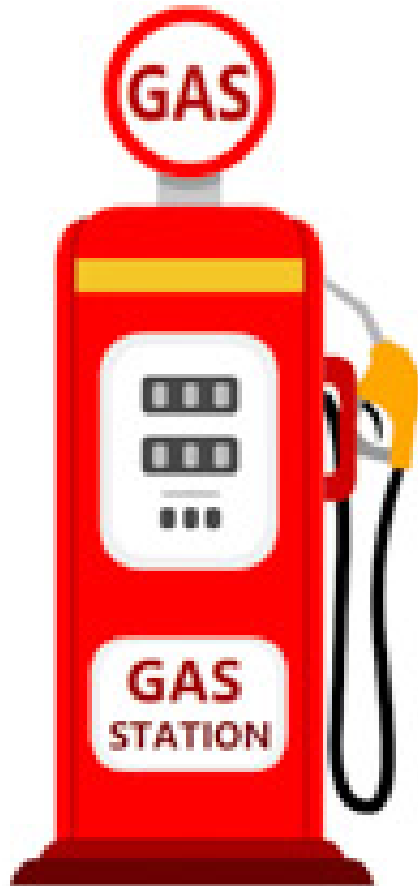
- This meeting
- Update guidance
- Creating of new worksheets/guidance
- Examining processes (stakeholder workgroups, process improvement subgroups, etc)



QC ACTIVITIES

- Examining defects in finished products
- Random Laboratory checks
- Audits
- Management reviews

CONTINUAL QA/PROCESS IMPROVEMENT



Montana Quality Assurance Plan for Investigation of Underground Storage Tank Releases

Referenced in rule

ARM 17.56.504 and ARM 17.56.703 Release
Investigation and Confirmation Steps and Assessing the Site at
Closure or Change in Service, respectively.

“The Montana Quality Assurance Plan for
Investigation of Underground Storage Tank Releases should be
used as a guide for the collection, preservation, and analysis of
field samples”

Last revision date, 2011

WHAT SHOULD QAPS CONTAIN?

Project Management
Data Generation and Acquisition
Assessment and Oversight
Data Validation and Usability

PROJECT MANAGEMENT

Christopher
Dorrington, DEQ
Director



Jenny Chambers, Waste
Management and
Remediation Division
Administrator



Terri Mavencamp,
Contaminated Site
Cleanup Bureau Chief



Marla Stremcha,
Petroleum Tank Cleanup
Section Supervisor



**Petroleum Tank
Cleanup Project
Managers**

Quality Assurance
Officer, Reed
Miner/Woodland

EPA

PROJECT MANAGEMENT

Quality Objectives and Criteria

- **Data Quality Objectives (DQO):** qualitative and quantitative statements derived from the DQO Planning Process that clarify the purpose of the study, define the most appropriate type of information to collect, determine the most appropriate conditions from which to collect that information, and specify tolerable levels of potential decision errors
- **Data Quality Indicators:** Indicators of data quality, ie., precision, accuracy, completeness, etc. (updating)



DATA GENERATION AND ACQUISITION

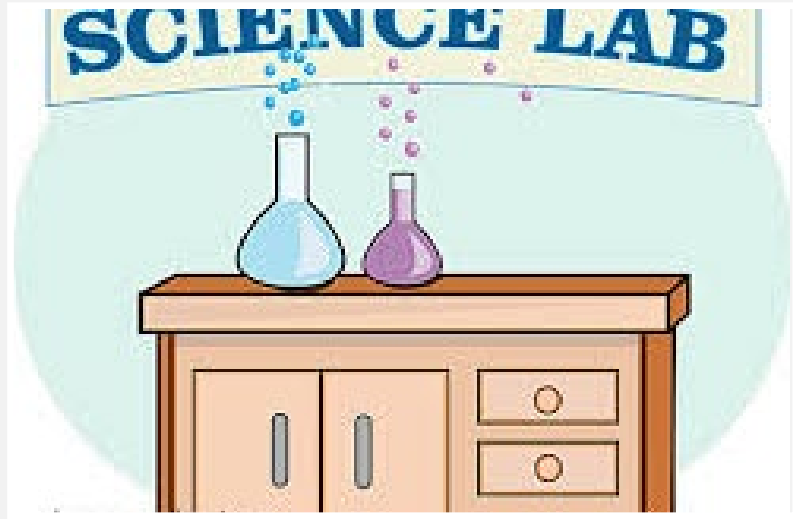
- Detailed sampling methodology

Air

GW

Soil

- Field & lab QC samples
- Required lab processes
 - Data Management



ASSESSMENT AND OVERSIGHT

- How a project's activities will be assessed during the project to ensure the QA Project Plan is being implemented as approved.
- Data must routinely meet DQOs
- If they do = accepted
- If they do not= outline actions to be taken
- Allows EPA access to field oversight/assessment of lab procedures



DATA VALIDATION AND USABILITY

Final project checks to see if the data or product obtained will conform to the project's objectives, and to estimate the effect of any deviations.

- Data review, verification and validation-
 - much of the previous information will be used here as a final check
- Reconciliation w/ user requirements – how and who?



WHAT DO YOU WANT
TO SEE IN A QAP?

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