NRMCA Quality Certification

Ready Mixed Concrete
Quality Management System

Certification Criteria Document

Version 2

NRMCA Quality Certification
Ready Mixed Concrete Quality Management System

Foreword

Ready Mixed Concrete is a manufactured product composed of a wide range of materials. Concrete mixtures are developed with fresh properties to meet the needs of a contractor who constructs a structure. Concrete also needs to achieve hardened properties, as designed by design professional and specified in contract documents, to meet the needs of the owner who establishes certain expectations for performance and service life of the structure.

The quality and uniformity of ready mixed concrete depend upon control over its manufacture. A ready mixed concrete company should maintain a basic quality management system, supported by management and managed by competent company personnel. Quality of concrete is impacted by all job functions within a company and all activities related to quality that impact these personnel should be addressed in the company's Quality Manual. Achieving a high level of quality enhances a company's reputation in the local market, allows the company to improve its profitability by optimizing the composition of concrete and stimulates innovation. The company with a successful quality management system has the ability to furnish concrete for performance-based specifications and respond to initiatives for sustainable development related to concrete construction.

A company's quality management system should be proactive to avoid problems, rather than reactive in responding to problems after they occur. Uniform processes for all separate entities or divisions within a company should be established in its Quality Manual. It should be ensured that these processes are communicated to all levels within the company and adhered to. A company's Quality Manual should only include procedures and measurement processes that it can reasonably achieve with the resources available. The company's Quality Manual should be flexible and updated periodically to allow for continuous improvement.

NRMCA provides several resources for a company to develop its Quality Manual. These guidelines are a resource and should not be construed as standards. The more comprehensive NRMCA reference document is the *Quality Management System for Ready Mixed Concrete Companies*, developed using the essential elements of Quality Management Standards of ISO 9000 and made pertinent to the ready mixed concrete industry. This document includes several sections with an internal company focus that are important for internal activities but may not be relevant to the external customer.

This Quality Certification program has been developed to assure the external customer of the ready mixed concrete company that the Applying Entity of the Company has and follows a comprehensive quality management system. Towards that end, the criteria for this Quality Certification have been extracted from the broader guideline document to include only those aspects that are of interest to the external customer. A company seeking to achieve this Quality Certification should ensure that its Quality Manual includes sections, procedures, and measurement systems required herein. This program reviews and verifies that a ready mixed concrete company has a defined Quality Manual that is developed and supported by the Company's management; the Company hires competent professionals, there is a laboratory that performs the necessary quality control tests and materials and mixture evaluation, there is process in place of testing and evaluating ingredient materials and concrete mixtures; there is a process by which corrective action is taken. These criteria are covered in the six sections of this document.

The system of certification was developed and is maintained by the Research Engineering and Standards Committee of the National Ready Mixed Concrete Association. The development process involved an iterative process to ensure that the criteria stated can be achieved by a typical ready mixed concrete producer with a focus on quality. It is anticipated that these criteria will continue to evolve as participation in this certification progress grows.

This document establishes the criteria to obtain the NRMCA Quality Certification. The Applying Entity can be:

- A ready mixed concrete Company,
- A Division of the Company, or
- A smaller subsection of the Company.

The production facilities associated with the submission should be listed.

The applying entity is permitted to display an NRMCA Quality Certificate of Conformance, which assures the purchaser that it follows quality processes and is capable of furnishing good quality concrete.

The premise of this Quality Certification is that a Company maintains a Quality Manual and the Applying Entity demonstrates that it performs the actions stated in its Quality Manual and the minimum requirements of this certification program. To be eligible for the NRMCA Quality Certificate of Conformance, the Applying Entity should submit sections of its Company's Quality Manual and the required documentation specific to the Applying Entity that verifies conformance to the Quality Manual.

The submission is audited by an independent auditor selected by NRMCA.

On receiving approval from the auditor, NRMCA issues a Quality Certificate of Conformance that lists the production facilities included in the submission. The certificate must be signed by the principal company executive attesting to his/her intention of ensuring that the applying entity will maintain their quality management system within the requirements of this document for the period of the certification.

The criteria for the NRMCA Quality Certification program has been reviewed by the NRMCA Board of Directors and approved without dissenting vote. Certification may be obtained by any producer of ready-mixed concrete in accordance with the procedures and limitations described herein. There is a nominal charge for the Association's service and auditor fees.

NRMCA Quality Certification Program
Certification Criteria Document

Developed by the
NRMCA Research Engineering and Standards Committee
Version 2, October 2016

Engineering Division
NATIONAL READY MIXED CONCRETE ASSOCIATION
900 Spring Street, Silver Spring, Maryland 20910
Phone: (301) 587 1400 Fax: 301 585-4219

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Certification Objective

The objective of this NRMCA Quality Certification is to ensure that the Applying Entity - Company, Division, or a smaller subsection of the Company - is operating an effective Quality Management System (QMS) for the production of ready mixed concrete that is well established, documented, implemented and facilitates continuous improvement. This audit verifies the existence of a Quality Manual with the minimum sections defined by this certification and appropriate documentation from the Applying Entity that ensures that it is conforming to the stated requirements and objectives in its Quality Manual and applicable minimum criteria established by this certification program.

This document serves the following purposes:

- to acquaint the producer and the auditor with the criteria for securing the NRMCA Quality Certificate of Conformance and to define the documentation required in a submission
- to provide the forms to be used for the application and audit;
- to familiarize concrete purchasers and specifiers with the system and its significance.

General Information

Section 1 covers items addressed in the Company's Quality Manual submitting for request for certification. Sections in a Quality Manual are general statements indicating what the company plans to do for quality related processes. Specifics on responsible individuals, actual procedures, measurement systems and other details may not be addressed in the Quality Manual. **The Company's complete Quality Manual should not be submitted.** Only the Table of Contents and the sections referenced in Section 1 are required.

Sections 2-6 evaluate whether the Applying Entity does what is stated in the Company's Quality Manual. These sections require statement of specific individuals to be identified, specific procedures to be described and supporting documentation that provides evidence on specific items be provided. When providing documentation in Sections 2-6, the section of the Quality Manual should not be repeated unless specifically required. The section of the Quality Manual can be referenced when providing this documentation.

The left column states the requirement. Text in italics serves as advisory information to auditor. In the right hand column, a listing of needed documentation is provided as guidance to the Applying Entity. The submission should follow the section sequence in this document. Each section submitted should include the section number reference of the certification criteria in this document. This should facilitate clear identification of the submission relative to the requirement and allow for an efficient audit. A separation sheet with the section number reference is suggested. The auditor has the prerogative to contact the company personnel making the submission to request clarification or additional documentation.

The submission should be made in two formats:

- Electronic document (in Adobe pdf format, with required documentation scanned as necessary)
- Print copy that will be forwarded to the auditor.

