

Zero Field Rework



☒ Self-Assessment Opportunity Checklist

Construction Industry Institute

3M
Abbott
Air Products and Chemicals
Amgen
Anheuser-Busch Companies
Aramco Services Company
BP America
CITGO Petroleum Corporation
Cargill
Celanese
Chevron Corporation
ConocoPhillips
Dofasco
The Dow Chemical Company
DuPont
Eastman Chemical Company
ExxonMobil Corporation
General Motors Corporation
GlaxoSmithKline
Intel Corporation
International Paper
Kraft Foods
Eli Lilly and Company
Marathon Oil Corporation
NASA
NOVA Chemicals Corporation
Ontario Power Generation
Petrobras
Praxair
The Procter & Gamble Company
Rohm and Haas Company
Shell Oil Company
Smithsonian Institution
Solutia
Southern Company
Sunoco
Tennessee Valley Authority
U.S. Army Corps of Engineers
U.S. Bureau of Reclamation
U.S. Department of Commerce/NIST/Building and Fire Research Laboratory
U.S. Department of Energy
U.S. Department of Health and Human Services
U.S. Department of State
U.S. General Services Administration
U.S. Steel
Weyerhaeuser Company

ABB Lummus Global
ALSTOM Power
AMEC
Aker Kværner
BE&K
Baker Concrete Construction
Bechtel Group
Black & Veatch
Burns & McDonnell
CB&I
CCC Group
CDI Engineering Solutions
CH2M HILL/IDC/Lockwood Greene
CSA Group
Day & Zimmermann International
Dick Corporation
Dresser-Rand Corporation
Emerson Process Management
Fluor Corporation
Fru-Con Construction Corporation
Gilbane Building Company
Grinaker-LTA
Hatch
Hilti Corporation
Jacobs
Kellogg Brown & Root
Kiewit Construction Group
J. Ray McDermott
M. A. Mortenson Company
Mustang Engineering
Perot Systems Corporation
Primavera Systems
S&B Engineers and Constructors
The Shaw Group
Technip USA Corporation
Turner Construction Company
Victaulic Company of America
Walbridge Aldinger Company
Washington Group International
WorleyParsons Limited
Yates Construction
Zachry Construction Corporation
Zurich

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Implementation Resource 203-2

*Prepared by
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Do It Right the First Time Research Team
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Foreword

A multitude of quality checklists are available to verify if the right “things” are in place on a project. These checklists usually focus on manuals and procedures, document and data control, and material control. These are all necessary and important elements of a quality control program. The Do It Right The First Time Research Team developed the *Zero Field Rework Self-Assessment Opportunity Checklist* as a tool to supplement the traditional quality checklist. It is focused primarily on people. The checklist addresses areas such as leadership, resources, employee involvement, communication, and teamwork, and takes a behavior-based approach to minimizing rework on a project.

The self-assessment can be utilized on a large project or at a plant site with a large volume of smaller project work. The checklist also can be applied effectively on a global basis by owners and contractors and with any type of contracting strategy. The level of application depends upon site/project complexity, structure of common systems, and the desired outcomes of the project leadership.

Introduction

This self-assessment opportunity checklist is to be used as a tool to assist in identifying areas for improvement to further strengthen a site construction quality process on the journey to zero field rework.

Scope

The self-assessment can be utilized on a large project or at a plant site with a large volume of smaller project work. The checklist also can be applied effectively on a global basis by owners and contractors and with any type of contracting strategy. The level of application depends upon site/project complexity, structure of common systems, and the desired outcomes of the project leadership.

Team

The self-assessment is best implemented using a team approach that includes a cross-section of the project team based on role and function. A team leader should be selected to facilitate and coordinate the assessment. It is the responsibility of project leadership to determine the specific team members who should participate.

Once the team is created, some basic orientation should be provided so that all team members understand the intent and desired outcomes of the self-assessment process.

Assessment Elements

The eight elements listed below are included in the self-assessment.

- | | |
|-------------------------------------|----------------------------|
| 1. Leadership by Example | 5. Teamwork |
| 2. Sufficient and Capable Resources | 6. Documentation |
| 3. Employee Involvement | 7. Absence of Shortcuts |
| 4. Communication | 8. Quality/Rework Auditing |

Three columns are provided in the checklist for each input within an element. The project team should evaluate each element question and identify the most appropriate column based on team consensus or other agreed upon method.

Scoring Scale

Yes – place a check mark in this column when the team believes the activity is being done to their satisfaction.

Plan/need to do – place a check mark in this column when the team believes the activity is not being done to their satisfaction and needs to be addressed sometime in the future.

N/A – place a check mark in this column when the activity is not applicable to the project or might be applicable but no plans address it.

Recommended Process Steps to Complete the Self-Assessment

The following provides suggested process steps to complete the self-assessment:

- 1) Identify the scope of the assessment, assign a leader, and select/solicit team members.
- 2) Orient the team about the purpose of the self-assessment, desired outcomes, and basic methodology.
- 3) Schedule the self-assessment. This may involve one or several sessions over several weeks or a month.
- 4) Complete the self-assessment through group input/session(s):
 - a) Review each element.
 - b) Place a check mark in one of the columns for each question.
 - c) Based on the results, identify any key opportunities for improvement.
- 5) Review the completed self-assessment results with project or site leadership (including prioritization of multiple recommendations).
- 6) Establish agreement on recommended improvement opportunities, develop an action plan, assign responsibility and target dates, and track action items to completion.

Results

The project or site conducting the evaluation is responsible to determine what improvement opportunities, if any, will be targeted based on the team's self-assessment results. This may include a goal to substantially improve one element where significant gaps were identified or work on multiple recommendations that extend across several elements. This must be determined based on perceived benefit, existing priorities, and available resources. The fundamental intent is to focus on key opportunities to upgrade project systems and performance, not generate a lengthy list of administrative action items.

The performance (results) box at the end of each element highlights recommended metrics or key performance indicators that could be monitored to drive improved performance in that area. The list is not intended to be comprehensive.

After completing the assessment, project leadership should determine how to best share the results with employees in the organization in order to communicate key learnings, an implementation plan, and worker involvement.