

Manager's Role in Assuring Data Quality: Overview of the Uniform Federal Policy for Quality Assurance Project Plans

Final Storyboard

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JRF

The Manager's Role in Assuring Data Quality: Overview of the Uniform Federal Policy for Quality Assurance Project Plans



Not so very
long ago

Gottcha Page 1

Project Manager (older person): So Billy, this is what a real life hazardous waste site looks like. I've been working this site for years. I'm an expert. So if you've got any questions, just ask.

Billy: Actually, I do have some questions. I've been reading the Quality Assurance Project Plan, and some things still aren't clear to me like where exactly are you going to be collecting soil samples today?

Project Manager: Oh, it doesn't matter, its random sampling. Pick a spot, right where you are standing is pretty good. One spot's as good as the next—unless we hit that spot where the PCB transformers leaked as mentioned by some former employees. But what are the odds? Been sampling out here for years and we haven't hit it yet.

Billy: So you're doing a random sampling and you know you've got a hot spot...where I worked before, we used a different sampling strategy for hot spots...

Project Manager (cutting him off): Hey, look, every organization has a different approach—more than one ways to skin a cat. If we don't find anything this time, we'll try something different next time. Now help me unload this truck.

Billy: Aren't you going to turn off the engine?

Project Manager: No, it's hot out here—we need the air conditioning.

Billy: Where are the gloves?

Gottcha Page 2

Screen 3 Continued

Project Manager: They're in the cab of the truck...but I never use them myself.

Billy : I didn't find a Standard Operating Procedure in here for sampling--So how did you do sampling in the past?

Project Manager: It's pretty obvious isn't it. Here's the scoop ... fill up the jar.

Billy : Like this?

Project Manager: Good enough.

Billy : Do you have any labels, field log book , chain of custody form?

Project Manager: I forgot them. Just write sample #1 on that one and we'll fix the paperwork when we get back to the office. You remember where we get that one, and I'll remember where we get the next one.

Billy: There's no ice in this cooler.

Project Manager: We'll get some ice on the way back to the office—after we've collected the rest of the samples.

Billy: Are you going to collect any quality assurance samples?

Project Manager: Nope—not enough money in the budget for them.

Gottcha Page 3

Billy : So what exactly are you looking for out here?

Project Manager: At first we were just looking for some metals then the State Environmental Department wanted us to check for level of organic solvents and then the local University was interested in the levels of certain pesticides. Every time somebody new gets involved in this project, they want more analyses. So I have the samples analyzed for a wide variety of things. You never know what you can find.

Billy: Sounds like you've done lots of sampling already, what the results been so far?

Project Manager: Well nothing conclusive. I mean we don't really have that much "good" data yet—nothing you want to base a decision on. And we have some problems with the samples, holding time violations, that sort of thing. So I guess we just have to keep sampling and see what we get.

Billy: But when is it going to be enough? What are your Data Quality Objectives? What are your quality assurance criteria? For that matter, what is your exit strategy?

Project Manager: Jjust keep sampling 'til the money runs out...

[fade to black]

[transition to executive office, narrator walks into scene]

Narrator (in a business suit): “Hello, and welcome. I’m here to talk to you today about this document: the Uniform Federal Policy for Quality Assurance Project Plans. The scene you just witnessed, though fictitious, shows just a few of the reasons why this document and these accompanying documents were written.

Narrator: “And now, back to the reason we developed this informational module for you and other managers . . . primarily it’s to introduce you to a new intergovernmental policy. This new policy and associated guidance are designed to ensure the quality of data collected at hazardous waste site projects.

Over the next few minutes, I’ll be providing an overview of this new Uniform Federal Policy and I’ll describe a systematic way to document the output from the project planning process in the form of an effective quality assurance project plan.

As a manager of an environmental program, you’re key to the successful implementation of this new policy. Since it represents a change in how we do business, your leadership in applying this new approach will promote its broad-base adoption and use.

You may be thinking . . . it just looks like another dust-collecting stack of paper for my shelf. . but not really.

This document represents an approach that DoD, EPA and DOE have all agreed to.

