



Quarries National Joint Advisory Committee (QNJAC)

## **Geotechnics, Face & Stockpile Operations**

*Information Sheet 3*

*November 2011*

### ***Guidance on Managing Change to Excavations or Tips***

Approved by the Quarries National Joint Advisory Committee (QNJAC)  
(Version 1: 2 November 2011)

This Information Sheet has been developed by the Quarries National Joint Advisory Committee (QNJAC) to help quarry operators, contractors, managers and others learn how to make health and safety improvements in the quarry industry. This guidance represents good practice which may go further than the minimum you need to do to comply with the law

## Guidance on Managing change to Excavations or Tips

### 1. Introduction

1.1 Unmanaged change has the potential to give rise to safety related incidents which in the worst case could result in a fatality.

1.2 This guidance will help to ensure that any proposed changes to the excavations or tips are risk assessed to ensure that foreseeable impacts of any change to safety, health and the environment are fully understood and controlled as far as is reasonably practicable.

1.3 Where the change is significant in relation to an existing significant hazard then a Geotechnical Assessment will be required.

1.4 This guidance should be read in conjunction with Part VI of The Quarries Regulations 1999 and Approved Code of Practice, Health and Safety at Quarries, link below.

[Health and safety at quarries. Quarries Regulations 1999 - L118](#)

Information Sheet 1 Safe Face Management Operations in Quarries, link below.  
<http://www.QNJAC Information Sheet 1.pdf>

Information Sheet 2 Excavations and Tips Rules, link below.  
<http://www.QNJAC Information Sheet 2.pdf>

### 2. Managing Change

2.1 Changes to the Excavations or Tips will require an Appraisal and where a significant hazard is identified a Geotechnical Assessment needs to be completed to confirm if the proposed change can proceed or to identify what additional controls will be required for the change to take place.

2.2 **Appendix 1** – The Managing Change Impact Assessment Sheet; provides a check list for changes that can impact upon the Excavations and Tips.

2.3 Any changes should be planned and risk assessed in advance to ensure that they are properly controlled. However where a change occurs that is unplanned (e.g. instability), it still requires the same level of review and control or remediation. Any instability is likely to require reporting as a dangerous occurrence under RIDDOR, Schedule 2, Part III, 47.

2.4 Being aware of the effects of change is important to ensure that new hazards are not introduced into the workplace and to ensure that effective controls are in place to control any new or changing risks.

2.5 The effects of change and its significance on safety, health and the environment must be fully understood and considered in the decision making process.

### 3. Assessing for change

3.1 The Operator should have arrangements in place to ensure that before any change is undertaken an Impact Assessment is completed and [Appendix 1](#) can be used to assist this process.

3.2 The Impact Assessment should consider such issues as (This list is not exhaustive):

- Short term hazards that may be introduced during the completion of the proposed changes.
- Hazards introduced permanently as a result of any changes.
- Hazards introduced during the changes or ongoing maintenance process.
- The controls required to negate or minimise the risk to an acceptable level.

3.3 The Impact Assessment should be completed with the involvement of the appointed competent person (usually, but not always, the manager), the employees, their representatives and any relevant contractors who will be affected or involved by the change and any appropriate member(s) of the SHE committee.

3.4 The involvement of the following people should be considered where appropriate (the list below is not exhaustive):

- Geotechnical specialist.
- Geologist.
- Equipment manufacturers.
- Blasting specialist/shotfiring personnel.
- Specialist contractors/consultants.

3.5 Throughout the Impact Assessment process the following must be considered:

- The requirement for a new or amended risk assessment.
- Ongoing compliance with current legislation and planning permissions.
- Ongoing compliance with company Health, Safety and Environmental policy and procedures.
- Ongoing compliance with the current Geotechnical Assessment, Appraisal and the Quarry Design.
- Any required changes to the Excavations and Tips Rules for the site.
- Routine inspections of the excavation and tips.
- The requirements for any new or refresher training.
- Any conflict with other activities on site.

**3.6 *Appendix 2 – Managing change decision tree*** provides further guidance on what actions can be undertaken regarding the type and extent of change being considered based upon the questions in [Appendix 1](#).

## Appendix 1 – Managing Change Impact Assessment Sheet

|               |   |
|---------------|---|
| <b>Site:-</b> | <b>Date impact assessment completed:-</b> |
|---------------|---|

**Detail of the proposed change being considered:-**

|                                   | Section   | Yes | No | Comment |
|-----------------------------------|---|-----|----|---------|
| <b>Quarry Development General</b> |   |     |    |         |
| 1.                                | Changes to relevant site personnel including contractors                            |     |    |         |
| 2.                                | Impact of any recent industry related safety Incidents regarding Quarry Development |     |    |         |
| 3.                                | New work proposed on an existing tip or establishing a new tip                      |     |    |         |
| 4.                                | Changes to stockpiles and haul road positions                                       |     |    |         |
| 5.                                | Changes to process equipment.   |     |    |         |
| 6.                                | Development of a sinking/sump   |     |    |         |
| 7.                                | Planned overburden strip including volumes  |     |    |         |
| 8.                                | Changes to site permit, planning conditions.  |     |    |         |
| 9.                                | Planned activity with the restoration programme                                     |     |    |         |
| 10.                               | Development issues i.e. additional reserves   |     |    |         |
| 11.                               | Surface water/ground water issues   |     |    |         |
| 12.                               | Environmental influences including biodiversity.                                    |     |    |         |
| 13.                               | Changes to quarry geology/structure   |     |    |         |
| 14.                               | Any significant issue identified during routine inspection                          |     |    |         |
| 15.                               | External influences i.e. changes to legislation                                     |     |    |         |