NRMCA will provide instructions for transferring the electronic document. The print copy should be mailed to:

National Ready Mixed Concrete Association
Engineering Division – Quality Certification
900 Spring Street, Silver Spring, Maryland 20910.

Please refer to the NRMCA website – www.nrmca.org for a fee schedule.

Expiration date for the certification will be 2 years from the date of approval by the auditor.

Upon approval by the auditor, NRMCA will issue a Certificate of Conformance to the NRMCA Quality Certification. The certificate will list the production facilities included under the certification. The Certificate should be signed by the Company Executive with managerial responsibility over the Applying Entity.

Disclaimer

No claim is made that the Applying Entity bearing this NRMCA Quality Certification will assure delivery of high quality concrete. The award of certification is based on the compliance with the criteria established in this certification, documentation provided and a statement by an official of the Company as to the veracity of the submission and the continued compliance with the criteria of this Certification Program. The presence of a Quality Certificate should, therefore, be accepted precisely for what it is—at the time of audit, evidence that the Company has an established Quality Manual and documentation that it conforms to it. The existence of this quality management system will reduce the likelihood of deficiencies in quality of concrete furnished by the Applying Entity.

NRMCA QUALITY CERTIFICATION
CERTIFICATION CRITERIA FOR AUDIT

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
1 Company Quality Manual	
1.1 Quality Manual Content.	
Company's Quality Manual (QM) addresses the following sections *The company has a defined Quality Manual that includes, at a minimum, the items listed in Section 1. A copy of the Table of Contents of the Quality Manual should be provided for review.*	Provide a copy of the Table of Contents of the company's Quality Manual (QM). Do not provide the complete QM. **(1.1)**
1.1.1 Management commitment.	
The QM includes a section documenting support from executive management. *Review section of the Quality Manual that documents that there is executive management support for its development and administration. An individual from the executive team responsible for the applying entity should be involved in establishing the QMS and its implementation.*	Provide section in the QM documenting support of executive management for the development and implementation of company's Quality Manual **(1.1.1)**
1.1.2 Quality Objectives.	
The QM states quantifiable Quality Objectives that are measured to track progress. *Review section of the Quality Manual where the company states two or more quality-related quantifiable goals or objectives and can provide documentation that there is a measurement or documentation system quantifying the achievement of these.* *Procedures for measuring attainment of Quality Objectives are requested in 1.1.13 and documentation of such are covered in Section 6.7*	Provide section in the QM listing two or more quantifiable quality objectives that are measured Examples of quantifiable objectives include strength standard deviation of mixtures by plant, percent rejected concrete due to quality, resources (cost and time) attributed to troubleshooting concrete quality issues. General quality objective statements that cannot be measured or quantified are not acceptable. These include general statements on improved quality or customer satisfaction. Only one of the stated objectives can be related to maintaining percentage of certified plants or personnel. Measurement procedures used are covered in 1.1.13. Documentation that verifies that these measurement processes to track quality objectives are followed by the applying entity is requested in Section 6.7. **(1.1.2)**
1.1.3 Personnel Qualifications.	
The QM defines job qualification requirements for various personnel that impact quality. *Review Company's job descriptions, including necessary*	Provide section in the QM defining the job descriptions of • QA/QC,

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
educational qualifications, experience and scope of responsibilities for: • *quality control/quality assurance personnel,* • *plant operators,* • *sales,* • *dispatch, and* • *drivers.*	• plant operators, • sales, • dispatch and • driver personnel. Only 1 page per job function is required. These should be general job descriptions established by the company and not qualifications of existing personnel. **(1.1.3)**
1.1.4 Laboratory Testing Capabilities.	
The QM includes a section that defines the laboratory facilities and capabilities used by the Company. The QM describes the testing performed in-house and by contract laboratories. *Review section of the Quality Manual that addresses testing capabilities of laboratories used by the company – in-house or contract. Review list of tests performed by in-house and contract labs - on concrete materials and concrete. Details of audit requirements of facilities are covered in Section 2.*	Provide section in the QM that describes laboratory facility and testing capabilities (<1 page). The company should have an in-house laboratory that develops mixtures and applicable data for submittals. The company can use a contract laboratory for specialized tests. Include list of tests performed in the in-house lab and those that are sent out for contract testing. **(1.1.4)**
1.1.5 Responsibility for the Quality Manual.	
The QM identifies the individual(s) by title who is assigned responsibility for development and administration of the Quality Manual and the authority is defined. *The individual(s) with this responsibility should be identified by title in the Quality Manual. The individual should have the authority for the administration of the quality system as described in his duties and responsibilities.*	Provide section in the QM that identifies the title of individual with overall responsibility for administering Quality Manual and list the individual's duties and responsibilities. **(1.1.5)**
1.1.6 Quality Control Processes.	
The QM addresses quality management processes used for monitoring the quality and uniformity of concrete ingredient materials *Review section of the Quality Manual that outlines the procedures and practices for testing and quality control activities on ingredient materials – aspects of 3.2 should be addressed. Audit of documentation conforming with this section are covered in Section 3.2*	Provide section in the QM that outlines testing and quality control procedures for ingredient materials – see Section 3.2 for details required. Documentation that verifies that these procedures are followed by the applying entity is requested in Section 3.2. **(1.1.6)**
1.1.7 Control of Concrete Production.	
The QM addresses production processes used for controlling the quality of concrete at the plant *Review section of the Quality Manual that outlines the production procedures and practices for controlling the quality and uniformity of concrete at the plant relative to the detail in Section 4. Audit of documentation conforming with this section are covered in Section 4*	Provide section in the QM that outlines quality procedures for production of concrete at the plant - see Section 4 for detail required. Documentation that verifies that these procedures are followed by the applying entity is requested in Section 4. **(1.1.7)**
1.1.8 Specification review process.	
The QM addresses the process by which specifications are reviewed and requirements for concrete are established. Title(s)	Provide section in the QM that outlines the process of specification review, establishing

