

The Water Boards' Quality System

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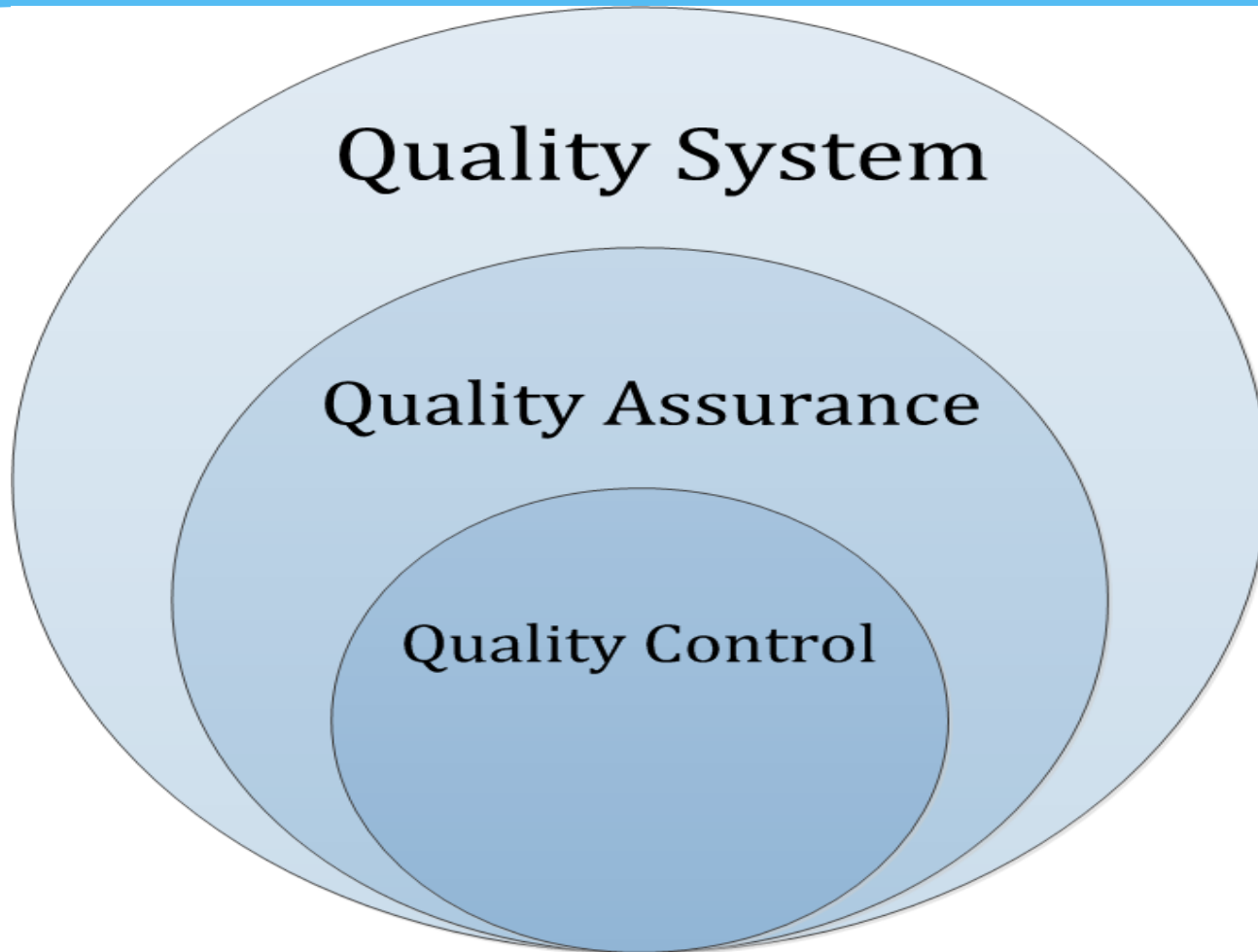
Outline

- * **Requirements and Goals of a Quality System**
- * **Quality Assurance and Quality Control**
- * **Water Boards' Quality Systems**
- * **Types of Quality Assurance Documents**

What is a Quality System?

