

TO: CHIEF HIGHWAY ENGINEER
ALL H.Q. DIRECTORS: Prof. Services, Planning & Major Projects
ALL REGIONAL MANAGERS Prof. Services, Planning & Operations
ALL DISTRICT HIGHWAYS MANAGERS

SUBJECT: QUALITY CONTROL/QUALITY ASSURANCE ON MOTH CONSTRUCTION PROJECTS

INTRODUCTION:

For many years, the terms "quality control" and "quality assurance" have been used interchangeably. Typically, the purchaser would carry out all required testing to prove the adequacy of a product, such as ready-mix concrete, delivered to the site.

More recently, with end-product specifications coming into wider use, the two terms have come to refer to different aspects of materials acceptance. Two recent definitions are:

Quality Control is "...those actions which provide a means to measure and regulate the characteristics of an item or service to contractual or regulatory requirements."

Quality Assurance is "...those planned and systematic actions needed to provide confidence that products or services will satisfy specific requirements."

CURRENT MOTH POLICY:

Current Ministry policy is that a supplier carries out Quality Control during manufacture of the product. Usually the frequency of such testing is set forth by one of the standard writing agencies, such as ASTM, CSA, CGSB and the like.

The Ministry carries out Quality Assurance as a check that the product is indeed up to standards. Testing frequency is variable. Materials from a reputable manufacturer, who provides the Ministry with full current Quality Control test data, may be only spot-checked occasionally by the Ministry. Where the manufacturer provides only a statement that the product has been tested and is up to standard, the Ministry will have to carry out Quality Assurance testing on a frequency approaching that of the original, but unreported, Quality Control tests.

INTERPRETATION:

Where the Ministry's Quality Assurance test data disagree significantly from those reported from the manufacturer's Quality Control tests, then the cause of the disagreement must be identified and resolved quickly. In the interim, the frequency of Quality Assurance testing must be increased to equal or greater than the frequency required for Quality Control.

Disagreement between QC and QA data cannot be ignored simply because the QA tests show the product to be acceptable. This would be tantamount to the Ministry assuming total responsibility and cost for assuming Quality Control duties - not the Ministry's intent.

POSSIBLE EXCEPTIONS:

On very small projects, or in remote locations, where the supplier may not have sophisticated equipment or adequate knowledge to carry out satisfactory QC testing, the Ministry may assume these duties. This must be spelled out unequivocally in the Contract, and reflected by appropriate reduction of material prices.

RECOMMENDATIONS:

The Ministry's policy regarding Quality Control and Quality Assurance must be clearly understood by those consultants to whom the Ministry's project management duties are assigned. In order to minimize the Ministry's risks, as well as costs of Quality Assurance testing, the Contract should clearly state that all suppliers shall provide the Ministry's project manager with complete data from the current Quality Control tests. These should be compared with results of the Quality Assurance tests, and a summary be included in a written monthly report to the responsible person in the appropriate Ministry Office.

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