

2006 No. 205

HEALTH AND SAFETY

Quarries Regulations (Northern Ireland) 2006

Made - - - - - *2nd May 2006*

Coming into operation in accordance with regulation 1

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SCHEDULE 1 — CONTENT OF GEOTECHNICAL ASSESSMENTS
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The Department of Enterprise, Trade and Investment(a), being the Department concerned(b), makes the following Regulations in exercise of the powers conferred by Articles 17(1), (2), (3), (5) and 55(2) of, and paragraphs 1(1) and (2), 2(1) and (2), 5, 7, 8, 11, 13, 14(1), 15, 17, 19 and 20(b) of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978(c).

In accordance with Article 46(1)(d) of that Order, it is giving effect without modifications to proposals submitted to it by the Health and Safety Executive for Northern Ireland(e) under Article 13(1A)(f) of that Order.

In accordance with Article 46(3) of that Order, the Executive has consulted any bodies which appeared to it to be appropriate.

PART I

INTERPRETATION AND GENERAL

Citation and commencement

1.—(1) These Regulations may be cited as the Quarries Regulations (Northern Ireland) 2006 and, subject to paragraphs (2) and (3), shall come into operation on 1st August 2006.

(2) Regulation 26, with the exception of paragraph (4), shall come into operation on 1st August 2007 with respect to any tip which was not a classified tip for the purposes of regulation 2(1) of the 1995 Regulations.

(3) Regulation 26(4) shall come into operation on 1st August 2008 with respect to any notifiable tip which was not a classified tip for the purposes of regulation 2(1) of the 1995 Regulations.

Interpretation

2.—(1) In these Regulations—

“the 1969 Act” means the Mines Act (Northern Ireland) 1969(g);

“the 1983 Order” means the Quarries (Northern Ireland) Order 1983(h);

“the 1995 Regulations” means the Mines and Quarries (Tips and Tipping Plans) Regulations (Northern Ireland) 1995(i);

“the 2000 Regulations” means the Management of Health and Safety at Work Regulations (Northern Ireland) 2000(j);

“appoint” in relation to a person means appoint in writing with a written statement summarising his duties and authority;

“competent” in relation to a person means a person with sufficient training, experience, knowledge and other qualities to enable him to undertake properly the duties assigned to him;

“excavation” means any place at the quarry where minerals are or have been extracted and includes the ground, faces or sides of the quarry and any other incline;

(a) Formerly the Department of Economic Development; *see* S.I. 1999/283 (N.I. 1), Article 3(5); that Department was formerly the Department of Manpower Services; *see* S.I. 1982/846 (N.I. 11), Article 3

(b) *See* Article 2(2) of S.I. 1978/1039 (N.I. 9)

(c) S.I. 1978/1039 (N.I. 9); Article 47A was inserted by Article 3, and Article 2 was amended by Articles 4 and 8, of S.I. 1997/1774 (N.I. 16)

(d) Article 46 was amended by S.I. 1998/2795 (N.I. 18), Article 6(1) and Schedule 1, paragraphs 8 and 18

(e) Formerly the Health and Safety Agency for Northern Ireland; *see* S.I. 1998/2795 (N.I. 18), Article 3(1)

(f) Article 13(1A) was substituted by S.I. 1998/2795 (N.I. 18), Article 4

(g) 1969 c. 6 (N.I.)

(h) S.I. 1983/150 (N.I. 4)

(i) S.R. 1995 No. 296

(j) S.R. 2000 No. 388 as amended by S.R. 2001 No. 348 and S.R. 2003 No. 454

“excavations and tips rules” means the rules referred to in regulation 25;

“geotechnical assessment” has the meaning given to it in regulation 27(1);

“geotechnical specialist” means a chartered engineer or chartered geologist who has—

- (a) three or more years relevant experience in soil mechanics, rock mechanics or excavation engineering; and
- (b) is competent to perform a geotechnical analysis to determine the hazard and risk arising from the excavation or tip being assessed;

“hazard” in relation to an excavation or tip means having the potential to cause harm to the health and safety of any person;