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
of personnel with these responsibilities are identified. *Review section of the Quality Manual that defines the process of reviewing specification and purchaser requirements, establishing mixtures and provides the titles of personnel with these company responsibilities. Audit of process specific to the applying entity are covered in Section 5.1*	mixtures and company personnel (by title) with these responsibilities Details of this process specific to the applying entity are requested in Section 5.1. **(1.1.8)**
1.1.9 Concrete Mixtures.	
The QM addresses the process of developing and evaluating concrete mixtures for meeting specification or purchaser requirements. *Review section of the Quality Manual that outlines the process of concrete mixture development and evaluation. Audit of documentation conforming with this section are covered in Section 5.2*	Provide section in the QM that outlines the process of mixture development and evaluation. The testing performed on concrete mixtures to develop the submittal information for projects should be outlined. Documentation that verifies that these procedures are followed by the applying entity is requested in Section 5.2. **(1.1.9)**
1.1.10 Non-Conforming Material.	
The QM addresses the process of identifying non-conforming concrete mixtures, analysis procedures, criteria and prevention. *Review section of the Quality Manual that outlines the process and criteria used for identifying non-conforming production concrete and process of preventing delivery to the customer. Audit of documentation conforming with this section are covered in Section 6.6*	Provide section in the QM that outlines the process used for identifying non-conforming production concrete mixtures. Indicate decision process of addressing non conforming concrete from being delivered to the customer. Documentation that verifies that these procedures are followed by the applying entity is requested in Section 6.6. **(1.1.10)**
1.1.11 Internal Audits.	
The QM includes a section of the process and personnel responsible for performing internal audits at least annually that ensures that quality systems defined in the QM are being followed. *Review section of the Quality Manual that defines the process whereby the team responsible for quality management ensures that the details of the Quality Manual are being followed at the plants by an internal audit process. The frequency of internal audits and personnel responsible should be identified. Review process of informing management and completing corrective action. Audit of documentation conforming with this section are covered in Section 6.3*	Provide section in the QM that describes the internal audit process and frequency used to ensure that the Quality Manual is being followed. Provide details of items reviewed. Identify personnel responsible for performing internal audits. Describe process of informing management of internal audits and finalizing corrective action. Documentation that verifies that these procedures are followed by the applying entity is requested in Section 6.3. **(1.1.11)**
1.1.12 Corrective Action.	
Process defined to address recurring problems resulting from internal audits and customer resolution by revisions to the Quality Manual *Review process by which recurring quality-related problems are addressed by revisions to the Quality Manual and personnel assigned responsibilities for accomplishing this. Audit of documentation conforming with this section are covered in Section 6.3*	Provide section of Quality Manual that addresses a process of using resolutions from internal audits and customer complaints to improve quality processes and revise the Quality Manual. Documentation that verifies that these procedures are followed by the applying entity is requested in Section 6.3. **(1.1.12)**.

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
1.1.13 Measurement systems.	
The QM defines the measurement systems that will be used for tracking quality objectives defined in the QM. *Review section of the Quality Manual that defines the processes that will be used to track defined quality objectives in 1.1.2. Audit of documentation conforming with this section are covered in Section 6.7*	Provide section in the QM that outlines the process for measurement systems for tracking quality objectives defined in 1.1.2. Documentation that verifies that these measurement processes to track quality objectives are followed by the applying entity is requested in Section 6.7. **(1.1.13)**
1.2 Personnel.	
1.2.1 Company organization chart.	
The QM or other company document defines an organizational and reporting structure with titles with responsibility and authority for quality functions. *Review a company organizational flowchart or other documentation illustrating its organizational and reporting structure. Review the reporting structure of technical and quality personnel to executive management.*	Provide section in the QM that defines an organizational chart of company that includes reporting structure. Identify clearly the reporting structure of technical and quality personnel to executive management. **(1.2.1)**

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
2. Resources for Quality Management	
2.1 Personnel Qualifications	
Review documentation outlining the qualifications of individuals employed by the applying entity within the company including training and certification records that directly pertains to the position of personnel identified below. The documentation should include individuals with the company at the time of submission for certification and audit. In several cases, it is adequate to review a sampling or listing of personnel.	Provide a brief summary of personnel qualifications (education and work experience as applicable) and applicable certifications that directly pertain to the position of personnel identified below. Do not include training unrelated to job function. These should include the specific personnel working at the facilities of the applying entity at the time of this submission for audit and certification.
2.1.1 Quality Manager.	
Person in charge of mixture proportions and specification review has one of the following: • NRMCA Concrete Technologist Level 3 Certification with 4 years experience • NRMCA CCSP Technical Track Certification with 4 years experience • ACI Concrete Quality Technical Manager Certification with 4 years experience • Licensed engineer with 4 year experience with specification review and mixture proportioning, or • NRMCA Concrete Technologist Level 2 Certification with 7 years experience *Review documentation of one of the 5 alternatives provided. An expired Level 2 certification (last option) is acceptable.* *For work experience, review a detailed statement of qualifications documenting responsibility for mixture proportioning and specification review. Review a listing of plants that the manager has responsibility over.*	For quality manager provide documentation for one of the following: • Copy of NRMCA Level 3 certificate or card with 4 years work experience • Copy of NRMCA CCSP Technical Track certificate with 4 years work experience • Copy of ACI Concrete Quality Technical Manager certificate with 4 years work experience • Copy of engineering license (PE) with 4 years work experience • Copy of NRMCA Level 2 certificate or card with 7 years work experience (An expired certificate is acceptable) For work experience include detailed statement of qualifications indicating responsibility for specification review and establishing concrete mixtures. Indicate responsibility for plants included in the submission for this certification. **(2.1.1)**
2.1.2 Plant Operators.	
Persons in charge of batching concrete have (one per plant) • A current NRMCA Concrete Plant Operator certification, • DOT batchman certification, or • Statement of qualifications with 4 years work experience and technical education related to batching concrete *Review documentation of one of the 3 alternatives provided for 1 operator per plant. For work experience, review a detailed statement of qualifications documenting training on concrete and batching. Review a listing of plants that the operator has responsibility for*	For batchmen provide documentation for one of the following for **one operator per plant** included in the applying entity: • Copy of current NRMCA Concrete Plant Operator certificate or card • Current DOT certificate for batchman certification, or • 4 years experience as concrete batchman For work experience include detailed statement of qualifications with training programs on technical topics related to concrete and batching. Indicate responsibility for plants included in the submission for this

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
	certification. **(2.1.2)**
2.1.3 Field Testing Technicians.	
At least 1 person(s) responsible for fresh concrete testing at the plant or in the field have a current ACI Field Grade 1 certification. *Review listing of field testing technicians performing fresh concrete tests at the plant or in the field, and that they are employed by the company. Review at least 1 person's current ACI certification.*	Provide listing of field testing technicians employed by applying entity. At least one individual with current ACI field testing certification is required. Provide legible copy of ACI certificate or card. **(2.1.3)**
2.1.4 Laboratory Technicians.	
At least 1 person(s) responsible for laboratory tests have one of the following: • A current ACI Lab Testing Technician Level I • A current ACI Strength and Aggregate lab I • equivalent work experience of 4 years performing concrete and aggregate tests. *Review listing of lab testing technicians employed by the company. Review documentation of one of the 3 alternatives provided for at least 1 lab technician. For work experience, review a detailed statement of qualifications documenting training and experience with performing the following ASTM standards or equivalent: C39, C78, C617, C1231, C117, C127, C128, C136, C192, C566 and C702.*	Provide listing of laboratory testing technicians employed by applying entity. At least one individual qualified as a laboratory technician is required to have one of the following: • Provide copy of ACI Lab Level I certificate or card • ACI Strength and Aggregate Lab I certificate • Provide statement of qualifications documenting training and 4 years experience with performing the following ASTM standards or equivalent: C39, C78, C617, C1231, C117, C127, C128, C136, C192, C566 and C702. **(2.1.4)**
2.1.5 Truck Mixer Operators.	
Truck mixer operators (two per plant) employed by the company have: • NRMCA Concrete Delivery Professional certification, or • A statement qualifications documenting training on technical topics outlined in Appendix A for drivers. *Review listing and qualifications of at least 2 drivers per plant in the submission for the two options provided.* *Statement of qualifications listing training on at least 50% of the topics listed in Appendix A.*	Provide listing of **<u>two drivers per plant</u>** included in submission with indication of • Completion of NRMCA Concrete Delivery Professional certification and date obtained. (copies of certificates not required). • Documentation of work experiences and internal training. Provide outline of internal training. Note Appendix A for topics suggested. At least 50% of these topics should be covered in internal training. **(2.1.5)**

