

2014 IAP Meeting

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Project Closeout Finals



Goal

45% of projects that achieve Substantially Complete status during 2013 need to complete the finals process within 6 months.

2012 20%

2013 30%



Contractor – Responsibility

- ▶ **Submit any missing records to PL upon request**
- ▶ **Verify/Resolve Quantity Issues**



Materials Certification Issues

- ▶ Missing materials tests
- ▶ Improper certification
- ▶ Incomplete or inaccurate Materials Information Tracking System (MITS) reports
- ▶ Materials Review conducted two years after project completion
- ▶ Submission of materials records one or more years after project completion



Solutions

- ▶ Interim Review of Materials
 - During construction at 30% and 60%
 - Pilot Regions: SER and NCR
- ▶ On-line Training of Materials Certification Process
 - WisDOT Project Materials Coordinator (WPMC)
 - Contractor Project Materials Coordinator (CPMC)



Benefits

- ▶ Resolve Non-conformance/Non-performance Issues upstream in a timely manner
- ▶ Enhance Quality of Materials' Record Submittal
- ▶ Assure Central Office Testing is being Conducted in a Timely Manner
- ▶ Assure Contractors are Submitting Materials Documentation as Required by Specifications



Standard Specs

- ▶ **106.1.2 Project Materials Coordinator**
- ▶ (1) Designate one person, either a member of the contractor's own organization or acting as an agent for the contractor responsible for the following:
 - Communicating contract sampling and testing requirements to subcontractors at all tiers.
 - Reporting out-of-specification test results to the department as soon as the information is available.
 - Providing certified reports of test or analysis and manufacturers' certificates of compliance from subcontractors at all tiers and maintaining certification records as specified in 106.3.3.2.
- ▶ (2) Ensure that the contractor's project materials coordinator submits materials information required under the contract to a person the engineer designates. Ensure that the contractor's project materials coordinator communicates with their department counterpart weekly.



▶ **106.5 Nonconforming Materials**

- ▶ (1) For nonconforming materials identified before incorporation into the work, the engineer will do one of the following:
 - ▶ 1. Reject those materials. Unless the engineer allows otherwise, the contractor shall remove rejected materials from the project site at no cost to the department. The engineer may allow the contractor to correct rejected materials. The contractor shall obtain the engineer's approval for previously rejected, but subsequently corrected, materials before incorporating those materials into the work.
 - ▶ 2. Approve those materials subject to potential reduced payment. The engineer will determine the circumstances under which those nonconforming materials may be approved and allowed to remain in place. The engineer will document the basis of approval and may execute a contract change order to adjust the contract unit prices for the nonconforming materials. If the contract does not specify a price adjustment, the engineer may adjust the price.
- ▶ (2) For materials incorporated in the work and later found to be nonconforming, the engineer will do one of the following:
 - ▶ 1. Reject those materials subject to the provisions of 105.3.2.2 for unacceptable work
 - ▶ 2. Approve those materials and adjust the contract price as provided in 105.3.2.1 for engineer-accepted nonconforming work.



C&MM

▶ **8-10.1.2 Contractor and Department Designated Materials Persons**

- ▶ Standard spec 106.1.2 requires the contractor to designate a dedicated materials person (CDMP) who will be responsible for submitting all contractor materials information to the engineer. The department should also designate a dedicated materials person (WDMP) who will be in direct contact with the contractor's designee.
- ▶ Standard spec 106.1.2 requires the CDMP to communicate with all subcontractors to ensure that sampling, testing, and associated documentation conforms to the contract. The contract also makes the CDMP responsible for submitting materials information from the prime contractor and subcontractors to the WDMP, promptly reporting out-of-specification test results, collecting and maintaining all required materials certifications, and regularly communicating with the WDMP regarding materials issues on the contract.
- ▶ The WDMP should provide a project-specific sampling and testing guide (E-Guide) to the contractor at the preconstruction conference.
- ▶ Both the CDMP and WDMP should review and supplement the E-guide before work operations begin to ensure that testing methods, frequencies, and documentation requirements conform to the contract.
- ▶ The CDMP and WDMP are charged with working together throughout the life of the contract to ensure that contract materials requirements are met and any issues that might arise related to either non-conformance or non-performance are dealt with promptly. The ultimate goal is to make sure that problems with materials are brought to light and timely corrective action taken before those materials problems compromise the quality or acceptability of the completed work.



- ▶ The CDMP should coordinate contractor materials related activities and do the following:
 - Establish methods and work expectations with the WDMP.
 - Provide all QMP test data and control charts from the prime contractor and subcontractors.
 - Deal with all materials-related concerns from the WDMP.

- ▶ The WDMP is responsible for administration of the contract with regards to contract materials requirements and should do the following:
 - Communicate or meet weekly with the CDMP to discuss outstanding materials issues on the contract.
 - Monitor the submittals from the CDMP to ensure timeliness and completeness.
 - Review contractor submittals to verify materials requirements are met.
 - Inform the Project Leader of non-conforming materials issues and discuss actions to be taken.
 - Prepare materials documentation for inclusion into the project files.



