INSPECTION REPORTS- A DIFFERENT PERSPECTIVE
The Significance of Properly Written Inspection Reports

Introduction

As an Inspection Supervisor or Manager, how many times have you encountered Project Managers, Purchasing Managers, Engineers and Clients that think very minimal or no inspection is necessary during new construction of petroleum exploration, refining or chemical processing equipment? You hear things like, "the proposed inspection estimate seems excessive", "historically, we have had no major problems with our equipment vendors". Then there are instances when the Inspection Department is called upon to provide inspection at the very last minute with little or no technical specifications to work with. How can the inspector be expected to verify purchase order and specification compliance with no purchase order or specifications to work with? Oh, and lets not forget the times when inspectors are called upon to provide costly around the clock monitoring of manufacturing as a result of poor workmanship and violations to project specifications which is only discovered long into the manufacturing process. This type of inspection is defined as "reactive" rather than "proactive". The resulting cost of inspection will usually far exceed that of a well thought out inspection plan. Stop for a moment and ask yourself, is it possible that these Project Mangers, Purchasing Managers, Engineers and Clients perceive the value inspectors add as unnecessary, too costly and less than favorable?

Inspection Influence

Inspection is just one small part of the overall project. We must remember that our charge is to execute our inspection duties professionally, cost-effectively and in accordance with project requirements. The intent here is to convey how we as Inspection Managers, Supervisors, and Inspectors can influence the timing and level of our involvement and effect change in the way we may be perceived by some of our peers. I have always believed that the root of these problems can be partially traced to poorly written inspection reports. At the end of a project, how we are perceived is most heavily influenced by the performance of the inspector in the field.

Traditional Reporting

Over the years, the details of many inspections have been poorly conveyed in written reports. This has laid the foundation for the sometimes unrealized value of a good inspection program. Poorly written reports can significantly condition the reader to believe that the inspection program and the inspector's abilities may be well below desired expectations. We condition the reader to think that many equipment manufacturers typically provide a higher quality of workmanship than is actually the case. We condition our inspectors to continue to write poor reports by providing them with little or no report writing training, little or no constructive feedback and continued evidence that few people actually read their reports. Put yourself in the inspector's position. How motivated would you be if you knew that few people actually take the time to read your inspection reports? These reports will usually end up in an archived project file only to be resurrected in the event of operational problems or failures. At which point the poorly written reports are scrutinized in great detail in an attempt to determine what went wrong, the end result being a perception that the entire inspection effort was unsatisfactory. My experience has shown that properly presented, most inspectors welcome comments, training, the opportunity to improve and the knowledge that comes with knowing someone is actually reading what they write.

Expanded Reporting

Good inspectors routinely find and avoid costly mistakes made by equipment manufacturers - they make suggestions that enhance the quality of the work and identify many small and not so small mistakes that, if gone undetected, would have significant cost and/or quality implications. However, most often there is very little, if anything, written in an inspection report that identifies these occurrences. Inspectors tend to camouflage these things with only the written final outcome that may read something like, "the item was inspected and found acceptable", when in fact, a number of corrective measures identified by the

inspector were necessary before acceptance. A true measure of the inspector's value can be easily identified when his or her efforts are clearly documented in an inspection report.

Target the Audience

Inspection Reports are also technical reports and may contain wording that could be foreign to the non-technical reader. Therefore, we must strive to assist the reader by ensuring that the technical portions are as clear and concise as possible. We tend to write Inspection Reports with a limited audience in mind. More often than not, we write Inspection Reports directed toward Inspection Managers and Supervisors only, all who fully understand the technical inspection jargon that inspectors routinely use – most of the time! In reality, our most important audiences are our Clients, Project Managers, Project Engineers and others whose second language is not technical inspection jargon. This is a language that routinely appears in inspection reports as short choppy sentences, incorrect abbreviations and terms that only veteran inspection people understand - most of the time! Let us not forget that their jobs are to be Project Managers, Project Engineers and Clients. They look to us, the inspectors, to be the experts in inspection. They look to us, the inspectors, to prepare technically correct reports which convey the quality and status of manufacturing as well as the inspection process, in a manner that can be easily understood.

Effective Nonconformance Reporting

Just a quick comment about another form of report, the Nonconformance Report. Nonconformance reports are rarely written by inspectors and manufacturers for reasons that have grown from the impression that a nonconformance report casts blame or harsh criticism. In fact, a nonconformance report is merely a good quality assurance tool designed to document, segregate, and disposition a nonconforming product. Everyone will encounter a nonconforming product at some point in time and those inspectors and manufacturers who correctly use the nonconformance report as it is intended should be commended. We need to erase the stigma that nonconformance reports imply intentional negligence. Personally, I am encouraged when I hear that a manufacturer or inspector issued a nonconformance report and so advised all concerned. First and foremost, it shows that the quality control system is working and problems are being identified at the point of manufacturing, not after the equipment is delivered.

Manager and Supervisor Influence

What can we as Inspection Managers and Supervisors do to influence a positive change and improve one of our most important deliverables, the Inspection Report? Some suggestions are:

1. Establish written reporting guidelines that meet the needs of the project and intended audience.
2. Encourage feed back and comments from our peers and most valued readers.
3. Carefully read all Inspection Reports. Never distribute a report that you find to be unsatisfactory.
4. Provide regular feedback and training to inspectors on reporting. This could include an evaluation of reports based upon:
    - Compliance with project or company reporting requirements.
    - Correct usage of technical terms and references
    - Spelling, punctuation & general appearance
    - Organization of the report - is it easy to read
5. Continually strive for improvement.

Inspector Influence

As inspectors writing reports:

1. Learn what is expected and realize the importance of your report. In most cases, your reports provide a critical first impression of you, your abilities and the Company you represent. They could also be a last impression.
2. Don't be offended by suggestions for improvement. In most cases the person offering the advice would not be doing so if they did not think of you as a valuable inspector.
3. Remember who your most important audience is. Spell things out clearly and avoid use of incomplete or short choppy sentences, slang abbreviations and terminology.
4. Make sure technical references are accurate.
5. Spend the extra time to make sure your report complies with project reporting requirements and properly addresses the inspection process in detail.
6. Take credit for your efforts. Without being slanderous toward the manufacturer, list all instances where potential problems, rework situations and/or nonconforming conditions are avoided as a result of your inspection efforts. This could be nothing more than the notation of a simple reminder of a requirement that it appears may be overlooked.
7. Work to continually improve your technical and grammatical vocabulary.
8. Read the report carefully before it is delivered.

Inspection reports are a direct reflection on you as an inspector!

Kenneth S. Harris
Inspection Manager
Mustang Engineering, Inc.
Houston, Texas
AWS CWI #82052141
Member: American Welding Society, Member #767757