Driver safety at customer sites: bulk delivery 6th edition

INTRODUCTION

Following the ejection of three filter housings from silo tops within three months, the procedure for validating customer safety controls has been updated.

Approaches adopted by MPA Cement member companies will vary, although the validation of safety controls will be undertaken jointly with the customer before the first delivery commences.

- **A green rating indicates that the issues have been satisfactorily controlled.**
- **An amber rating indicates the need to address an issue within an agreed timescale and to implement interim measures in order for deliveries to be made safely.**
- **A red rating indicates an issue has been identified which renders the site unsafe for delivery. This information will be used to agree an improvement plan before deliveries commence.**

Any issues identified will be subject to further discussion, although ultimately it is the customers responsibility to correct any deficiencies.

The following safety controls are essential:

- A correctly sized, secured and maintained, pressure relief valve and filter.
- Regular maintenance carried out on the silo and fittings.
- High level alarms visible/audible to the driver and tested regularly – preferably from ground level.
- All inlet ports locked when not in use.
- Operating procedures displayed and enforced.

Be aware that a badly maintained silo is a potential bomb.

- Dust emissions from the silo require urgent attention.
- **There is an expectation that automatic shutoff valves should be fitted to existing silos by 2025 (new silos should be fitted with automatic shutoff valves as a matter of course).**

Over-pressurisation incidents lead to the 'launching' of these filter/filter housings from silos. If these had landed on anyone they would have been killed.

1 General site safety

GREEN AMBER RED

1.1 Is the approach to the site entry safe for articulated Tanker vehicle access and egress? ☑ ☐ ☐

1.2 Does the site display clear signage / instructions at the site entrance (e.g. driver instructions, directions, speed limits etc)? ☐ ☐ ☐

1.3 Is the onsite approach to the discharge point safe for articulated Tanker vehicle access and egress with minimal vehicle manoeuvring? ☐ ☐ ☐

1.4 Is the ground even and firm? ☐ ☐ ☐

1.5 Is the ground properly drained, i.e. minimal standing water? ☐ ☐ ☐

1.6 Is the ground free from slip and trip hazards? ☐ ☐ ☐

1.7 On first arrival does the customer provide

a. a site specific induction? ☐ ☐ ☐

b. task specific instructions (e.g. the connection procedure, including the procedures to follow if the operation of filters and alarms are not fully automatic, what to do if an alarm sounds or emissions of dust occur)? ☐ ☐ ☐

c. information on how much space is available in the silo? ☐ ☐ ☐

d. details of who to contact in an emergency? ☐ ☐ ☐

1.8 Has the customer defined a safe pedestrian access route for our driver to collect keys and deliver paperwork (also consider out of hours)? ☐ ☐ ☐

1.9 Does the delivery point allow the driver to maintain a safe exclusion zone around the driver and the pressurised tanker from other site operations and vehicle movements? ☐ ☐ ☐

1.10 If the cement tanker has to make a reversing manoeuvre, is an agreed safe system in place that excludes pedestrians from the area behind the tanker? ☐ ☐ ☐

1.11 Is the lighting sufficient for our driver to see where he is going and what he is doing? ☐ ☐ ☐

GREEN AMBER RED

1.12 Is there secure fencing around pits or tanks into which our driver could fall? ☐ ☐ ☐

1.13 Is our driver safe from falling objects from overhead hazards (e.g. conveyor belt systems)? ☐ ☐ ☐

2 Customer's silo

2.1 Can the silo inlet connection be reached by one length of hose from the tanker (one hose length = green, two hose length = amber, three hose lengths = red)? ☐ ☐ ☐

2.2 Is the silo inlet connection between two and a half feet (0.8m) and four feet (1.2m) above ground level and is the inlet pipe angled at 35 to 45 degrees to the vertical? ☐ ☐ ☐

2.3 Is all pipework between the end of the silo inlet connection and the silo firmly secured, for instance by mounting brackets? ☐ ☐ ☐

2.4 Is all pipework between the end of the silo inlet connection and the silo made of steel (or suitable equivalent) and does it appear in reasonable condition? ☐ ☐

a. Is the coupling (and anti-whip device, where fitted) of an appropriate type and in good condition?(because of the risks of leaks and hoses detaching, couplings must be of a proprietary type and not home made) ☐ ☐ ☐

b. Type of connection (Unicone, Stortz or Other)?

c. If Unicone, is the silo connection structurally intact (i.e. no hole drilled to accept padlock)?

d. If Unicone, use test piece and note results

2.5 Is the silo inlet connection clearly identified by a sign/s showing silo number, product identification and discharge procedures? ☐ ☐ ☐

		GREEN	AMBER	RED
2.6	Is the silo inlet connection "capped" and "locked", when not in use?	☐	☐	
2.7	Is the high level detection system linked to an audible and visual warning, for each silo which can be seen and heard by the tanker driver whilst standing at their controls during delivery?	☐	☐	☐
2.8	Are warning lamps and sirens clearly labelled to indicate the alarm condition they are displaying and the silo to which they relate?	☐		☐
2.9	Where there is a local limit on maximum allowable pressure, is it clearly displayed?	☐		☐
2.10	Confirm with the customer that there is a functioning Pressure Release Valve (PRV)?	☐		☐
2.11	Is there is a written maintenance plan for all silo safety controls (e.g. PRV, filter etc) and records that maintenance has taken place.	☐	☐	☐
2.12	Are there regular inspections of silo safety controls (commensurate with the risk) e.g. for evidence of dust emissions etc.	☐	☐	☐

NOTE (additional safety points):
- Drivers must stop the delivery if an alarm sounds or if dust emissions occur
- A whip arrestor must be used for each delivery
- Drivers are not authorised to permit the towing of vehicles

2.18 Are there any further comments you wish to make?

Assessor name

Signature* Date

Company

Site

Site contact

Site signature* Date

FOR OFFICE USE ONLY

	GREEN	AMBER	RED
Overall Customer Site Safety Rating	☐	☐	☐

Explanation

Disclaimer