

Slide 1 - Independent Quality Assurance

Independent Quality Assurance



Slide notes

Now let's take some time to learn about the Quality Assurance program and how SHA projects are reviewed to ensure they remain in compliance with the regulations, contract documents and applicable permits. The information presented in this portion of the training is based in section 308 of the SHA Specifications

Notes

Slide 2 - QA Rating System - Compliance

QA Rating System - Compliance

Rating A: equal to or greater than 90
Rating B: 80 to 89.9
Rating C: 70 to 79.9

- Projects that receive a 'C' rating will be re-inspected within 72 hours.



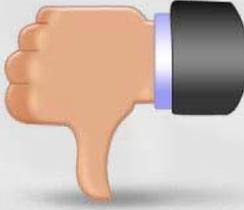
Slide notes

A project may be found in compliance or in non compliance with the program. The Regional Environmental Coordinator (REC) will review the project and access a grade utilizing an objective scoring system. A grade of A, B, or C is considered compliance, although a C grade will be re-inspected within 72 hours of when the grade was issued.

Notes

Slide 3 - QA Rating System – Non Compliance

QA Rating System – Non Compliance



Rating D: 60 to 69.9

- All earthwork operations will be shut down.
- The project will be re-inspected within 72 hours.
- Failure to correct all of the outstanding issues and upgrade the project to a 'B' rating will result in the project being rated an 'F'.

Rating F: less than 60

- **Appropriate permits and approvals have not been obtained.**
- **Specified LOD, wetlands, buffers, jurisdictional waters, floodplains, and/or tree protection areas not demarcated and disturbance not contained within LOD.**
- **Project not in conformance with the E&S plan, schedules, and contract documents.**
- The entire project will be shut down until the project receives a 'B' rating.

Slide notes

A grade of D or F is considered non compliance. In the event of a D rating, all earthwork operations will be shut down by the Administration and the project will be re-inspected within 72 hours. Failure to complete all of the necessary corrections and achieve at least a B will result in the project receiving an F rating.

An F rating will be given based on grade, based on failing to correct issues related to a D grade or in any of the instances listed. These conditions are the first three questions on the Quality Assurance form. An answer of no to any of these questions will result in an automatic failure.

Please familiarize yourself with the conditions surrounding a non compliance.

Failure of a contractor to obtain necessary permits, such as surface mining or offsite waste area will result in a non compliance.

Failure to demarcate limits of disturbance or resource areas and creating disturbance beyond these limits will result in a non compliance.

Failing to remain in compliance with the contract documents, such as not following the sequence of construction, will result in non compliance.

Slide 4 - "C" ratings

"C" ratings



When a 'C' rating is given

- Corrected within 72 hours.
- If deficiencies have not been corrected, a 'D' rating will be given and all earthwork operations will be shut down until the project receives a 'B' rating.

When a consecutive 'C' rating is given:

- For other deficiencies and the original deficiencies were corrected
- Imminent shut down of all earthwork operations.
- 72 hours to correct deficiencies
- If deficiencies have not been corrected or other deficiencies are identified that result in a score of less than 80 and not below 60 a 'D' rating will be given and all earthwork operations will be shut down until the project receives a 'B' rating.

Slide notes

Let's discuss the C rating in a little more detail. Although a C is considered compliance the reality is that this grade represents the line before a non compliance may occur. When a C grade has been issued, the contractor has 72 hours to make corrections at which time the project will be re-inspected by an REC, if the correction have not been made properly then the project will be rated a D and found in non compliance.

A second C grade could occur in the instance that a contractor made all of the original corrections and new issues were found on the follow up inspection. In this event the project will receive a second C grade and have another 72 hours to complete the corrections. With the second C situation the contractor must correct all of the outstanding issues and score better than an 80 or the project will be found in non compliance. The specifications do not allow for a project to receive 3 C grades in a row.

Notes

Slide 5 - Shutdowns

Shutdowns

When a disregard for correcting these deficiencies is evident, an 'F' rating will be given and the entire project will be shut down until the project receives a 'B' rating.

Where degradation could occur, or if the Contractor is unresponsive; SHA may elect to have these corrective actions taken by another contractor or Administration Maintenance.

All costs associated with this work will be billed to the original Contractor in addition to the Liquidated Damages.



Slide notes

The Administration may shut down a project as identified in the specifications. When the Administration identifies a disregard by a contractor for correcting deficiencies, an F rating will be given and the project will be shut down. If degradation could occur or if the contractor is unresponsive, the Administration may elect to have the work done by another contractor or SHA maintenance forces. All of the costs associated with this work will be billed to the contractor on top of the liquidated damages.