▶ **8-10.5 Nonconforming Materials**

▶ **8-10.5.1 General**

- ▶ The department does not want material not meeting contract specifications incorporated into the work. Standard spec 106.5 gives the engineer the authority to either reject nonconforming materials or to allow the nonconforming materials to remain in place. If materials are found to be unacceptable before or after placement into the work, the engineer may reject the materials, and the contractor must remove the materials from the site at no cost to the department. Materials that have been tested and approved at their source or otherwise previously approved, but have become damaged or contaminated before use in the work, are also subject to rejection by the engineer.
- ▶ To ensure consistency in the decisions made for acceptance of non-conforming material or workmanship, the engineer should involve the region oversight engineer before finalizing any decision. This will help keep central office informed about contractor or material problems that may require action with a change in specifications or discipline of a contractor. If any technical questions remain about the acceptance or rejection of nonconforming materials refer to the appropriate technical expert in the Bureau of Technical Services.



- ▶ **8-10.5.2 Nonconforming Materials Allowed to Remain in Place**
- ▶ **8-10.5.2.1 Deciding Whether or not to Allow Material to Stay in Place**
- ▶ Good engineering judgment is required when making decisions on nonconforming materials. The engineer may choose to approve nonconforming materials, allow them to remain in place, and adjust the contract price. When making the decision to direct the contractor to remove and replace the materials versus leave the materials in place, it's important to consider the following:
 - Long-term consequences on quality and durability.
 - Implications on the project's life cycle costs, service life, serviceability, and maintenance.
 - Socioeconomic, environmental, and aesthetic considerations.
 - Impacts on traffic, staging, and construction timeframes.



- ▶ **8-10.5.2.2 Deciding Whether or Not to Apply Price Reduction**
- ▶ After the engineer has decided to allow nonconforming materials to remain in place, he or she must carefully evaluate each situation in deciding whether to take a price reduction. The goal is to achieve consistency statewide in administering price reductions for nonconforming materials that are allowed to remain in place.
- ▶ Results of retests and related quality tests should be considered. The following list includes some examples of the types of factors the engineer must consider to decide if a price reduction is warranted and how much it should be:



- ▶ - Has the contractor been conscientious to provide quality by carefully controlling materials and construction operations?
- ▶ - Has the contractor been proactive and made good use of QC data to maintain and improve quality?
- ▶ - Did the engineer provide the contractor with non-conforming test results within the contractual timeframe, if specified?
- ▶ - If timeframes are not specified, did the engineer provide non-conforming test results in time for the contractor to make process or materials corrections?
- ▶ - Upon becoming aware of a materials quality problem, has the contractor responded quickly to correct it?
- ▶ - Is the nonconforming test an isolated incident or a recurring situation?
- ▶ - How does the nonconforming test compare to the rest of the project data:
- ▶ - Have material test results been well within specification requirements or consistently at the very limit of what is acceptable?
- ▶ - How many tests are nonconforming vs. how many tests have passed?
- ▶ - How far out of spec is the non-conforming test?



▶ 8-30.13 Contractor Non-Performance of QMP Sampling & Testing

- ▶ It is the contractor's responsibility to perform the quality control work according to the specification. With the QMP specifications, the contractor's quality control (QC) test results and documentation serve as the primary means for determining if materials conform to the specifications, and for calculating pay adjustments.
- ▶ It is the project engineering team's responsibility to monitor the contractor's quality control program (QC). As the work is being performed, the engineer should monitor the contractor's sampling, testing, and documentation. To monitor test results, the engineer should request that the QC technician post documentation (control charts and or test summary reports) in a location easily accessible to the engineer. Electronic transfer or faxing of information is an option. With fax transfers, the engineer should keep in mind the amount of time and paper that this requires. The engineer should routinely monitor the test documentation to ensure that the contractor is properly performing under the specification.
- ▶ The primary objective of both the contractor and engineer is to work together to ensure compliance with QMP sampling and testing requirements.
- ▶ For contractor QMP non-performance, the engineer should notify the contractor early to address the problem. If the contractor responds immediately and is able to correct the non-performance issue, no further action may be necessary. If non-performance continues, the engineer should consider one or more of the following options, but may use other alternatives:



1. Suspend or delay contract operations as provided in standard spec 105.
2. Withhold payment of the material bid item not properly sampled and/or tested until the contractor supplies adequate pre-placement or in-place test results, or demonstrates material compliance in a manner acceptable to the engineer. The engineer must document the approved acceptance, or require removal and replacement of the material. The engineer's acceptance may lead to a price adjustment for the improperly tested or untested material. If the contractor demonstrates material compliance in a manner acceptable to the engineer, a price adjustment for the material is not necessary.
3. Administer a pay reduction using the Non-performance of QMP administrative item.



- ▶ The following table presents general guidelines to address QMP non-performance problems. The engineer should carefully evaluate each problem situation encountered in order to determine the applicability of these guidelines.

Table 2 General QMP – QC Testing Problems Encountered (Not shown)

- ▶ Note: Where a price deduction range is given in the preceding guidelines, the engineer should take into account the severity of the non-conformance when choosing the deduction.
 - The upper limit of the materials cost deduction is shown at 50% of the item price, since the materials cost can often be about 50% of the bid item cost. For some bid items the materials costs can be significantly less. For the more severe cases, the engineer should consider deducting the total cost of the materials for the bid item.
 - For re-sampling and testing, the contractor must demonstrate the material compliance using a method acceptable to the engineer.

