

# Surveillance of Materials, Testing and Components

RC 500.11

## 1. Scope

### 1.1. Scope

This code of practice covers surveillance of materials, testing and components supplied or manufactured by contractors and their subcontractors, as applicable to VicRoads Contracts for:

- (a) VicRoads Register of Testing Companies;
- (b) road and bridge materials; and
- (c) structural components.

The Code details requirements for VicRoads Technical Services surveillance officers, the conduct of the surveillance and the action to be followed based upon the results of the surveillance.

### 1.2. Field of Application

The surveillance is carried out on works and materials testing undertaken by contractors and their sub-contractors engaged both in the production of road and structure materials, including VicRoads corporate programs, and in their placement and compaction, as applicable, and on the production of structural components such as precast concrete elements, fabricated steelwork items and protective coating.

VicRoads arranges and conducts surveillance as detailed in VicRoads Standard Specifications: Section 160 Part A - Construction – General, Clause 160.A10; and Section 2010 - Management Systems General – Clause 2010.06.

### 1.3. Surveillance

Surveillance is the continuing evaluation of the status of procedures, methods, conditions, products, processes and services, and analysis of records to ensure that the quality requirements are being met.

VicRoads quality requirements are described in standard specification sections and contract specific clauses.

## 2. Surveillance Officers

VicRoads Technical Services surveillance officers must:

- (a) have the necessary experience in the testing, production and quality requirements of the material under surveillance; and
- (b) have undergone suitable training in the surveillance of processes; and
- (c) be authorised for each relevant type of surveillance by VicRoads through Manager – Construction Materials, or Manager – Geotechnical Services.

## 3. Application of Surveillance

In all cases, surveillance shall be carried out against an active VicRoads contract(s).

Surveillance by VicRoads Technical Services shall occur when requested by either:

- (a) the contract Superintendent or nominated representative (VicRoads contract officer), including contracts where materials testing services are provided by suppliers on the VicRoads Register of Testing Companies; or
- (b) the managing officer as part of a VicRoads corporate program (currently consists of the quarry accreditation program and mix design registration for asphalt, concrete and crushed pavement materials); or
- (c) an external contract principal.

Specialist surveillance, such as for structural components including precast concrete, steel fabrication, and protective coating, will be carried out on a project basis, against a specific VicRoads contract.

Requests for surveillance may be arranged by VicRoads staff through VicRoads Technical Services, Materials Surveillance database.

In other cases, surveillance may be organised by the VicRoads Region or Project responsible for the work and with reference against a specific VicRoads contract.

## 4. Frequency of Surveillance

The frequency of surveillance shall be determined by either:

- (a) the contract surveillance plan; or
- (b) as agreed with the contract administrator; or
- (c) application of the requirements for the VicRoads Register of Testing Companies; or
- (d) participation in an accreditation or register program, at an annual or use-based interval.

The frequency of surveillance may be varied as the work progresses. As procedures are observed to be in place and delivering the required product quality, the frequency of surveillance could be reduced. However, in consultation with the relevant contract administrator, both the frequency and duration of surveillance should be increased where non-conformances arise.

## 5. Performance of Surveillance

The surveillance officer shall, with reasonable notice, arrange for a suitable date and time to conduct the surveillance at the contract workplace. Generally, at least two days notice will be given. The scope of the surveillance and the relevant active contract will be identified. In cases where the surveillance officer is required to be present for the purpose of hold point release, reasonable notification is the responsibility of the contractor (subcontractor or supplier).

On arrival at the workplace, the surveillance officer must notify the workplace manager or their representative of the purpose of the visit, and comply with any induction or record requirements.

The surveillance officer will monitor and verify those aspects of the quality system which influence, as appropriate to, the manufacture of the component(s), the supply of material and the performance of testing. Surveillance shall be carried out by observing processes and test methods, as detailed in quality plans and process control procedures, and reviewing test results and frequency of testing against specified requirements.