2.2 Laboratory (in-house or contract)	
The company's routine materials testing and concrete mixture development and testing shall be performed by an in-house laboratory. Specialized tests can be performed by a contract laboratory. QM describes the testing performed in-house and by contract laboratories. *Review for consistency with 1.1.4*	
2.2.1 Laboratory Quality System.	
Laboratory facility that supports plants included in the application that develops concrete mixtures meets the requirements of Appendix B1. Additional laboratory facilities performing routine quality tests meet the requirements of Appendix B2. *Review documentation supporting conformance to Appendix B1 and B2. Laboratory accreditation by AASHTO, CMEC, A2LA or other accreditation bodies meets this requirement and documentation of such can be provided.*	For the in-house laboratory facility performing mixture development and evaluations, show documentation indicating compliance with Appendix B1. Laboratory certificates of accreditation or lab inspection reports with corrective actions documented are acceptable alternatives. Indicate that the laboratory supports plants included in the application. For laboratory facility(s) performing routine quality testing, such as moisture, gradings, fresh concrete or strength tests, show documentation indicating compliance with Appendix B2. **(2.2.1)**
2.2.2 Test Equipment and Capabilities.	
The laboratory has equipment and capabilities to conduct tests in 2.2.2.1 and 2.2.2.2. Capabilities for 2.2.2.3 should be documented if test data are developed for specialized tests either in-house or by third-party.	Equipment inventory and verification documented for primary lab and other facilities that perform routine testing of aggregates and concrete. Document conformance with Appendix B1 and B2. **(2.2.2.1 and 2.2.2.2)**
2.2.2.1 Aggregate Tests.	
Laboratory facilities maintains equipment with appropriate verification for aggregate tests to include aggregate sampling (ASTM D75), reducing samples to test size (ASTM C702), aggregate moisture content (ASTM C566), sieve analysis of coarse and fine aggregates (C117 and C136), and if performed measurement of relative density (specific gravity) and absorption of fine and coarse aggregate (ASTM C127 and C128). *Review documentation of equipment inventory and applicable verification records for aggregate tests performed in accordance with Appendix B1 and B2*	
2.2.2.2 Concrete Tests.	
Laboratory facilities maintains equipment, as applicable, with appropriate verification for tests: slump (C143), air content (C231, C173), density and yield (C138), temperature (C1064), making and curing cylinders (C192), capping cylinders (C617 or C1231), compressive strength (C39) *Review documentation of equipment inventory and applicable verification records for concrete tests performed in accordance with Appendix B1 and B2*	

2.2.2.3 Specialized Tests.	
The laboratory has capabilities to conduct specialized tests, as applicable, performed for prequalification of concrete mixtures, *Review documentation on capabilities and equipment inventory of in-house laboratory that performs test methods for prequalification tests.* *When tests are performed by 3rd party laboratories review 1 sample report of each type of test performed (within the past 1 year).* *Tests can include ASTM C157, C457, C1202, C1260, C1567 C1293, and other applicable tests that are used for project submittals.*	When in-house laboratory performs specialized tests, provide equipment inventory and a description of capabilities. When specialized tests are performed by 3rd party laboratories provide one sample report for each type of test performed (within the past 1 year). Tests can include ASTM C157, C457, C1202, C1260, C1567, C1293, and other applicable tests that are used for project submittals. **(2.2.2.3)**

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
3 Ingredient Materials Quality Management	
3.1 Compliance with Specification	
3.1.1 Material Certifications.	
Current material certification retained for ingredient materials used to produce concrete. *Review records of material certification or supplier letters of conformance for materials being used to produce concrete at one plant. Material certifications include cements in conformance with ASTM C150, C595 or C1157; normal weight aggregates with ASTM C33; lightweight aggregates with ASTM C330; fly ash with ASTM C618; slag cement with ASTM C989; silica fume with ASTM C1240; blended supplementary cementitious materials with ASTM C1697; and chemical admixtures with ASTM C494 and C260. Equivalent AASHTO designations are acceptable. Documentation can constitute DOT approval. Records should be less than 12 months old. In general documents should be retained for a minimum period of 12 months.*	Samples of current (< 12 months old) material certifications or supplier letter of conformance for ingredient materials used to produce concrete in one plant. Ensure that records are relevant to current materials being used at the applying entity. The auditor may randomly select one or more plants for additional verification. **(3.1.1)**
3.1.2 Qualification of non-potable water.	
When non-potable sources of water are used, documentation for compliance with ASTM C1602 or requirements of local highway department. *Review records for strength and time of setting tests on sources of non-potable water in accordance with Table 1 of ASTM C1602. Review records of optional tests for composition of mixing water in accordance with Table 2 of ASTM C1602. Review that the frequency of testing is in accordance with ASTM C1602. No documentation needed when plants use potable water as mixing water.* *Review process of compliance with specs that prohibit the use of non-potable water.*	Documentation for compliance with ASTM C1602 or local highway department requirements relative to use of non potable water (if applicable) for 1 plant. The auditor may randomly select one or more plants for additional verification. If non-potable water is not used at all the plants in the submission, state that relative to this section (no test records required). If potable water is required on projects describe how this is complied with. **(3.1.2)**
3.2 Conformance monitoring	Procedures and documentation should be consistent with 1.1.6
3.2.1 Material Shipments.	
Process in place at plant to verify that material shipments agree with the material order. *Review the process that should clearly outline responsibility for accepting material shipments at the plant and the process of verifying that the material received is consistent with the product in the material order.*	For the applying entity, outline the process used at the plant to verify that material shipments agree with the material ordered for purchase and the person responsible. **(3.2.1).**
3.2.2 Cement Uniformity.	
Process in place for monitoring changes in characteristics of one primary cement used. *Procedures for evaluating uniformity of cement from single sources should be described and documented. Cement uniformity can be monitored by ASTM C917 reports from the cement supplier or test measurements or other data of cement monitored on control charts. Review outline of procedures and documentation of cement uniformity monitoring information*	Describe the process used by the applying entity to evaluate uniformity of cement from a single source. Provide information listed below for one primary cement used representing shipments from the past 3 months-used in 1 concrete plant. One of the following are acceptable: • One ASTM C917 report from supplier