As you can imagine, getting these three organizations to agree on one consistent approach for ensuring data quality was no small feat.

And this consensus policy document would not have been developed; if all parties had not all agreed that a consistent approach was critically needed. Let me give you some background on how data quality became a common concern to these three organizations.”

1 minute 10 seconds

Screen 6

Narrator: “In 1997, the Inspector Generals of both DoD and EPA issued reports [narrator picks up reports] citing data quality issues at Federal Facility hazardous waste sites.

The reports found that poor quality data resulted in rework, greater clean-up costs, and time delays.

Most importantly though, there was a potential for increased risk to the public and the environment since our data weren’t scientifically defensible there was a general lack of confidence in the decisions being made.”

Bottom line -- the citizens we’re responsible for protecting, were potentially at risk.

Something needed to be done . . .and it was. An intergovernmental task force came together to address the problem.

The outcome was a consensus approach to build quality into data collection activities. This approach is now documented in the Uniform Federal Policy Documents

Narration: “The Uniform Federal Policy for Quality Assurance Project Plans describes how to build quality into hazardous waste projects.

It provides a systematic approach for planning a project and describes how to record that plan in a formal document called a Quality Assurance Project Plan—referred to as a QAPP.

The QAPP Manual details the quality-related activities that support sampling, analysis and data reporting.

The QAPP Workbook provides fill-in-the-blank tables that can be used to write a comprehensive QAPP.

The QAPP Compendium provides a matrix presenting minimum quality assurance activities to be selected and specified in a QAPP.

The QAPP provides a blueprint for project personnel to follow. So the samplers know where to sample, how to sample and what to sample for. It’s to avoid problems like the ones we saw in the video a few moments ago

[Knock at the door] Narrator to camera: “Excuse me” [Narrator calling to door]: “Come in..Ah Commander Smith what can I do for you”

Commander Smith (in a military uniform): “Ye, I just received these documents today. I remembered that you were involved in their development so I thought I’d stop by and see if you could answer a few questions.”

Narrator: “I’ll try...come on in, have a seat? Now what you you like to know?”

Commander Smith: “Why do we really need another guidance document—and an interagency one at that?”

Narrator: The QAPP manual is a tool for ensuring consistency across Federal agencies. It’s needed because existing guidance lacks the level of detail needed to address multiple agency expectations, resolve conflicts, and minimize rework.

In the past, approaches and requirements for QAPPs differed among the various EPA regions and among different Federal agencies. This UFP-QAPP manual provides a common organizational framework and approach to QAPPs. It will reduce conflict by providing all who are involved at Federal facilities with a common set of guidelines and expectations.

The common framework will help everybody out—those writing the QAPPs as well as those reviewing the QAPPs. Regulators should have a much easier, and quicker time reviewing QAPPs that are developed according to this Uniform Federal Policy.

1 minute 20
seconds

Commander Smith: “O.K., now what about this...I got a call from Captain Blakely asking whether they could get a Notice of Violation if they didn’t meet all the UFP QAPP requirements.

Screen 9

Narrator: You can tell the Captain that they won’t get an NOV for not following the UFP QAPP manual. There is no law or regulation that requires the use of the manual—so it’s not subject to regulatory enforcement or Notices of Violation. But with that said, make sure she knows that when the Assistant Deputy Undersecretary of Defense signed the UFP QAPP Manual in March 2005. Also, the EPA Assistant Administrator for Solid Waste and Emergency Response issued Directive 9272.0-17 in June 2005. This directive requires EPA Regions to use the UFP when reviewing and approving QAPPs developed by other federal agencies.

Also, let her know that the graded approach is used throughout the UFP-QAPP manual.... so if something is not needed for a specific project, it won’t need to be addressed in the QAPP. As you know, many of us feel that this consistent approach will help us cut through the red tape and get project plans approved quicker.

Commander Smith: I've looked at the minimum Quality Assurance activities listed in the Compendium. Isn't this going to cost a lot more?