“health and safety document” shall be construed in accordance with regulation 7;

“maintained” with respect to the quarry and its plant means maintained, where necessary to secure the health and safety of any person, in an efficient state, in efficient working order and in good repair;

“management structure” shall be construed in accordance with regulation 8;

“mine” means any mine within the meaning of the 1969 Act;

“minerals” includes stone, slate, clay, gravel, sand and other natural deposits except peat;

“notifiable excavation” and “notifiable tip” shall be construed in accordance with regulation 28(3);

“operator” in relation to a quarry means the person in overall control of the working of the quarry;

“preparation for sale” includes the crushing, screening, washing, drying and bagging of minerals;

“public road” means a road as defined in Article 2(2) the Road Traffic (Northern Ireland) Order 1981(a);

“quarry” has the meaning given to it by regulation 3;

“railway company” means any person authorised by a statutory provision to construct, work or carry on a railway;

“tip” means an accumulation or deposit of any substance at a quarry (whether in a solid or liquid state or in solution or suspension) and includes, but is not limited to, overburden dumps, backfill, spoil heaps, stock piles and lagoons, and where any wall or other structure retains or confines a tip then it shall be deemed to form part of the tip;

“vehicle” means any mechanically propelled vehicle (including mechanically propelled plant);

“vehicle rules” means the rules referred to in regulation 14.

(2) Any reference in these Regulations to any specified document shall operate as a reference to that document as revised or reissued from time to time.

Meaning of quarry

3.—(1) In these Regulations “quarry” means—

- (a) subject to paragraph (2), an excavation or system of excavations made for the purpose of, or in connection with, the extraction of minerals (whether in their natural state or in solution or suspension) or products of minerals, being neither a mine nor merely a well or borehole or a well and borehole combined;
- (b) any reclamation site (and for this purpose “reclamation site” means a site where the extraction of minerals forms part of the process whereby that site is restored for agricultural, industrial or domestic use) from which minerals are being extracted for sale or further use; or

(a) 1981/154 (N.I. 1), to which there are amendments not relevant to these Regulations

- (c) any disused tip from which minerals are being extracted for sale or further use and which is not at a mine within the meaning of section 156 of the 1969 Act.
- (2) Notwithstanding paragraph (1)(a), in these Regulations “quarry” does not include—
- (a) an excavation or system of excavations made for the purpose of or in connection with the extraction of such minerals or products of minerals where the exclusive purpose of that extraction is to enable the minerals or products of minerals so extracted to be used for the purpose of carrying out any building, civil engineering or engineering construction work on the site at which the extraction has taken place;
 - (b) a public road; or
 - (c) a railway line which is exclusively under the control of a railway company.
- (3) For the purposes of these Regulations, the following shall be deemed to form part of a quarry—
- (a) so much of the surface (including buildings, structures and works thereon) surrounding or adjacent to the quarry as is occupied for the purpose of, or in connection with—
 - (i) the working of the quarry;
 - (ii) the consumption, use, storage or preparation for sale of the minerals or products thereof extracted from the quarry; or
 - (iii) the removal from the quarry of any substance extracted from the quarry; and
 - (b) any tip—
 - (i) for the time being used in conjunction or connection with the operation of the quarry; or
 - (ii) subject to paragraph (4)(a), (whether or not it is for the time being in use) situated on premises occupied by the operator of the quarry;
- (4) For the purposes of these Regulations, where—
- (a) a tip is for the time being used in conjunction or connection with the operation of two or more quarries and is situated on premises occupied exclusively by the operator of one of those quarries, it shall be treated as forming part of that quarry unless—
 - (i) the operator of one of the other quarries in conjunction or connection with which the tip is for the time being used has agreed that the tip should be treated as forming part of the quarry of which he is the operator; and
 - (ii) notice to that effect has been given to the Executive by that operator;
 - (b) a tip is for the time being used in conjunction or connection with the operation of two or more quarries and is situated on premises occupied jointly by the operators of two or more of those quarries, the last-named operators shall, for the purposes of these Regulations, be treated as being in joint and several control of that tip and as being jointly and severally responsible therefor unless—
 - (i) the said operators have agreed that one of their number should be treated as being in control of that tip and responsible therefor; and
 - (ii) notice to that effect has been given to the Executive by the operator who is to be so treated;
- (5) Upon receipt of a notice given in accordance with paragraphs (4)(a)(ii) or (4)(b)(ii), the tip named in that notice shall be treated as forming part of the quarry specified in the said notice.

