

Main Roads Technical Standard

MRTS23

Supply and Delivery of Quicklime and Hydrated Lime for Road Stabilisation

June 09

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FEEDBACK

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Supply and Delivery of Quicklime and Hydrated Lime for Road Stabilisation

1 INTRODUCTION

This Technical Standard applies to the supply of dry lime for incorporation in soil stabilisation work and its delivery to the site of the works or any other location(s) specified by the Principal.

This Technical Standard shall be read in conjunction with MRTS01 *Introduction to Technical Standards*, MRTS50 *Specific Quality System Requirements* and other Technical Standards as appropriate.

This Technical Standard forms part of the Main Roads Specifications and Technical Standards Manual.

2 DEFINITION OF TERMS

The terms used in this Technical Standard shall be as defined in Clause 2 of MRTS01 *Introduction to Technical Standards*. The terms used in this Standard shall also be as defined in MRTS07A *In Situ Stabilised Subgrades using Quicklime or Hydrated Lime*.

3 REFERENCED DOCUMENTS

Table 3 lists documents referenced in this Technical Standard.

Table 3 – Referenced Documents

| Reference | Title |
|-------------|---|
| AS 1672.1 | Limes and limestones - Limes for building |
| AS 4489.6.1 | Test methods for limes and limestones - Lime index - Available lime |

4 MATERIAL

Lime shall comply with this Technical Standard and shall not be more than three months old, measured from its date of manufacture. Lime shall have an available lime index, as determined by testing in accordance with AS 4489.6.1, of not less than 80%.

Lime shall comply with the requirements of AS 1672.1 with regard to physical requirements, chemical requirements, sampling and marking of containers and bags.

Lime shall be either a quicklime, supplied in a fine granular form with the maximum dimension, in any direction, of granules not exceeding 3 mm and, which can be readily slaked with water, or powdered hydrated lime, as stated in the Contract.

In addition to meeting the requirements of AS 1672.1, quicklime shall be capable of being spread uniformly by means of a bulk spreader, without producing excessive dust during the spreading operation.

A certificate of test results demonstrating compliance shall be provided to the Administrator and included in quality records, for each load, or part thereof, of each source and/or type of lime.

The Principal may reject the lime supplied if in the Principal's opinion the lime supplied contains over-burned, re-carbonated or impure lime.

5 MODE OF SUPPLY

Quicklime shall be supplied in bulk form only.

Hydrated lime shall be supplied either in bulk form or in multi-wall paper bags of 25 kg nominal capacity, as stated in the Contract.

6 WEIGHT OF LIME

If lime is supplied in bulk form, each delivery vehicle shall have the weight of lime delivered certified on a registered public weighbridge. A copy of each certified weighbridge docket shall be included in the quality records and shall be provided to the Administrator.

If lime is supplied in bags, each bag in the shipment shall bear the manufacturer's certified nominal weight and any other markings stipulated in AS 1672.1.

7 RATE OF DELIVERY

Lime shall be delivered at the rate stated in the Contract except that, where the Administrator directs the rate stated in the Contract is to be modified, the rate of delivery shall be mutually agreed between the Administrator and the Contractor.

8 MODE OF DELIVERY

All deliveries of bulk lime shall be made in air-tight, water proof and water-tight blower type vehicles. Further the delivery vehicles shall be specifically designed for the purpose and shall be capable of discharging the lime at a rate not less than 40 tonnes per hour into the spreader or bulk storage bin, as relevant. These delivery vehicles shall have the capability to pneumatically transfer the lime from the vehicle to a bulk storage silo or bulk spreader as necessary. Equipment used to transfer the lime shall be waterproof during the transfer process. All equipment used to deliver/transport or store the lime shall be emptied, cleaned and dried prior to the introduction of each different type or source of lime.

All deliveries of bagged lime shall be made in air-tight, water proof and water-tight bags. The bags shall be labelled, stacked and wrapped or strapped on pallets.