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
representing shipments from the past 3 months for one primary cement used at one plant.	• Control chart of ASTM C917 data • Control chart of producer performed tests on samples from cement shipments • Other information on control chart used to track uniformity Mill test reports are not acceptable for this section. The documentation should define control limits and process of corrective action. The auditor may randomly select one or more plants for additional verification. **(3.2.2)**
3.2.3 SCM Uniformity.	
Process in place for monitoring changes in characteristics of fly ash or slag cement. *Procedures for evaluating uniformity of SCM from single sources should be described and documented. Fly ash uniformity can include data from the fly ash marketer on LOI, foam index or mortar air content or similar tests performed by the concrete producer. Methods to evaluate variability of slag cement should be outlined in the Quality Manual. Review outline of procedures and documentation (reports or charts) for shipments of at least one SCM used at one plant for the past 3 months.*	Describe the process used by the applying entity for monitoring changes in characteristics of fly ash and/or slag cement from single sources. Charts of specific data for shipments (not composite data) of at least one SCM from the past 3 months at 1 plant. Material certification (mill test reports) is not acceptable for this section. The documentation should define control limits and process of corrective action. The auditor may randomly select one or more materials or plants for additional verification. **(3.2.3)**
3.2.4 Aggregate Tests.	
Aggregate grading tests performed at a frequency of once per month of concrete production or every 3000 tons of aggregate used whichever is more often. Aggregate relative density (specific gravity) and absorption tests performed annually. *Review documentation of aggregate tests performed in the most recent 12 month period and verify that the minimum frequency of tests are being performed.*	Provide 3 aggregate grading test records within the past 3 months at 1 plant in the applying entity of one fine and coarse aggregate grading and FM (sand) test results. Provide 1 record of aggregate absorption tests, and aggregate relative density (sp. gr.) tests in past 12 months at 1 plant from the applying entity. The documentation should include control limits and defined process of corrective action. The auditor may randomly select one or more plants for additional verification. **(3.2.4)**
3.2.5 Aggregate Moisture and Batch Adjustment.	
Coarse and fine aggregate moisture measured at a frequency of once per each day of production and documented batch adjustments for aggregate moisture. *Review 10 records of moisture measurement on one fine and one coarse aggregate performed on different days in the past 3 months at one plant. Review 3 batch records corresponding to the aggregate moisture measurement from the same plant that indicate batch quantities have been adjusted for aggregate*	Provide 10 records of aggregate moisture measurement of one fine and one coarse aggregate for one plant from the applying entity performed on different days in the past 3 months. If moisture probes are used for all aggregates, state this and 3.2.5.1 will apply Provide 3 batch weight records corresponding to the aggregate moisture measurement from

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
moisture. If moisture probes are used for all aggregates 3.2.5.1 applies	the same plant indicating batch quantities adjusted for aggregate moisture. The auditor may randomly select one or more plants for additional verification. **(3.2.5)**
3.2.5.1 Moisture Probe Accuracy.	
Moisture probes, when used, are checked for accuracy at a minimum once every 6 months. *Review 2 records of verification of accuracy of moisture probes conducted in the past 12 months from 1 plant. Review changes in aggregate moisture on 3 consecutive batch records from 1 plant. NRMCA certified plants will have this verified. This section does not apply if moisture probes are not used.*	When moisture probes are used, provide 2 sample records verifying accuracy of moisture probes conducted in the past 12 months from 1 plant from the applying entity. Provide 3 consecutive batch records from one plant (using moisture probes) with recordation of aggregate batch weights and aggregate moisture content. This documentation is not necessary if the plants maintain NRMCA certification. If moisture probes are not used, state this. The auditor may randomly select one or more plants for additional verification. **(3.2.5.1)**
3.2.6 Management of lightweight aggregate for moisture.	
Lightweight aggregates, when used, are managed for proper moisture control and batching *Review procedures for sprinkling lightweight aggregate stockpiles or alternative procedures used in cold weather to ensure consistency of moisture.*	Outline of process at the applying entity to ensure proper moisture control of light weight aggregates, when used. Include procedures used in cold weather. **(3.2.6)**

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
4 Production Facilities	Procedures and documentation in this section should be consistent with 1.1.7
4.1 Compliance with Standards.	
Production facilities and delivery vehicles conform to the requirements of ASTM C94 *Review NRMCA certification records or listing of State DOT approval of plants and ensure that they are current. All plants in the applying entity should be included in the listing. Plants in the process can be added to the certification when their certification or approval can be documented. Review a listing of all delivery vehicles operating from these plants. For non-NRMCA certified delivery vehicles review procedures and frequencies for addressing blade wear and buildup.* *Review statement by company on frequency of verification of accuracy of scales and volumetric measuring devices. Ensure that the frequency conforms to the required frequency of the NRMCA certification or the state DOT. Review records of one scale verification record.*	Provide listing of all plants in the applying entity and copy of current NRMCA certificate of conformance or indicate approval by State DOT. Indicate expiration of DOT approval. Provide statement on frequency of accuracy checks of scales and volumetric measuring devices. Include in statement the frequency requirements of NRMCA or State DOT for these verifications. Provide one scale verification record – load test data sheet required. Provide listing of delivery vehicles associated with listed plants. For NRMCA certified plants, indicate certification status of delivery vehicles in listing. For non-NRMCA certified delivery vehicles, provide statement on procedures and frequency to evaluate blade wear and buildup in truck mixers. **(4.1)**
4.2 Monitoring Batching Accuracy.	
Procedures stated to monitor and to address out of tolerance batches *Review procedures used to identify out-of-tolerance batches and decision process and responsibility for addressing these situations. Review corrective action. Review 2 batch records from 1 plant in submission within the last 3 months.*	For the applying entity, provide description of procedures used to identify and address out-of-tolerance batches. Indicate the specific individual with responsibility for monitoring batching accuracy. Describe corrective actions used for consistent out of tolerance situations. Provide two batch records from 1 plant within the last 3 months. Records should indicate target and actual quantities batched for cementitious materials, aggregates, batch water and admixtures. Tolerance information should be included in batch records. The auditor may randomly select one or more plants for additional verification. **(4.2)**
4.3 Control of Mixing Water.	
Procedures stated to control mixing water to within the ASTM C94 tolerance of ±3% *Review procedures used for control of mixing water to include, but not limited to:* • *Verifying accuracy of measuring devices (volumetric to 1.5%, scales as per scale check) and frequency* • *Addressing mixer wash-water prior to batching.* • *Control of mixing water addition at the slump rack.* • *Verifying accuracy of water measuring devices on truck*	For the applying entity, provide descriptions of required practice for the following: • Frequency of verifying accuracy of plant water measuring devices, procedure used and accuracy requirements. • Procedures for addressing wash water in mixer prior to batching • Procedures required at the slump rack and controls for water addition to load.