Application

- 4.—(1) Subject to paragraph (2), these Regulations shall apply to all quarries where persons work.
- (2) These Regulations shall not apply to any—
- (a) quarry at which there has been no extraction or preparation for sale of minerals within the previous twelve months;

- (b) quarry in relation to which notice of abandonment or ceasing of operations has been given to the Executive in accordance with regulation 39(1), provided that the quarry is no longer being used for the extraction or preparation for sale of minerals; or
- (c) part of a quarry which is being used exclusively by a person for a work activity unconnected with—
 - (i) the extraction of minerals; or
 - (ii) the preparation for sale of minerals,

provided that no work activity set out in paragraph (3) is being carried on at that quarry.

(3) The work activities mentioned in paragraph (2) are any work carried on—

- (a) with a view to abandoning that quarry; or
- (b) for the purpose of preventing the flow from that quarry into an adjacent quarry of water or material that flows when wet.

(4) These Regulations shall apply to a self-employed person as they apply to an employer and as if that self-employed person were both an employer and a person at work.

PART II

HEALTH AND SAFETY MANAGEMENT

Duties of the person entitled to work the quarry

5.—(1) The person entitled to work a quarry shall not permit another person to be the operator of that quarry unless that person is suitable and has sufficient resources to be able to operate the quarry safely.

(2) Where the person entitled to work a quarry permits another person to be the operator of that quarry, he shall make a written record of that permission which record shall be signed by the person so entitled and the operator and a copy of which shall be provided to the operator.

(3) The said record and copy shall be kept by the person so entitled and the operator respectively for the duration of the said permission.

(4) The person so entitled shall provide the operator with any relevant information available to him which might affect the health and safety of persons at work at the quarry.

General duties of the operator

6.—(1) It shall be the duty of the operator of every quarry to take the necessary measures to ensure, so far as is reasonably practicable, that the quarry and its plant are designed, constructed, equipped, commissioned, operated and maintained in such a way that persons at work can perform the work assigned to them without endangering their own health and safety or the health and safety of others.

(2) The operator shall co-ordinate the implementation of all measures relating to the health and safety of persons at work at the quarry.

(3) Without prejudice to the generality of paragraph (1), where necessary to ensure the health and safety of any person the operator shall ensure that any building (whether temporary or permanent) or structure—

- (a) is designed, constructed, erected, operated, supervised and maintained so as to withstand any reasonably foreseeable environmental forces; and
- (b) has a construction and solidity which is appropriate to the nature of its use.

(4) The operator shall ensure that in the event of the abandonment of or ceasing of operations at a quarry, the quarry is left, so far as is reasonably practicable, in a safe condition.

The health and safety document

7.—(1) The operator shall ensure that no work is carried out at the quarry unless a document (in these Regulations referred to as the “health and safety document”) has been prepared which—

- (a) demonstrates that the risks to which persons at work at the quarry are exposed have been assessed in accordance with regulation 3(1) to (5) of the 2000 Regulations;
- (b) demonstrates that adequate measures, including measures concerning the design, use and maintenance of the quarry and of its plant, will be taken to safeguard the health and safety of persons—
 - (i) at the quarry; and
 - (ii) in the area immediately surrounding the quarry who are directly affected by the activities of the quarry;
- (c) includes a statement of how the measures referred to in sub-paragraph (b) will be co-ordinated;
- (d) gives details of the management structure and sets out the authority and duties of each person in the management structure; and
- (e) records the following information—
 - (i) the rules required by regulation 10(1)(a);
 - (ii) the arrangements for the review of safety measures in accordance with regulation 11;
 - (iii) details of the inspection, maintenance and testing schemes prepared in accordance with regulation 12;
 - (iv) the rules controlling risks from vehicles required by regulation 14;
 - (v) details of the permit to work system required by regulation 18;
 - (vi) the excavations and tips rules required by regulation 25;
 - (vii) the conclusions of any appraisal or assessment of an excavation or tip undertaken in accordance with regulation 26;
 - (viii) the arrangements for health surveillance required by regulation 37; and
 - (ix) the shotfiring rules required by regulation 4(2) of the Quarries (Explosives) Regulations (Northern Ireland) 2006(a).