| <b>Load &amp; Haul specific</b> |  |  |  |  |
|---------------------------------|--|--|--|--|
| 16.                             | Quality control of material, blending/to tip |  |  |  |
| 17.                             | Proposed Changes to blast design             |  |  |  |
| 18.                             | Changes to face heights and/or Bench widths  |  |  |  |
| 19.                             | Changes to Mobile Plant and or operator      |  |  |  |
| 20.                             | Change to production output                  |  |  |  |

| <b>Drilling &amp; Blasting specific</b> |  |  |  |  |
|---|--|--|--|--|
| 21.                                     | Changes to blast design                    |  |  |  |
| 22.                                     | Development of any final faces             |  |  |  |
| 23.                                     | Changes to drilling and blasting equipment |  |  |  |

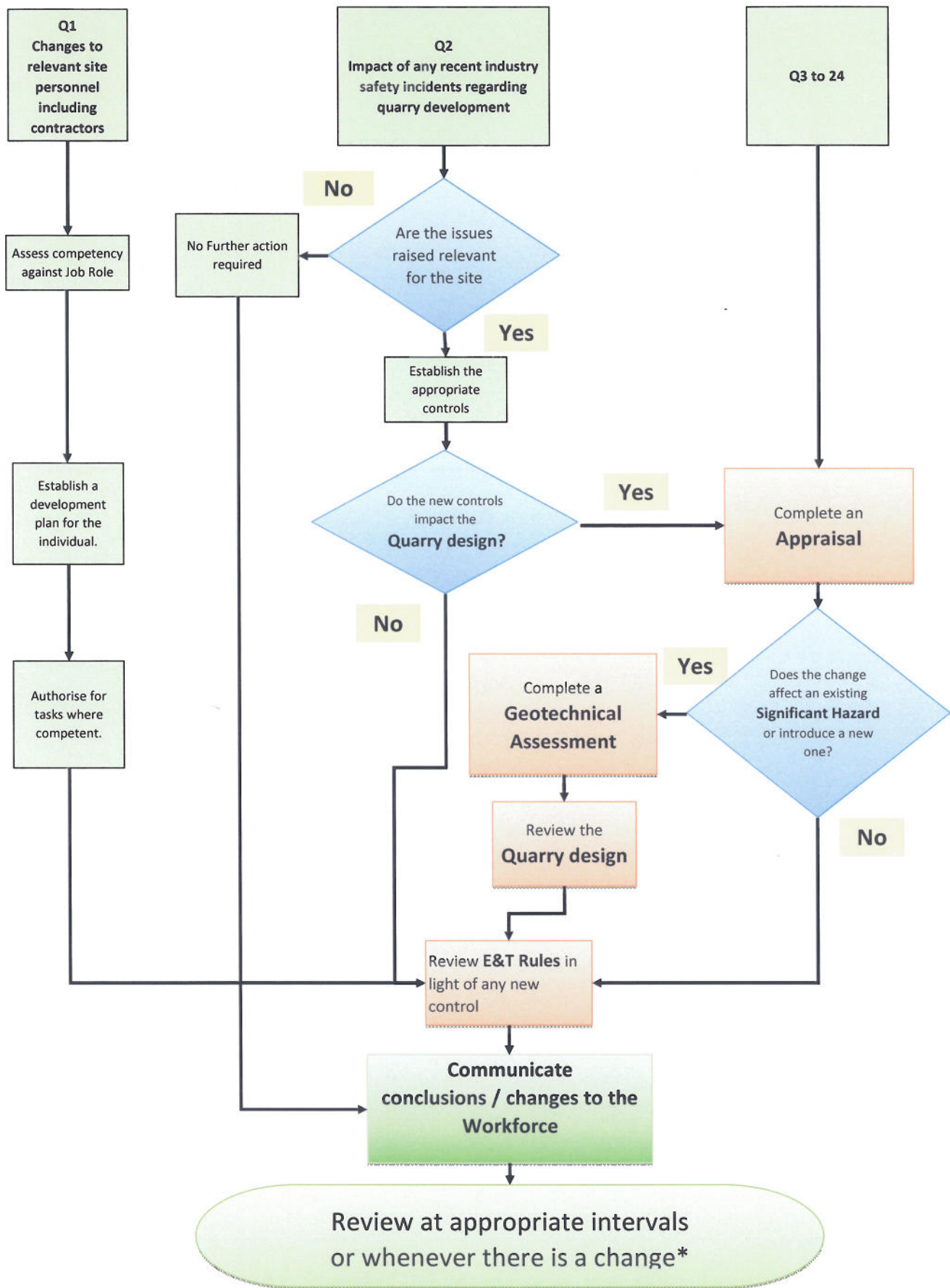
| <b>Any other issues not listed above</b> |  |  |  |  |
|--|--|--|--|--|
| 24.                                      |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Date of Next Site Review/Audit**

If the answer is "Yes" to any of the questions above then these aspects should be risk assessed, and there must be a suitable comment regarding any remedial action proposed, and the responsible person.

| Present at Audit/Review: | Print Name | Signed | Date |
|--------------------------|------------|--------|------|
|                          |            |        |      |
|                          |            |        |      |
|                          |            |        |      |
|                          |            |        |      |
|                          |            |        |      |
|                          |            |        |      |
|                          |            |        |      |
|                          |            |        |      |

## Appendix 2 - Managing Change Decision Tree



\* It is helpful to have an agreed date for the review