Narrator: In some cases there may be increased cost for the quality assurance work that needs to be done. I won't kid you, building in quality up front in a project has associated costs. But what's the alternative...rework? ... lack of confidence in the data? Let's face it, re-work is extremely expensive. I've known of sites where we just kept sampling and the project went nowhere. The data was never good enough to close out the site or go to the next level of the clean-up process.

I was at a conference the other day and saw this ... "The ultimate success of an environmental program or project depends on the quality of the environmental data collected and used in decision-making, and this may depend significantly on the adequacy of the QAPP and its effective implementation." Bottom line is...we need good data to make good decisions.

Commander Smith: Are you sure this is going to work? Do you have any proof?

Narrator: It already has worked! We have a lot of success stories that have shown the effectiveness of systematic planning. Across the country, sites have been investigated, Records of Decision signed, contamination cleaned up, and are now safely being used.

When the UFP QAPP Manual was written, the successes and lessons learned were examined. The resulting UFP QAPP manual contains refined good practices that should be used consistently—that's what the UFP QAPP is about: applying a consistent planning approach to ensure we get data appropriate for its intended use. Then we will be able to move forward and have successful cleanups.

Commander Smith: **“But in my group we have several, approved QAPPs with ongoing fieldwork – are we going to have to stop and rewrite them?”**

Narrator: “No, QAPPs that have already been approved don’t need to be rewritten. They’ll be acceptable, as is, until revisions are required. The UFP-QAPP is aimed at future data collection efforts. Approved project-specific QAPPs will remain acceptable until time for their revision.

Commander Smith: “That’s a relief”

Narrator: “Yes, but the UFP-QAPP manual requires that all QAPPs be reviewed annually to make sure they’re still accurate. At that point, if they need substantive changes, then the QAPP needs to be revised according to the new guidance. Anyway, they have to be revised at least every five years, so they’ll need to conform with the UFP QAPP manual then.”

Commander Smith: “So you see this new approach being phased in over the next few years.”

Narrator: “Exactly.”

40 seconds

Screen 13

Commander Smith: How are my people even going to learn about this new way of writing QAPPs?”

Narrator: “I’m glad you asked about that...there’s a new training course specifically focused on developing and reviewing UFP QAPPs. It’s an interservice course that is open to EPA, DOD, DOE government personnel and their contractors as well as state regulators. The course is offered at various times and locations. Your people can see the schedule and register on-line at this web site.

We’re developing other training resources such as computer courseware and web seminars to supplement the course or for people who can’t attend the classroom instruction.”

Commander Smith: “Sounds like you’ve thought of everything... but just between you and me...is this really worth it?”

Narrator: Yes! These UFP documents cover a great deal, but as I have said, they will help you gather the project information for the QAPP and speed up the review and approval process—basically saving us all time and money and in the end, have a better product – quicker cleanups for less money, while still maintaining high standards for the protection of the public and the environment.

And another thing...These documents aren’t meant to be just left on the shelf. You can take them to all your planning meetings. The workbook has worksheets that will help guide you through the planning process. You can convert the completed worksheets into tables that will replace long narratives in the QAPP. The automated version of the workbook makes completing these tables easier. There is an up-to-date glossary that defines what they are talking about. In the compendium the writers have gone through each step in the remedial process and indicated the steps that need to be accomplished for quality sampling.

Commander Smith: I see your point. I can see where this could also be used for sampling in other programs besides Superfund or other remedial work. Well Jim, thanks for your time...you made a believer out of me.

Narrator: No problem, glad to help

Narrator: Thank you for taking your time to view this module. We hope it has been informative. But most of all, we hope that we've convinced you that this approach to developing QAPPs in a way that is consistent across Federal agencies will have many benefits...improved data quality, faster review times, project cost savings, and, ultimately, defensible site cleanup decisions. As a manager, you play a vital role in the successful implementation of this policy and we're counting on your support.

Credits

Dedicated to the memory of

Mrs. Jacqueline Sample,

whose leadership as

Chair of the DoD Environmental
Data Quality Workgroup

and service on the

Intergovernmental Data
Quality Task Force

was instrumental in the

development of the UFP-QAPP

Credits

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Credits

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