(2) In addition to the matters referred to in paragraph (1), the health and safety document shall where appropriate also include—

- (a) a plan detailing the equipment and measures required to protect persons at work at the quarry from the risk of explosion;
- (b) where toxic gases are or may be present in the atmosphere at the quarry in such concentration that the atmosphere may be harmful to the health of persons at work, a plan detailing the protective equipment and measures required to protect persons at work at the quarry from the harmful atmosphere; and
- (c) a diagram of the quarry indicating those areas to which these Regulations do not apply by virtue of regulation 4(2)(c).

(3) The operator shall ensure that the health and safety document, including any information recorded therein pursuant to paragraph (1)(e), is—

- (a) kept up to date; and
- (b) made available to each employer of persons at work at the quarry and to all persons at work at the quarry.

(4) The operator shall ensure—

- (a) that the measures identified in the health and safety document are taken; and

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(b) that any plans included in that document are followed.

(5) Each person in the management structure shall carry out the duties assigned to him in the health and safety document so as to protect the health and safety of persons at work at the quarry.

Management structure

8.—(1) With a view to ensuring the health, safety and welfare of those persons identified in regulation 7(1)(b)(i) and (ii), it shall be the duty of the operator to—

- (a) establish a management structure which enables the quarry to be operated in accordance with the health and safety document;
- (b) make a record of the management structure and the extent of the authority and duties of persons in the said structure;
- (c) appoint a competent individual to take charge of the operation of the quarry at all times when persons are working in the quarry, provided that where the operator is an individual and is suitably qualified and competent he may appoint himself;
- (d) ensure that when, for whatever reason, the individual appointed in accordance with paragraph (1)(c) is not readily available, a competent individual is nominated as a substitute to hold the authority and perform the duties of the first named individual; and
- (e) ensure that a sufficient number of competent persons are appointed to manage the quarry safely.

(2) Without prejudice to the generality of paragraph (1), the management structure shall be established to provide in particular that all persons working at the quarry come under the authority of a competent person in the management structure who shall have a duty to exercise such supervision of those persons as is appropriate to ensure the health and safety of those persons and of all others who may be affected by their activities.

(3) The operator shall ensure that the management structure is reviewed regularly and revised where necessary and in particular if the quarry undergoes significant changes (including natural changes), extensions or conversions.

(4) The operator shall ensure that each person who forms part of the management structure is provided with a copy of those parts of the health and safety document which describe his authority and duties.

(5) The reference to a competent individual taking charge in paragraph (1)(c) is a reference to that individual taking charge subject to the overall control exercised by the operator.

Training and competence

9. The operator shall ensure that a person shall not undertake any work at the quarry unless—

- (a) that person is either competent to do that work or he does so under the instruction and supervision of some other person who is competent to give instruction in and to supervise the doing of that work for the purpose of training him; and
- (b) a sufficient number of persons with the requisite competence to perform the tasks assigned to them are present.

Instructions, rules and schemes

10.—(1) It shall be the duty of the operator to—

- (a) ensure that rules are in place at the quarry with a view to securing—
 - (i) the health and safety of those persons identified in regulation 7(1)(b)(i) and (ii); and
 - (ii) the safe use of equipment;
- (b) ensure that copies of all current instructions, rules and schemes required to be made under these Regulations are kept at the quarry and are—
 - (i) given to any person at work at the quarry upon whom they impose duties; and

- (ii) comprehensible to all persons at work at the quarry to whom they apply; and
 - (c) take all reasonable measures to ensure that each person at work at the quarry understands any rules required to be made under these Regulations which are relevant to that person.
- (2) The operator shall ensure, so far as is reasonably practicable, that any instructions, rules and schemes required to be made under these Regulations are followed, or as the case may be, complied with, by persons at work at the quarry.