Records of the surveillance shall be made on a VicRoads worksheet covering the processes being surveilled. Photographs may be taken during the surveillance visit to aid the documentation of observations. Discretion must be exercised in taking photographs, in some cases photographs may not be appropriate; e.g., of sensitive documents; and permission should be sought.

Prior to leaving the workplace, the surveillance officer must verify with the workplace manager or their representative those practices that appear to be non-conforming.

Note: Workplace means worksite, laboratory, quarry, batching plant, pre-cast yard, steel fabrication workshop, abrasive blasting and painting workshop, hot dip galvanizing plant, and similar places.

## 6. Reporting

The outcomes of surveillance shall be reported as a Surveillance Report in the VicRoads Technical Services, Materials Surveillance database. When appropriate, non-editable versions of the Surveillance Report shall be saved to the VicRoads file server.

Notwithstanding the requirements of Section 160.A10, and Section 2010.06, the findings and information obtained from the surveillance should be treated as confidential and be appropriately protected by all parties.

Reports shall be issued, and NC resolved, as follows, as applicable to the request for surveillance:

- For surveillance against a specific contract: only to the VicRoads contract officer(s) requesting the surveillance. NC resolution is through the contract administration officer; or
- For surveillance to support the VicRoads Register of Testing Companies scheme: to the VicRoads contract officer, the contractor, the tester and the Materials Testing Management Group. NC resolution is through the contract administration officer; or
- For surveillance supporting the quarry accreditation program: to the quarry against whom the surveillance was conducted. A draft non-editable version of the Surveillance Report shall be issued initially, indicating an appropriate agreed time frame for closeout of any non-conformance raised and issue of the final report. NC resolution is through the surveillance officer. A final non-editable version Surveillance Report shall be issued to the quarry, with copy to the quarry accreditation program manager; or
- For surveillance for an external principal (non-VicRoads contracts): a non-editable version of the Surveillance Report will be sent direct to the external contract administrator requesting the surveillance.

## 7. Managing Non-Conformance

Where components, processes, products or testing do not conform to the specification or test method requirements, including findings from visual observation or inspection, a Non-Conformance (NC) shall be raised in the Surveillance Report.

Where appropriate, an agreed time frame for closeout of any non-conformance raised should be established.

Resolution of NC during the surveillance may occur. In such case, the NC and the corrective action taken shall both be reported in accordance with Clause 6.

Where corrective action or disposition to close out NC has been taken or agreed, this shall be recorded into the Materials Surveillance database, either in the editable disposition portion of the original report, or through a new surveillance report.

**8. Resolution of Non-Conformance**

**8.1. Surveillance undertaken against a specific VicRoads Contract, including VicRoads Register of Testing Companies**

- (a) NC shall be managed through the contract by the VicRoads contract officer, who may receive assistance and support from the surveillance officer.
- (b) Where closeout is not achieved through step 8.1(a), the Contract Superintendent (or representative) shall be advised, and shall manage NC through the Contract by the principal (head) contractor as part of its quality system. Where necessary, the matter shall be resolved in accordance with the Settlement of Disputes process for the Contract.

**8.2. Surveillance undertaken as part of the VicRoads quarry accreditation program**

- (a) NC shall be managed by the VicRoads surveillance officer, including the issue of draft and final reports.
- (b) Where the raising of NC is disputed after issue of the final Surveillance Report, the participants of the surveillance shall review the evidence and factors involved with the intent to achieve resolution and closeout.
- (c) Where resolution is not achieved at step 8.2(b), the NC should be referred to Manager -Construction Materials or Manager -Geotechnical Services, as appropriate, who will determine a course of action that may finally involve step 8.1(b) using an appropriate VicRoads contract to direct closeout.

**Code of Practice - Revision Summary**

**RC 500.11 Surveillance of Materials, Testing and Components**

Date	Clause Number	Description of Revision	Authorised by
September 2014	Full document	Complete revision and re-issue of May 2007 version	Principal Advisor – Pavement, Geotech. & Materials