Notes

Slide 6 - Liquidated Damages

Liquidated Damages

For each day that the project has a 'D' or 'F' rating the Contractor and/or his surety will be liable for liquidated damages in the amount as specified in the Contract Documents.

When a 'D' or 'F' rating is given liquidated damages will be imposed on the Contractor. Payment of the liquidated damages shall be made within 30 days from imposition of the liquidated damages and will not be allowed to accrue for consideration at final project close-out.



Slide notes

When a non compliance occurs, there are liquidated damages specified in the contract documents. The Contractor is responsible for these damages for each day the project remains in non compliance. The liquidated damages are to be paid by the Contractor within 30 days of the issuance of the grade.

Notes

Slide 7 - Liquidated Damages

Liquidated Damages

When the project receives two 'F' ratings the E&S Control Certification will be revoked from the project superintendent and the ESCM for a period of not less than six months and until successful completion of the E&S Control Certification Program.



Work may not commence until the certified personnel are in place

Slide notes

In the event that a project receives two F grades (non compliance) within the span of the contract, both the superintendent and the ESCM will have their certifications revoked for six months and until they attend the certification program again.

Unfortunately this has happened multiple times in the past so everyone must remain diligent to avoid even a single non compliance, let alone two.

Notes

Slide 8 - Incentive Payment

Incentive Payment

Quarterly incentive payment will be made when an average score equal to or greater than 85 for the entire rating quarter.

4 Quality Assurance reviews are required within the rating quarter.



No incentives will be paid for any quarter that liquidated damages are imposed.

Slide notes

When a Contractor strives to do well with their environmental program there may be incentives to be earned. The contract documents will stipulate any incentives related to an Administration project. Incentives are paid on a quarterly basis and as a final lump sum. As long as the Contractor can achieve an average grade of 85 or better on the quality assurance ratings and not receive a non compliance an incentive may be due. An incentive is money that is to be earned and is not a guarantee as payment for meeting the minimums specifications.

There have been projects that have incentives ranging from a few thousand dollars up into the millions.

Notes

Slide 9 - Other Penalties

Other Penalties

- MDE
- USACE
- EPA
- Civil / Criminal
- Corrective Action / Mitigation
- Documented past Non-Compliance is evaluated as part of Design/Build selection criteria
- And Others