- * **It is a means by which an organization or business manages its quality aspects in a systematic, organized manner.**
- * **It provides a system for carrying out Quality Assurance and Quality Control activities.**

A Quality System



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Requirements

- * ***ANSI/ASQC E4-1994 Specifications and Guidelines for Quality Systems for Environmental Data.*** This consists of guidance for planning, implementing and assessing data operations including the collection, handling, analysis and evaluation of data.

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Requirements

- * **Documentation of the organization's quality system – the Quality Management Plan.**
- * **Documentation of the application of QA/QC specific efforts by preparing and implementing quality documents.**

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Goals

- * **Protection of human health and the environment**
- * **Make correct decisions**
- * **Conserve/optimize resource use**
- * **Ensure that environmental programs and decisions are supported by the data of the type and quality needed for their intended use**

A Quality System



Quality Assurance

- * **QUALITY ASSURANCE (QA)** is an integrated system of management activities that involves planning, implementation, documentation, assessment, reporting and quality improvement. It ensures that a process produces reliable and verifiable data tailored for the specific project.

Quality Control

- * **QUALITY CONTROL (QC) is an overall system of technical activities that measure the attributes and performances of a process against defined standards to verify that they meet the stated requirements established by the customer.**

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Quality Management Plan

Benefits

- * **Reduced or justifiable resource expenditures**
- * **Effective management of internal and external activities**
- * **Reliable and defensible decisions based on reliable and defensible data.**

Quality Management Plan

State of California Water Resources Control Board

Quality Management Plan

Policy Guidance

Version 1.0

October 1, 2010

Quality Management Plan

- * The QMP documents how an organization structures its quality system and describes its quality policies and procedures.**
- * The QMP's purpose is to provide the framework to guide the acquisition of environmental data that is credible and achievable for the organization.**

Quality Management Plan

Roles and Responsibilities

State Board Program Manager:

- * Ensures that there are sufficient resources for the Quality System and that all applicable Programs comply with the QMP**

Quality Assurance Officer:

- * Prepares annual Quality Assurance report for US EPA R9**
- * Organizes the quarterly QA Roundtable**

Quality Management Plan

- * **The QMP calls for staff from the Regional Boards and Programs to:**
- * **Participates in the QA Roundtable**
- * **Prepares annual QA report to the State Water Board**

Quality Assurance Program Plan

A Quality Assurance Program Plan (QAPrP):

- * Describes the program's needs for the data it acquires and how the data will be used to answer questions that guides the program.**
- * Overarching and more specific than the QMP**
- * A graded or tailored approach is used.**

Quality Assurance Program Plan

Examples

- * **Surface Water Ambient Monitoring Program (SWAMP) QA Program Plan- *under revision***
- * **National Pollutant Discharge Elimination System (NPDES) QA Program Plan- *under construction***

Quality Assurance Project Plans

A Quality Assurance Project Plan (QAPP):

- * Describes the decisions to be made.**
- * Identifies the information/measurements needed.**
- * Defines study boundaries --when/where sampling events should occur.**
- * Includes criteria on which the decisions will be made, (e.g., regulatory standards, action levels.)**

Quality Assurance Project Plans

Examples

- * **Division of Financial Assistance projects**
 - Citizen Monitoring Groups projects*
 - Large grant funded projects*
- * **Section 303 (d) Water Body listing and delisting projects**
- * **Conditional Waivers of Waste Discharge Requirements**
- * **Beach Monitoring**
- * **Stream Pollution Trends Monitoring Program (SPoT)**
- * **Bioaccumulation Oversight Group**

Standard Operating Procedures

Standard Operating Procedures (SOP)

- * A set of written instructions that document a routine or repetitive activity which an organization follows**
- * Facilitate consistent conformance which supports data quality**

Standard Operating Procedures

Examples

- * **Analytical test procedures for CWA and SDWA**
- * **SWAMP Field and Lab SOPs; SOPs for data reporting and flagging**
- * **Drinking Water Notification Rules**
- * **Beach Monitoring Program**

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Questions?

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