Review of health and safety measures

11. The operator shall ensure that—
- (a) the measures taken to protect the health and safety of those persons identified in regulation 7(1)(b)(i) and (ii) are reviewed—
 - (i) on a regular basis to ensure compliance with the relevant statutory provisions; and
 - (ii) whenever the circumstances require it, including where there has been a significant change in the way that the quarry operates; and
 - (b) the regularity with which such reviews are to take place is specified in the health and safety document.

PART III

RISK CONTROL

Inspection

- 12.—(1) The operator shall—
- (a) prepare and keep up to date a suitable written scheme for the systematic inspection, maintenance and, where appropriate, testing of—
 - (i) all parts of the quarry;
 - (ii) all buildings (whether temporary or permanent) at the quarry; and
 - (iii) any plant at the quarry, with a view to securing the health and safety of those persons identified in regulation 7(1)(b)(i) and (ii);
 - (b) ensure that, where appropriate, suitable written reports are made of inspections, maintenance and tests carried out in pursuance of sub-paragraph (a) and that each report records significant defects and the steps taken to remedy them and—
 - (i) is signed by the person making it; and
 - (ii) countersigned by an appropriate person in the management structure; and
 - (c) ensure that a sufficient number of competent persons are appointed to undertake the activities referred to in sub-paragraphs (a) and (b).
- (2) Without prejudice to the generality of paragraphs (1)(a) and (b), the said written scheme shall specify that faces above—
- (a) every place of work at the quarry; and
 - (b) every road used by persons at work at the quarry for the purpose of their work or of getting to or from their place of work,

are inspected for loose ground or loose rocks before any work at the quarry commences or re-commences.

(3) In this regulation, “inspection” means such visual or more rigorous inspection by a competent person as is appropriate for the purpose.

Benches and haul roads

13. The operator shall ensure, so far as is reasonably practicable, that—
- (a) benches and haul roads are designed, constructed and maintained so as to allow vehicles and plant to be used and moved upon them safely; and
 - (b) where necessary, effective precautions are taken, by the installation of barriers or otherwise, to prevent vehicles or plant accidentally leaving any bench or haul road.

Rules controlling risk from vehicles

14. The operator shall make suitable and sufficient rules (known in these Regulations as the “vehicles rules”) which shall lay down in writing measures designed to control the risks to persons at the quarry arising from the use of vehicles at the quarry.

Escape and rescue facilities at the quarry

15. The operator shall ensure that—
- (a) adequate means of escape and rescue are provided and maintained so as to permit persons in the quarry to leave the quarry promptly and safely in the event of danger;
 - (b) adequate means of communication and warning are provided to enable assistance, escape and rescue operations to be launched at once when required;
 - (c) written instructions concerning the use of emergency equipment and the action to be taken in the event of an emergency at or near the quarry are prepared;
 - (d) persons at work at the quarry are trained in appropriate action to be taken in the event of an emergency; and
 - (e) rescue equipment is provided at readily accessible, appropriately sited and clearly sign-posted places and kept ready for use.

Barriers

16. The operator shall ensure that, where appropriate, a barrier suitable for the purpose of discouraging trespass is placed around the boundary of the quarry and is properly maintained.

PART IV

ADDITIONAL HEALTH AND SAFETY REQUIREMENTS

Compliance with Part IV

17. The operator shall ensure that regulations 18 to 23 are in each case complied with as appropriate having regard to the features of the quarry, the nature and circumstances of the work carried on there or to a specific risk.