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
water tanks – procedure and frequency (water meters accurate to ±2%, sight gages accurate to ±1 gallon). • *Process for trim water holdback and communicating limits of water addition to the purchaser and procedures required by drivers at the jobsite* *Review sample of 1 delivery tickets from 1 plant in the submission of delivered loads documenting the recording of jobsite water addition and signature of purchaser.*	• Accuracy verification of measuring devices on truck water tanks – procedures and accuracy requirements • Procedures for holding back trim water, limits on water addition communicated to the purchaser and driver instructions for jobsite water addition. Provide sample of one (1) delivery tickets for 1 plant in the submission noting jobsite water addition with sign-off by purchaser. The auditor may randomly select one or more plants for additional verification. **(4.3).**

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
5 Product Management	Procedures and documentation should be consistent with 1.1.8 and 1.1.9
5.1 Specifications and Orders.	
Process defined for review of specifications and orders for concrete and assignment of mixtures. *Review the responsibility chain of reviewing orders and specifications for concrete and the process for assigning the appropriate concrete mixtures.*	For the applying entity, describe process and responsibility for review of specifications and orders for concrete. Process of assigning mixtures to these orders. **(5.1)**
5.2 Concrete Mixtures and Submittals.	
Process defined for concrete mixture development, and review of the submittal process *Review mixture submittals based on specification or purchaser requirements on 2 projects (for the applying entity) in the past 12 months for strength and fresh concrete properties. Review producers target strength determination based on specified strength. Review strength test results for proposed mixture in submittals for these requirements.*	For the applying entity, describe process for establishing mixture proportions for concrete orders and for project specifications. Describe who has responsibility for this and whether it is in-house or on contract. Describe process used for establishing target strength and documentation of strength of proposed mixtures. Provide mixture submittals showing strength results and fresh properties for 2 different projects in the past 12 months (per applying entity not per plant). Include pertinent requirements of specification or that of the purchaser for these projects. Do not include the complete specification. Do not include material certification or other information that might be included in submittal package. **(5.2)**
5.2.1 Hot and cold weather.	
Procedures stated and followed for hot and cold weather concreting *Review general procedures for hot and cold weather concreting and responsibility for making changes and decisions.*	For the applying entity, describe procedures used for hot and cold weather concreting and making adjustments to concrete mixtures, and responsibility assigned. **(5.2.1)**
5.3 Pre-qualification tests.	
Reports of pre-qualification test data needed for project specifications *Review reports of pre-qualification data for project submittals. One project in the past 12 months. Review relevant section of specification. The data can include but is not limited to: alkali aggregate reactivity tests, shrinkage, rapid chloride permeability, setting time, heat signature of concrete mixtures; ingredient material compatibility information; air void analysis; equilibrium density of lightweight concrete.*	Provide sample report(s) of specialized pre-qualification concrete tests for project submittals from the applying entity. Include requirements of specification for these tests (complete specification is not required). One project in the past 12 months. Pre-qualification testing can include but is not limited to: alkali aggregate reactivity tests, shrinkage, rapid chloride permeability, setting time, heat signature of concrete mixtures; ingredient material compatibility information; air void analysis; equilibrium density of lightweight concrete. **(5.3)**

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
5.4 Mixture Adjustments.	
Responsibilities assigned for adjustments to batch quantities and mixture proportions for established mixtures *Review the types of mixture adjustments permitted by plant personnel and adjustments that need approval or direction from the technical department personnel. Review the process used to inform the specifier or purchaser when applicable.*	For the applying entity, identify personnel responsible for making different types of adjustments to concrete mixtures. Define types of adjustments permitted by plant personnel. Define adjustments requiring approval by technical personnel. Outline process used to inform specifier or purchaser, when required. **(5.4)**
5.5 Order Tracking.	
Process defined for receiving orders, order entry and verification of order fulfillment *Review procedures used for receiving orders, assignment of order identification to designated mixtures and tracking order fulfillment.*	For the applying entity, describe procedures for order entry, order identification and verification of order fulfillment. Descriptions should be brief – about 1 page. **(5.5)**
5.6 Records	
5.6.1 Record Keeping.	
Record keeping process for maintaining information related to projects – concrete mixtures, batch records, delivery tickets and other records are documented. *Review process of maintaining records of concrete mixture proportions, batch records, delivery tickets, test data on concrete mixtures performed by the company or by the laboratory performing acceptance testing. Review a sampling of data records that include concrete mixture information, batch records and delivery tickets for 2 projects over the previous 12 months (per applying entity). Project test data not required for this section.*	For the applying entity, describe procedures used for maintaining batch records, delivery tickets, and test data on concrete mixtures. Provide sampling of records for 2 projects over the previous 12 months (per applying entity) to include concrete mixture information, batch records and delivery tickets. Project test data not required for this section. **(5.6.1)**
5.6.2 Record Retention.	
Period of record retention defined in company policy based on type of information and types of project *Review the record retention policy of the company, either established by company policy, project requirements or jurisdictional requirements.*	For the applying entity, outline record retention policy for records listed in 5.6.1. **(5.6.2)**

