MPQBL14

Load blast holes with bulk explosive to blast specification

Overview

What is this standard about?

This standard specifies the skills, knowledge and understanding required to demonstrate competence to load blast holes with bulk explosive from a mixer truck to specification. The standard covers checking blast location/s prior to loading, finalising the blast specifications and confirming the charge, preparing the explosive materials and loading blast holes with the explosive materials. The standard also covers purging the system, preparing and securing the vehicle to leave the blast location and site.

Knowledge is required across a range of specialisms which include: blasting specification, symbols and terminology, reporting procedures, potential hazards, effects of adverse environmental and site conditions on explosives, relevant legislation, manufacturers recommendations for handling explosives and detonators and types and properties of explosive materials used, explosive types and susceptibility to detonation.

Who is this standard for?

This standard applies only to those persons assigned to load blast holes with bulk explosive and associated explosive materials from a bulk explosive truck.

Performance criteria

You must be able to:

1. check written information relevant to the blasting specification is complete and unambiguous
2. establish and maintain communications with the shotfirer and agree the procedure for the work activity
3. check the access to the loading points, and the condition of the loading area and confirm they are suitable for the vehicle and loading operation
4. check that personal, vehicle and area protection and safety arrangements are appropriate
5. check the vehicle is earthed and equipment is ready to mix
6. mix materials to meet the blast specification requirements.
7. load blast holes in accordance with the blasting specification and under the direction of the shotfirer
8. monitor the performance of the mixing truck
9. check the quality of the bulk **explosive materials** produced is checked and confirmed as meeting requirements.
10. make adjustments to modify truck performance, loading or quality.
11. reposition vehicle
12. take precautions to protect vehicle and personnel against adverse environmental conditions.
13. record blast loading, identifying and reporting variations between the specification and the actual conditions at the time of loading
14. purge the system
15. position all tools and equipment on the vehicle and secure them for leaving the blast site
16. ensure work activity documentation is completed
17. prepare the vehicle for travel.
18. drive vehicle from blast location by approved route
19. notify the responsible person that work is completed and site has been vacated
20. carry out work activities according to the **approved policies, procedures and practices**

Knowledge and understanding

You need to know and understand:

1. the **approved policies, procedures and practices** in the context of the work activity
2. your responsibilities under the health and safety statutory requirements.
3. blast specifications.
4. written information relating to the bulk explosive truck operation
5. the principles and practice of ensuring blast hole suitability
6. bulk explosive truck operations measuring instrumentation and techniques.
7. communications, reporting and recording arrangements for the site, blast location and the work activity
8. the potential hazards, risks and environmental aspects and impacts associated with bulk explosive loading
9. the hazards and risks associated with the blasting environment
10. how to assess that the conditions of blast sites
11. the effects of adverse environmental conditions.
12. the limits of your own responsibility.
13. the shotfirers responsibilities in relation to loading of blast holes.
14. the types and range of explosive materials
15. the characteristics of bulk explosive materials
16. the methods to monitor truck performance whilst loading holes.
17. the methods to monitor the quality of bulk explosive produced.
18. the methods to monitor filling of blast holes
19. how to calculate the quantities of explosive materials used
20. the effects of adverse environmental and site conditions on system performance
21. the effects of water in blast holes and the subsequent limitations on methods of loading.
22. the causes of blockages in holes and authorised remedial action.
23. the types of truck mixing problems that can arise during loading, and the corresponding remedial actions
24. actions that can be taken in event of overloading or incorrectly filling blast holes with bulk explosive.
25. actions to be taken in the event of any variations to the blast specification
26. purging techniques, and why purging is required
27. how to deal with excess mixed **explosive materials**
28. the standards for stowing tools and equipment and making vehicle fit for travel
29. how and why to earth vehicles
30. types of emergencies in relation to bulk explosive truck operation whilst

loading blast holes, and how to respond to them

31. actions to be taken in the event of problems occurring outside the limits of your responsibility

Scope/range

1. **explosive materials**: explosive articles or substances, and any blasting intermediaries, as defined in current legislation, as appropriate to the work activity
2. **approved policies, procedures and practices**: legislative, organisational, operational, accident or emergency, health and safety, first aid, and environmental as appropriate to the location and work activity

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