Permits to work

- 18.—(1) The operator shall ensure that a system is in place so as to ensure that any work involving—
- (a) the carrying out of hazardous operations; or
 - (b) usually straightforward operations which may interact with other activities to cause serious hazards,
- (c) is not carried out unless a permit to carry out that work has been issued.
- (2) Such permits to work shall specify—
- (a) the conditions to be fulfilled; and

- (b) the precautions to be taken before, during and after the operation concerned, in order to ensure, so far as is reasonably practicable, the health and safety of any person affected by that operation.
- (3) Such permits to work shall be—
 - (a) issued, signed and dated by a suitable person in the management structure; and then
 - (b) accepted, signed and dated by a further suitable person.

Safety drills

19.—(1) The operator shall ensure that safety drills are held at regular intervals for persons at work at the quarry.

- (2) Such safety drills shall be for the following purposes—
 - (a) to train the persons who work at the quarry in the appropriate actions to be taken in an emergency including, where appropriate, the correct use, handling or operation of emergency equipment; and
 - (b) to train and check the skills of such persons to whom specific duties involving the use, handling or operation of such equipment have been assigned in the event of an emergency.

Fire and explosion hazards

20.—(1) The operator shall ensure that a person at work at the quarry does not use a naked flame or carry out any work which could give rise to a risk of an unintended explosion or fire unless sufficient measures to prevent such an explosion or fire are taken.

- (2) A person shall not smoke in any part of a quarry where there is a risk of fire or explosion.

Control of harmful and explosive atmospheres

21.—(1) It shall be the duty of the operator to ensure that—

- (a) steps are taken in order to determine whether potentially explosive substances are present in the atmosphere and, where such substances are present, to measure the concentration of such substances in the atmosphere;
- (b) automatic devices designed to—
 - (i) monitor continuously the concentration of explosive or flammable gases in the atmosphere;
 - (ii) trigger an alarm if such concentration reaches a dangerous level; and
 - (iii) cut off power to any plant which, because of the concentration of such gases in the atmosphere, gives rise to a risk to the health and safety of any person,are provided;
- (c) where devices are provided in accordance with paragraph (b)(i), a record of the levels of concentration of such gases in the atmosphere shall be made at such intervals as are specified in the health and safety document;
- (d) at any place in the quarry where there is a risk of the occurrence or accumulation of an explosive atmosphere, all necessary measures are taken with a view to—
 - (i) preventing such occurrence and accumulation, or, where this is not practicable;
 - (ii) preventing the ignition of such an atmosphere; and
- (e) at any place in the quarry where there is a risk of the occurrence or accumulation of a substance harmful to health in the atmosphere, appropriate measures are taken in order to—
 - (i) prevent such occurrence and accumulation, or, where this is not practicable;

- (ii) extract or disperse that harmful substance, in such a way that persons are not placed at risk.

(2) Without prejudice to the requirements of the Personal Protective Equipment Regulations (Northern Ireland) 1993(a), the operator shall ensure that whenever persons at work are present at any place in the quarry where they may be exposed to a substance harmful to health in the atmosphere—

- (a) appropriate and sufficient breathing and resuscitation equipment is available; and
- (b) a sufficient number of persons trained in the use of such equipment is present.

(3) The operator shall ensure that the equipment referred to at paragraph (2)(a) is suitably stored and maintained.

Danger areas

22. The operator shall ensure that—

- (a) any danger areas in the quarry are clearly marked;
- (b) equipment or barriers designed to prevent inadvertent entry by any unauthorised person are installed at any danger area in the quarry in which, because of the nature of the work being carried out there or for any other reason there is—
 - (i) risk of a person falling a distance likely to cause personal injury;
 - (ii) risk of a person being struck by a falling object likely to cause personal injury; or
 - (iii) a significant risk to the health and safety of persons; and
- (c) where any person at work is authorised to enter a danger area, appropriate measures are taken to protect his health and safety.

Lighting

23. The operator shall ensure that every part of a quarry in which a person is likely to be exposed to risks in the event of the failure of artificial lighting is provided with emergency lighting of adequate intensity and where that is impractical persons at work in that place shall be provided with a personal lamp.