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
6 Measurement Systems	Procedures and documentation should be consistent with 1.1.10 – 1.1.13
6.1 Mixture identification and traceability	
6.1.1 Mixture Designations.	
Process defined for establishing internal concrete mixture codes and establishing mixture designations for communications with customers *Review the company's process of establishing mixture codes for internal use and understanding. Review communication of mixture designations to customers and on mixture submittals. Procedure descriptions are adequate.*	For the applying entity, outline process of establishing internal concrete mixture codes and for establishing mixture designations on submittals, orders, and delivery tickets for customers. **(6.1.1).**
6.1.2 Mixture Traceability.	
Process defined for ensuring traceability of designated mixtures in the company's databases to batch recordation and delivery tickets *Verify that mixture designations and individual batches of concrete sold are traceable to batch records and delivery tickets through truck numbers or other.*	For the applying entity, outline process for tracing mixtures in the company database to batch records and delivery tickets. Provide one delivery ticket and corresponding batch record from 1 plant. The auditor may randomly select one or more plants for additional verification. **(6.1.2)**
6.2 Customer Resolution.	
Customer complaint or product defect resolution process is addressed. *Review the customer complaint handling process. Review at least 1 record (per applying entity) of documented complaints about quality, details of any non-compliances identified and corrective actions taken*	For the applying entity, outline process for customer complaint handling or product defect resolution system. At least 1 record in the past 12 months (per applying entity) of documented complaints about quality, details of any non-compliances identified and corrective actions taken. **(6.2)**
6.3 Internal quality audits	
Record of one internal audit and corrective actions resulting from the audit completed in the past 12 months (per applying entity). *Review completed internal audit within the last 12 months and if any corrective action was needed. Review process of ensuring corrective action is taken, with management approval.*	Provide sample of a portion of a completed internal audit within the applying entity performed in the past 12 months. Include corrective action needed, if any. Document process of ensuring corrective action is taken, with management approval. This should not exceed about 5 pages. **(6.3)**
6.4 Internal Testing.	
Process provided for testing one concrete mixture from one plant by company personnel – frequency of once/week or once every 500 cubic yards whichever results in the smaller number of tests. *Review results of tests performed by company personnel on 1 selected concrete mixtures as a continual monitoring of quality process at 1 plant. Records should be available for the past 6 months and at least 10 records should be reviewed for the selected mixtures. Tests conducted should include slump, temperature, density and/or 28 day compressive strength; air content for air-entrained concrete only. Review process for data*	For the applying entity, outline process for testing one concrete mixture from one plant by company personnel at frequency of once/week or once every 500 cubic yards whichever results in the smaller number of tests. Provide report and/or charts of at least 10 records of results of tests performed by company personnel of one concrete mixture

Requirement (*auditor guidance*)	Documentation – (applicant guidance)
analysis.	produced from 1 plant within the past 6 months. Tests conducted should include slump, temperature, density and/or 28 day compressive strength; air content for air-entrained concrete only. Document process for data analysis. **(6.4)**
6.5 Quality Assurance Test Records.	
Process established, with assigned responsibility, for collection and monitoring of quality assurance tests performed by third-party labs, data review and corrective action. Records provided for at least 2 projects in the past 12 months (per applying entity). *Review the process used for obtaining and tracking project test data generated by third-party acceptance testing, data tracking for trends, and control points that generate corrective action on two projects during the past 12 months. Ensure that there is assigned responsibility for data collection, analysis and decisions for corrective action.*	For the applying entity, describe process used for obtaining project test data, data analysis and corrective action. Identify personnel responsible for collection and analysis of test data and for corrective action. Provide project test records on 2 projects during the previous 12 months (per applying entity). **(6.5)**
6.6 Non-conforming Concrete Mixtures - Identification and Management.	
Process defined, with assigned responsibility to identify and manage non-conforming concrete mixtures *Review process for identifying non-conforming concrete mixtures related to mixture properties or purchaser or specification requirements and assigned responsibility for resolution. Examples are excessive slump, air content, incorrect ingredient or contamination, batching accuracy or load size.* ***Corrective Action***. Process defined to eliminate the cause for future non-conformities with recurring problems *Review 1 case in the past 12 months (per applying entity) where frequent occurrences of non-conforming product have caused corrective action*	For the applying entity, identify responsibility and describe process for identifying and addressing non-conforming product. Examples are excessive slump, air content, incorrect ingredient or contamination, batching accuracy, or load size. Process to analyze frequent non conformances and future prevention. Provide 1 case in the past 12 months (per applying entity) where frequent occurrences of non-conforming product resulted in corrective action. **(6.6)**
6.7 Measurement of quality objectives.	
Data and records used to measure quality objectives stated in the QM are provided. *Review records that document that at least 2 stated quality objectives (1.1.2) are being quantified relative to stated quality objectives.*	For the applying entity, provide records that document that at least 2 stated quantifiable quality objectives are being tracked or measured relative to stated quality objectives. See 1.1.2. **(6.7)**
6.8 Management of Returned Concrete.	
Review company policy that identifies responsibility and process for managing returned concrete, when reused in whole or part. *Review the company's policy and adherence to managing returned concrete and the processes used when returned concrete or its constituents is processed for reuse or sale by the company. Ensure that company personnel are aware of these processes through internal education.*	Outline company's policy and describe process used by the applying entity to ensure adherence to managing returned concrete when reused in some manner. Identify responsibility. Provide documentation on how this is communicated to company personnel. **(6.8)**

Appendix A – Outline of Training Requirements

Truck Mixer Operator

In lieu of certifications, the following outlines the recommended technical training topics for truck mixer operators.

• Basic concrete technology	• Procedures for placing and finishing concrete
• Types of concrete and concrete materials	• Factors impacting concrete due to ambient temperature
• Mixing requirements, water additions	• Handling and recording customer complaints
• Control of slump and air	• Delivery tickets and jobsite notes
• Company policy on jobsite water additions	• Environmental regulations – delivery and jobsite
• Truck and mixer operation, maintenance and production of concrete	• Safety – driving and personal
• Fresh concrete test methods and procedures – recognition of improper procedures	• Handling jobsite concrete rejection

It is recommended that truck mixer operators should have continuing education that is documented

Appendix B1 – Checklist for laboratories used for mixture development

1. The laboratory shall maintain documentation of the following:
   1.1 Laboratory equipment inventory,
   1.2 Personnel qualifications,
2. The laboratory is under the direction of a licensed professional engineer with at least 3 years experience in materials testing or an individual with at least 7 years experience in concrete technology and materials testing.
3. Concrete laboratory technicians possess current technician certification that covers ACI Field Grade I and ACI Strength Testing Technician certification. ACI Lab Level 1 is an acceptable alternative.
4. Laboratory maintains current published annual book (or online version) of ASTM or other standards on tests that it performs.
5. Proper record of equipment verification is maintained in the laboratory
   5.1 Verification documented annually for – scales and balances, slump cone (ASTM C143). air content (C173), temperature (C1064), dimensions of cylinder molds (C470), sieves checked for defects and verification procedure. Frequency at every 3 months for pressure air meters (C231), sulfur capping (C617).
   5.2 Compressive strength machine should conform to C39. Its calibration is annually verified
6. Curing tank/room requirements:
   6.1 Curing tank/room that can be used for curing test specimens and meets the requirements stated in ASTM C511.

Appendix B2 – Checklist for laboratories performing routine quality testing

1. The laboratory shall maintain documentation of the following:
   1.1 Laboratory equipment inventory,
2. Proper record of equipment verification is maintained in the laboratory
   2.1 Verification documented annually for – scales and balances, slump cone (ASTM C143). air content (C173), temperature (C1064), dimensions of cylinder molds (C470) if used, sieves checked for defects and verification procedure, if used. Frequency at every 3 months for pressure air meters (C231), sulfur capping (C617), if used.
   2.2 Compressive strength machine (if any) should conform to C39. Its calibration is annually verified
3. Curing tank/room requirements, if available:
   3.1 Curing tank/room that can be used for curing test specimens and meets the requirements stated in ASTM C511.

