U.S. DEPARTMENT OF
ENERGY

Office of
ENERGY EFFICIENCY &
RENEWABLE ENERGY

Identifying Work Quality Issues

Introduction

Welcome

Welcome to "Identifying Work Quality Issues." In this module, we'll practice determining the root cause of work quality issues. Creating a system to identify and evaluate such issues forms the bedrock of a continuous improvement process for your program. If you would like information on how to navigate this course, select the Navigation Tutorial button. Otherwise, select the forward arrow to begin.

Navigation

To get started, make sure your audio is turned on. This learning experience is primarily audio-driven. To move backward and forward in the module, select the next and back arrows. Want to see something again? Select the refresh button. Need to pause the module? Select the play/pause button. You can also navigate to a different section in this course by selecting the menu tab at the top of the screen.

So, let's get started. Select the next arrow to continue.

Course Objectives

By the end of this course, you should be able to:

- Describe how work quality is measured,
- Determine the source of a quality control finding,
- List commonly found quality issues,
- And, Differentiate between the oversight roles of federal, grantee, and subgrantees.

Measuring Work Quality

The Value of Verifying Work Quality

It is important to have a quality management plan that defines quality work as work performed in accordance with or exceeding:

- Standard Work Specifications (S W S) and the state weatherization field guide and building codes,
- The work order,
- And, the subcontract.

There must be defined processes for identifying work that is incomplete or that does not meet quality standards.

Work quality issues may be identified through: Quality control inspections, known as QC or final inspections, performed by the sub grantee, and technical monitoring, or quality assurance, performed by the Grantee.

The diagnostic tests that are typically part of those processes, supervisor or staff observation during in-process, final, and QA inspections, Subcontractor communications and reports, and Client complaints.

Work quality issues can also be identified by reviewing job file contents such as: the work order, job site photos, invoices, sizing calculations, bag counts and certificates for insulation, and labor and material warranties.

Common Ways of Verifying Work Quality

Verifying quality affects all administrative and technical processes. Select each WAP [rhymes with ZAP] employee to see their story of how they verify the quality of work.

Identifying Common Sources of Quality Control Issues

Uncovering Potential Quality Issues

As Damien already knows, Quality Control is a system of routines that his team can use to measure and control the quality of their work. Employees focus on different quality concerns depending on their role. Select each of Damien's employees to see some of their concerns about work quality

Quality Control Versus Quality Assurance - What do you think?

Now that you know more about the kinds of possible quality issues, what do you think are the consequences if the quality control process is not effective? What additional work for the agency is generated as a result? Check all that apply.

Quality Management Plan

Experts at agencies that use a quality management plan suggest that each plan include these elements. Drag each checkmark to the plan to learn more about it.

- Tracking production on a regularly basis allows you to identify when and why production lags and make corrections. It can help maintain a steady, but not overburdened work schedule. A team with too many jobs may cause workers to rush, and lead to work quality issues.
- Average cost tracking allows you to stay within the required parameters.
- A contractor feedback mechanism provides a channel for subcontractors to respond to findings on a timely basis. It is also a way to communicate to WAP staff any recurring issues they are finding in the field.
- Actively managing the schedule includes maintaining a consistent pipeline of audits and keeping installations and inspections running according to plan.
- Data from client feedback should be analyzed and used to take corrective action.

Creating a Culture of Quality

While having quality management policies and procedures is important, they are more likely to be followed when there is a "culture of quality." Communicate the importance of quality to the team and what it looks like at the organizational level. Move the slider to the right to see some useful practices.

Using Root Cause Analysis to Identify the Source of a Quality Issue

Another part of Damien's job is to determine why an issue occurs, so that it can be avoided in the future. To do this he conducts a root cause analysis to get to the source. Root Cause Analysis helps identify the underlying policy or process that is allowing work quality issues to occur, and does not attempt to lay the blame on individual workers, who may be working within a flawed system. Select each check mark to learn about the steps of a root cause analysis. Watch the meter as the issue is resolved.

- Determine the origin of the measure quality issue.
- Review the documentation.
- Present evidence.
- Ask Questions.
- Identify where the process failed. Understand that processes, not individuals, are most likely responsible for the issue. Acknowledge that multiple parties may have been involved in what was finally identified as a work quality issue. For example, if the worker was not provided with the work order or if the insulation density on the work order was inaccurate, the worker is NOT the root cause.
- Take corrective action.

Roles of Oversight for Federal, Grantee, and Subgrantee Work

Quality Control vs. Quality Assurance - Definition

Damien is wondering if a quality control mechanism would address the identified quality issue. Before we help Damien make that decision, let's look at the difference between what we refer to as Quality Control and Quality Assurance. Select each icon to learn how these processes are distinct.

Quality Control (QC) is a system of routine technical activities used to measure and control the quality of our work and ensure that everything is happening as it should. QC is done on 100% of the jobs.

Quality Assurance (QA) is a planned system of procedures to monitor a certain percentage of completed jobs to ensure that work quality standards are being upheld. In other words, QA checks to see that the processes in place at the sub grantee level are working as they should, so that no units are being reported as complete with substandard or incomplete work.

Oversight Role of Federal, Grantee and Subgrantee Staff

Federal staff, grantees, and subgrantees all have a role in providing oversight for projects.

Federal staff are responsible for overseeing the quality of Grantee work. This is accomplished through quality assurance as DOE project officers review selected units during their onsite monitoring visits.

Grantees are responsible for overseeing the quality of Subgrantee work. Grantees also provide quality assurance by reviewing, at a minimum, 5% of all completed units.

Subgrantees are responsible for overseeing auditors, crews, and subcontractors. They provide quality control and inspect each unit individually.

Quality control and quality assurance are the primary ways to ensure that: WAP operates according to Federal regulations and program guidance, work performed at a unit is of sufficient quality, and, there is no fraud, waste, or abuse within the program. Each level, Federal, Grantee, and Subgrantee, has different responsibilities.

The federal DOE monitors Grantees to:

- Ensure proper and timely use of funds and realization of expected benefits,
- Provide transparency and accountability,
- And, provide quality assurance and controls.

Grantees monitor the Subgrantees. Grantees conduct an annual monitoring visit of each subgrantee that includes a review of program and fiscal activities.

At the Subgrantee level, the quality assurance manager, or someone in a similar position oversees the work of auditors, crew, and subcontractors. All DOE-funded weatherized units must be inspected. Before a unit can be billed as completed, the subgrantee MUST inspect all DOE-funded units and verify that all work meets minimum work quality standards before declaring it as complete.

Conclusion

Course Conclusion

Damien has been able to fulfill his responsibilities and improve work quality. Before we conclude, let's review a few of our key takeaways.

- Have a quality management plan that defines quality work as work performed in accordance with Standard Work Specifications (SWS) and Grantee field guide and building codes,
- Use root cause analysis to identify the source of a quality issue,
- Analyze quality control inspection data to improve process,
- And, promote a culture of quality.

Congratulations

Nicely done! You have successfully completed this module. As you move forward, consider what steps you will take to identify and prevent quality issues within your agency. Check out the additional references section of the course for more information. You may also benefit from other modules such as Managing Subcontractors, Supporting quality work with training and technical assistance funds, and basic employee management.

When you're ready, you may close your browser window to exit this course.