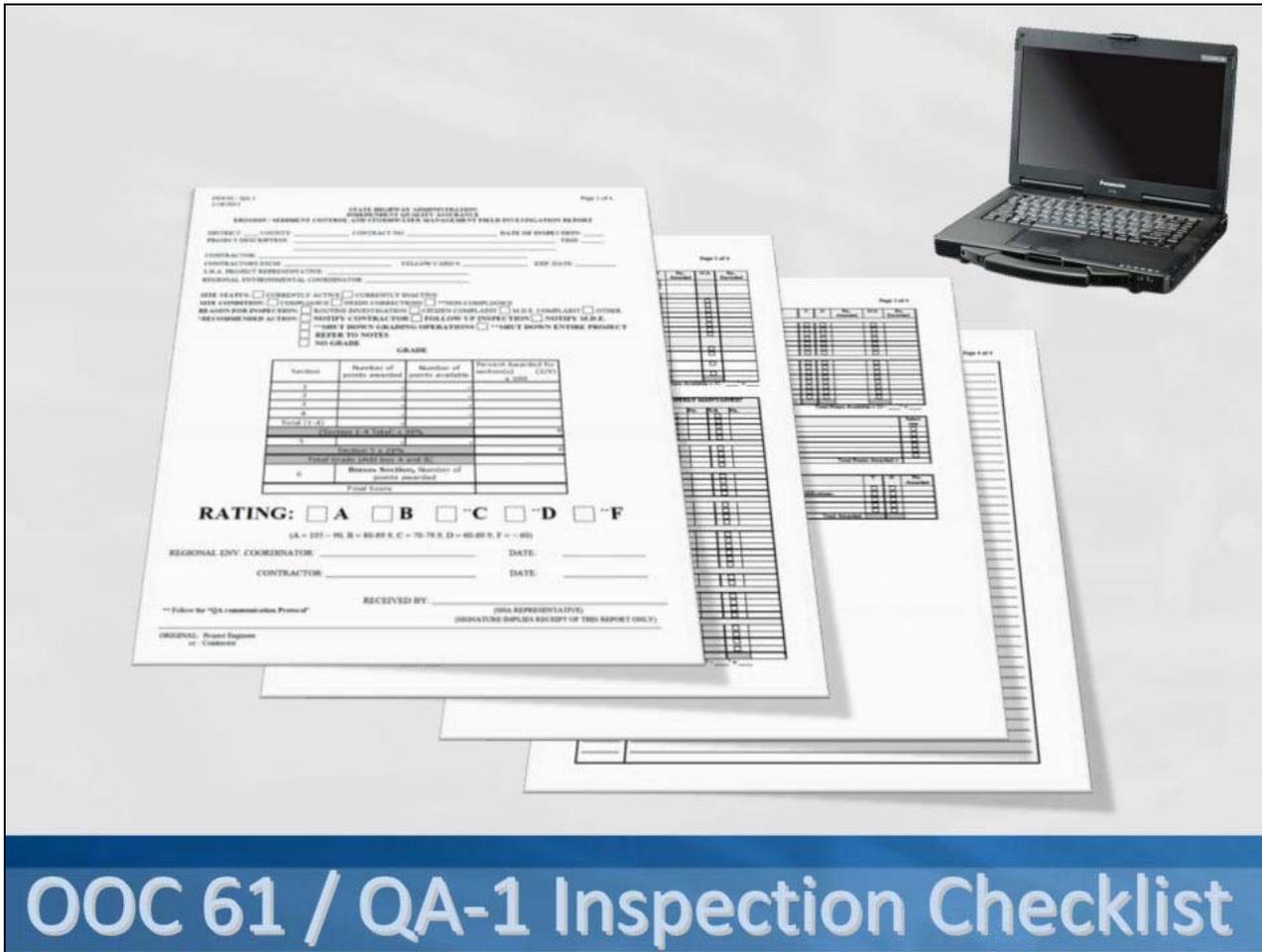


Slide notes

Remaining in compliance with the Administration’s program is of the utmost importance. Beyond that, there are multiple other regulatory agencies that can also bring penalties against the Contractor. These could range from monetary fines, to mitigation requirements, and also civil or criminal actions.

Notes

Slide 10 - OOC 61 QA Inspection Checklist



OOC 61 / QA-1 Inspection Checklist

Slide notes

Let's look at how a Regional Environmental Coordinator arrives at the grade a Contractor receives. The review is completed using the QA-1 form. This is an objective evaluation of the environmental conditions on a project at the time of review. When completing a review, the REC is looking at the project as it stands at that moment and grades it as such. What was done last week or what will be done in the future has no effect on the grade. Although this training is given utilizing the original handwritten form, the reviews are now conducted by entering the information into the QA toolkit on a laptop computer. The system will then calculate the score automatically, signatures can be collected electronically, and a printed PDF report will be provided to the Project Engineer and Contractor.

Notes

Slide 11 - OOC 61 QA Inspection Checklist

OOC61 / QA-1
2/18/2015
Page 1 of 4

**STATE HIGHWAY ADMINISTRATION
INDEPENDENT QUALITY ASSURANCE**

EROSION / SEDIMENT CONTROL AND STORMWATER MANAGEMENT FIELD INVESTIGATION REPORT

DISTRICT: _____ COUNTY: _____ CONTRACT NO.: _____ DATE OF INSPECTION: _____
 PROJECT DESCRIPTION: _____ TIME: _____

CONTRACTOR: _____
 CONTRACTORS ESCM: _____ YELLOW CARD #: _____ EXP. DATE: _____
 S.H.A. PROJECT REPRESENTATIVE: _____
 REGIONAL ENVIRONMENTAL COORDINATOR: _____

SITE STATUS: CURRENTLY ACTIVE CURRENTLY INACTIVE
 SITE CONDITION: COMPLIANCE NEEDS CORRECTIONS **NON-COMPLIANCE

REASON FOR INSPECTION: ROUTINE INVESTIGATION CITIZEN COMPLAINT M.D.E. COMPLAINT OTHER
 **RECOMMENDED ACTION: NOTIFY CONTRACTOR FOLLOW UP INSPECTION NOTIFY M.D.E.
 **SHUT DOWN GRADING OPERATIONS **SHUT DOWN ENTIRE PROJECT
 REFER TO NOTES
 NO GRADE