References

1. *Quality Management System for Ready Mixed Concrete Companies*; Part A: Preparation Guidelines for Quality Manual for Ready Mixed Concrete Companies; Part B: Sample Quality Manual: Global Ready Mixed Company; Part C: Ready Mixed Concrete Company External Quality Audit Checklist for Compliance with Quality Plan, February 2008, NRMCA, Silver Spring, MD, www.nrmca.org/p2p
2. *Quality Control Guide* - Section 1 of NRMCA QC Manual, NRMCA, Silver Spring, MD, www.nrmca.org
3. *Quality Control Check List* - Section 2 of NRMCA QC Manual, NRMCA, Silver Spring, MD, www.nrmca.org
4. *Plant Certification Check List* - Section 3 of NRMCA QC Manual, NRMCA, Silver Spring, MD, www.nrmca.org
5. *NRMCA Guideline Manual for Quality Assurance/Quality Control*, NRMCA Publication 2P190, 2006, NRMCA, Silver Spring, MD, www.nrmca.org
6. *Annual Book of ASTM Standards, Volume 04.02*, Concrete and Aggregates, ASTM, 100 Barr Harbor Drive, West Conshohocken, PA, www.astm.org
7. *Concrete Plant Operator's Manual*, NRMCA Publication 2P159, 2005, NRMCA, Silver Spring, MD, www.nrmca.org
8. *User's Guide to ASTM Specification C94 on Ready Mixed Concrete*, by D. Gene Daniel and Colin Lobo, ASTM MNL 49, available from NRMCA – Publication 2PMNL49. www.nrmca.org; www.astm.org
9. *Improving Concrete Quality*, by Obla, K.H., CRC Press, Boca Raton, FL, 2014, 214 pp.
10. *ACI 121R-08 - Guide for Concrete Construction Quality Systems in Conformance with ISO 9001*, Report of ACI Committee 121, American Concrete Institute, Farmington Hills, MI, www.concrete.org
11. *ACI 211.5R-01 (2009) – Guide for Submittal of Concrete Proportions*, Reported by ACI Committee 211, Manual of Concrete Practice, Part 1, American Concrete Institute, Farmington Hills, MI, www.concrete.org

Application Form

NRMCA Quality Certification

Date of Submission:_____ ❑ Initial Application ❑ Recertification Application

Applying Entity Information *(This information will be used for the certificate)*

Name of Applying Entity: _____

Company Name: _____

Production Facilities (Name, City, State) included in submission:

_____

_____

_____

_____

Submitted by: (Individual may be contacted by the Auditor for additional information or clarification)

The submission has been assembled and submitted by:

Name: _____

Title: _____

Company:_____

Address: _____

Direct Phone: _____ Cell Phone: _____ Email: _____

By signing this form, the submitter states:

1. The information submitted accurately represents the quality management processes used at the Applying Entity
2. The quality processes represented in this submission and required by this certification will be maintained at this level or higher for the period of the certification.

Signature: _____

Printed Name: _____

Company Executive *(Individual with overall management responsibility for Applying Entity)*

I hereby request an Audit of the submission for the Applying Entity for conformance to the NRMCA Quality Certification Program. I state that to the best of my knowledge, the submission represents the quality management processes followed by the Applying Entity and these will be maintained in conformance with the NRMCA certification criteria for the duration of this certification.

Signature: _____

Printed Name: _____ Title: _____

For NRMCA Use:

Date Received:_____ Date to Auditor: _____ Date Approved: _____

Processed by: _____ Payment Received: _____ Payment method: _____

Certification ID: _____ Expiration Date: _____ Date Sent:_____

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Audit Form

NRMCA Quality Certification

Note to Auditor: Use this form to complete your audit. Indicate whether the company's submission complies with the intent of the section (Y/N). Indicate if a section is not applicable (N/A). Provide comments as necessary and indicate information required to satisfy a requirement. Contact the company person making the submission directly for clarifications or additional information. The intent of the audit is not to evaluate whether the quality process are appropriate or not, but to see if their submission meets the intent of the requirements for certification. The auditor may request documentation from one or more additional plants for the following criteria: 3.1.1, 3.1.2, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.5.1, 4.2, 4.3, 6.1.2. The auditor should consider requesting documentation from additional plants for at least one of these criteria on a random basis to verify that all plants comply with the company's quality manual and the certification criteria.

Applying Entity: _____

Company: _____

Auditor: _____

Date Received: _____ Date Review Completed: _____

Sec.	Y/N or N/A	Auditor Comments	Corrective Action Needed
1			
1.1			
1.1.1			
1.1.2			
1.1.3			
1.1.4			
1.1.5			
1.1.6			
1.1.7			
1.1.8			
1.1.9			
1.1.10			
1.1.11			
1.1.12			
1.1.13			
1.2			
1.2.1			
2			
2.1.1			
2.1.2			

Sec.	Y/N or N/A	Auditor Comments	Corrective Action Needed
2.1.3			
2.1.4			
2.1.5			
2.2.1			
2.2.2.1			
2.2.2.2			
2.2.2.3			
3			
3.1.1			
3.1.2			
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6.2			
6.3			

Sec.	Y/N or N/A	Auditor Comments	Corrective Action Needed
6.4			
6.5			
6.6			
6.7			
6.8			

Time Spent on Audit: _____

Company had to be contacted for clarifications and supporting documentation ❑ Yes ❑ No

Based on my audit of the provided documentation from the Applying Entity, my decision regarding conformance to the certification criteria:

❑ Approve ❑ Do Not Approve

Auditor Signature: _____

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Sample Certificate

NRMCA

NRMCA Quality Certification

NATIONAL READY MIXED CONCRETE ASSOCIATION

Quality Certification

Certificate of Conformance

THIS IS TO CERTIFY THAT

Applying Entity

that includes

Plant name and location (1)
Plant name and location (2)
Plant name and location (3)

of

Company Name

has been audited and verified to be in conformance with the requirements of the NRMCA Quality Certification Program and is hereby certified for the duration below:

September 30, 2013	***September 30, 2015***
Audit Approval Date	Certification Expiration Date

This company will maintain this Entity in compliance with the NRMCA Quality Certification Program requirements for the duration of the certification period.

Signature of Company Executive	Title of Company Executive

***Note:** The NRMCA Quality Certification Program assesses the conformance of the named entity to a Quality Manual established by the Company and minimum criteria set forth in this certification program. The submission for this certification has been audited and verified by an independent third-party auditor selected by NRMCA. Unauthorized reproduction or misuse of this certificate may result in legal action.*

Company ID #: 555555 © 2013 Certificate ID #: 0000

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