GRADE

| Section | Number of points awarded | Number of points available | Percent Awarded for section(s) (X/Y) x 100 |
|-------------------------------|---|----------------------------|--|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| Total (1-4) | | | |
| (Section 1-4 Total) x 30% | | | A |
| 5 | | | |
| Section 5 x 20% | | | B |
| Total Grade (Add box A and B) | | | |
| 6 | Bonus Section, Number of points awarded | | |
| Final Score | | | |

RATING: A B C D F
(A = 105 - 90, B = 80-89.9, C = 70-79.9, D = 60-69.9, F = < 60)

REGIONAL ENV. COORDINATOR: _____ DATE: _____
 CONTRACTOR: _____ DATE: _____

RECEIVED BY: _____ (S.H.A. REPRESENTATIVE)
(SIGNATURE IMPLIES RECEIPT OF THIS REPORT ONLY)

** Follow the "QA communication Protocol"

ORIGINAL: Project Engineer or Contractor

OOC 61 / QA-1 Inspection Checklist

General project information

Scoring Section

Rating

Signatures

Slide notes

Looking at the report itself we see that it is comprised of four pages with multiple sections. Page one contains the general project information along with the box where each individual section is scored to find the representative grade. You may notice that section five of the report is worth 20% of the grade. We will discuss that more in a little bit. There is also a rating section where the appropriate grade will be marked based on the score.

Notes

Slide 12 - OOC 61 QA Inspection Checklist

Section 1 - Is the project in scope

Section 2 - Are controls properly installed

Section 3 - Are controls properly maintained

OOC 61 / QA-1 Inspection Checklist

Slide notes

Page two of the report contains sections one through three. The first thing that needs to be discussed is how points are awarded or taken away during a review. Each question, with the exception of the first three, have a checkbox for, yes, no, or not applicable. Questions that do not apply to the project will be marked not applicable and have their value removed from the total points available in that section. Any question that is marked yes awards the points value for that question and any question marked no awards zero points. When the section is complete, the awarded and available points are now known and can be filled in on page one of the report.

Section one asks multiple questions related to scope of work such as: have all changes been approved, is the ESCM performing their duties or is grading limited to the maximum grading unit. This section also contains the three automatic failure questions we discussed earlier in the presentation. Also notice that there are four questions in this section directly applicable to a project with an NPDES permit. When a project has an NPDES these questions need to be considered.

Section two of the report pertains to proper installation of controls. There is a list of all the regularly utilized controls for a construction project. Each control has a unique points value. The proper installation of E&S Controls is critical to proper function, and also can reduce maintenance issues in the future. Installation method, proper materials and functionality are all considered at the time of review.

Section three relates to the same items on the reports but is focused on proper maintenance. It is important that controls throughout the project be kept in good repair at all times to ensure proper functionality. You may notice that the bottom of the list has four blank lines with a point value of one. These spaces are for unique control that may be included in the details of a project but are not a routinely used control. The reviewer would add in the control description on these lines.

Notes

Slide 13 - OOC 61 QA Inspection Checklist

| Point Value | 4. IS STABILIZATION PROVIDED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS? | Y | N | Pts. Awarded | N/A | Pts. Excluded |
|-------------|---|---|---|-----------------------------|-----|---------------|
| 1 | 4.1. Is stabilization provided as specified? | | | | | |
| | 4.1.1. Temporary staking or stabilized seating | | | | | |
| 2 | 4.1.2. Temporary stabilization | | | | | |
| 2 | 4.1.3. Permanent stabilization | | | | | |
| 1 | 4.1.4. Stabilization meeting called for by plans | | | | | |
| 3 | 4.1.5. Seed | | | | | |
| 1 | 4.1.6. Straw | | | | | |
| 1 | 4.1.7. Other | | | | | |
| 3 | 4.2. Is stabilization provided in the specified time frame? | | | | | |
| 2 | 4.2.1. Seven day stabilization | | | | | |
| 2 | 4.2.2. 3-7 day stabilization | | | | | |
| 2 | 4.2.3. Other | | | | | |
| 1 | 4.3. Is incremental stabilization provided during construction? | | | | | |
| 2 | 4.4. Is the stabilization performing as specified? | | | | | |
| 2 | 4.5. Is vegetation being established? | | | | | |
| 23 | = Total Possible Points | | | | | |
| Subtotal = | | | | Total Points Available = 23 | | |

| Point Value | 5. WAS CORRECTIVE ACTION TIMELY FROM PREVIOUS QA REPORT? | Select one |
|-------------|--|--------------------------|
| 5 | 5.1. No corrective action needed | <input type="checkbox"/> |
| 4 | 5.2. Action completed - 24 hours | <input type="checkbox"/> |
| 3 | 5.3. Action completed within 24 - 48 hours | <input type="checkbox"/> |
| 2 | 5.4. Action completed within 48 - 72 hours | <input type="checkbox"/> |
| 1 | 5.5. Action completed > 72 hours | <input type="checkbox"/> |
| 0 | 5.6. Action not completed | <input type="checkbox"/> |
| 5 | = Total Possible Points | Total Points Awarded = |

| Point Value | 6. IS THE CONTRACTOR PROACTIVE? (Bonus items) | Y | N | Pts. Awarded |
|-------------|---|---|---|---------------|
| 1 | 6.1. In role duty of ESCM E&S activities? | | | |
| 1 | 6.2. Recognize and requests changes as a timely measure as warranted by any Changes or Modifications. | | | |
| 1 | 6.3. ESCM conducts daily/semi inspection with S&A staff | | | |
| 1 | 6.4. Contractor initiates corrective action | | | |
| 1 | 6.5. Contractor practices Environmental Awareness/Stewardship by training employees. | | | |
| 5 | = Total Possible Points | | | Total Awarded |

Section 4 - Is stabilization provided in accordance with the contract documents

Section 5 - Was corrective action timely from previous QA report

Section 6 - Is the contractor proactive (Bonus Points)

OOC 61 / QA-1 Inspection Checklist

Slide notes

Page three of the report consists of sections four through six.

Section four is related to proper stabilization and vegetation establishment, this section contains multiple sub categories of questions. The first part of this section asks if the stabilization has been done correctly, for example. In order to answer if permanent stabilization has been provided as specified, one must ensure the soil was prepared properly, amendments added, seed, straw and mulch binder applied correctly. Not completing any part of the process means the stabilization was not provided as specified. The second part of the section asks if the stabilization was done in the proper timeframes. The stabilization timeframe requirements will be shown in the general notes of your plans. The next question asks about incremental stabilization, when building a slope from a cut or fill operation, the MDE requirement is to stabilize every 15 feet before proceeding with the work. The final two questions in this section are performance based, is the stabilization performing, keeping the ground covered to reduce erosion and is vegetation being establish, are we seeing growth occur.

Section five asks a single question, was the corrective action timely from the previous QA report. A quick reaction is expected by the contractor when an E & S Control issue on a project is documented. For every 24 hours the contractor delays in correcting outstanding issues a point will be deducted. There are only five points available in this section, therefore the loss of these five may seem small, but keep in mind that this section is worth 20% of the total grade so each point carries a lot of weight with the total score. In a situation where a contractor does not correct an issue between QA reviews the current report will reflect a C grade at best.

Section six gives an opportunity for the contractor to earn bonus points. These are percentage point and therefore can have a major effect on the grade. These questions are not meant to be easy to achieve as they require the contractor to go above and beyond the minimum expectations to earn. The contractor needs to be focused on environmental issues, looking ahead in the work schedule and proactive to earn these points.

History has shown that a company focused on getting just a few bonus points tends to have higher average grades throughout the life of the contract.

Another question to consider is, how will an QA reviewer know when the corrective action was completed in section 5 or if a contractor is doing what is necessary to earn a bonus point? The ESCM has a responsibility to document their actions related to the environment in the daily report. The ESCM daily report is critical to helping a QA reviewer know what has been happening on a project site over the recent past.

Slide 14 - OOC 61 QA Inspection Checklist

The image shows a screenshot of a QA Inspection Checklist form. The form is titled "OOOC61 07/01/2011" and "CD 07220 3000.01" in the top left corner, and "Page 4 of 4" in the top right corner. The main body of the form is a table with two columns: "Item No." and "Notes". The table has 20 rows, each with a horizontal line for writing. Below the table, there is a blue banner with the text "OOOC 61 / QA-1 Inspection Checklist" in white. The entire screenshot is set against a light gray background.

Slide notes

The fourth and final page of the report is for notes provided by the REC QA reviewer. Any issues found during the review are to be documented here with details about the issue and location.

Notes

Slide 15 - End



Slide notes

This completes the Quality Assurance portion of the training program. If you have reviewed all of the training modules in the recommended order, then the presentation of the training portion of the Yellow Card Certification is now complete. Please follow the instructions provided in the email you recieved after registration to take the exam portion of the certification. Remember that you may come back and review all of the information you have just seen at any time and also consider utilizing the reference materials provided.

Notes