PART V

EXCAVATIONS AND TIPS

General duty to ensure safety of excavations and tips

24. The operator shall ensure that excavations and tips are designed, constructed, operated and maintained so as to ensure that—

- (a) instability; or
- (b) movement,

which is likely to give rise to a risk to the health and safety of any person is avoided.

Excavations and tips rules

25. The operator shall ensure that suitable and sufficient rules (known in these Regulations as the “excavations and tips rules”) are made to ensure the safe construction and operation of excavations and tips and such rules shall in particular specify the following matters—

(a) S.R. 1993 No. 20 as amended by S.R. 1995 No. 51, S.R. 1996 No. 109, S.R. 2000 No. 87, S.R. 2000 No. 375 and S.R. 2003 No. 423

- (a) the manner in which such activities are to be carried out;
- (b) the nature and extent of supervision of such activities; and
- (c) the precautions to be taken during such activities to ensure the health and safety of any person and the safety and stability of the excavation or tip.

Appraisal of excavations and tips

26.—(1) The operator shall ensure that a suitable and sufficient appraisal of all proposed or existing excavations or tips at the quarry is undertaken by a competent person in order to determine whether any such excavation or tip is a significant hazard.

(2) The operator shall ensure that—

- (a) any significant findings made during an appraisal, any conclusions reached in accordance with paragraph (1) and the reasons for those conclusions are recorded by the competent person undertaking the appraisal;
- (b) the said competent person signs and dates any such record; and
- (c) the record made in accordance with sub-paragraph (a) is made available to each employer of persons at work at the quarry and to all persons at work at the quarry.

(3) Where the conclusion reached by the competent person following an appraisal made pursuant to paragraph (1) is that the excavation or tip presents no significant hazard, the operator shall ensure that a competent person carries out further such appraisals—

- (a) at appropriate intervals;
- (b) whenever there is any reason to suspect that there has been or will be a significant change to—
 - (i) the matters to which the appraisal relates; or
 - (ii) any neighbouring land which may be affected by movement by or instability of the excavation or tip to which the appraisal relates; and
- (c) whenever there is any reason to doubt the validity of the conclusion of the current appraisal.

(4) Where the conclusion reached by the competent person following an appraisal made pursuant to paragraph (1) is that the excavation or tip represents a significant hazard, the operator shall ensure that a geotechnical assessment is carried out in accordance with the requirements of regulation 27 as soon as is reasonably practicable.

Meaning of “geotechnical assessment” and operator’s duties in relation to geotechnical assessments

27.—(1) For the purposes of these Regulations, a “geotechnical assessment” means an assessment carried out by a geotechnical specialist identifying and assessing all factors liable to affect the stability and safety of a proposed or existing excavation or tip and shall include—

- (a) preparation by or under the supervision of the said geotechnical specialist or, as appropriate, consideration by the said geotechnical specialist of the documents and particulars specified at Schedule 1;
- (b) the conclusion of the said geotechnical specialist as to the safety and stability of the proposed or existing excavation or tip being assessed, including his conclusions as to whether the said excavation or tip represents a significant hazard by way of instability or movement;
- (c) where appropriate, the conclusion of the said geotechnical specialist as to whether any remedial work is required in relation to the excavation or tip being assessed and the date by which such work should be completed;
- (d) where appropriate, the conclusion of the said geotechnical specialist as to the date by which the next geotechnical assessment should take place; and

(e) consideration by the said geotechnical specialist of the excavations and tips rules.

(2) The operator shall ensure that—

- (a) any significant findings made during a geotechnical assessment and any conclusions reached in accordance with paragraphs (1)(b), (c) or (d) and the reasons for those conclusions are recorded by the geotechnical specialist undertaking the assessment; and
- (b) the said geotechnical specialist signs and dates any such record and records his professional qualifications thereon.

(3) The operator shall ensure that any information available to him which may be relevant for the purposes of a geotechnical assessment is made available to the geotechnical specialist undertaking that assessment.

(4) The operator shall ensure that any remedial works identified during the geotechnical assessment in accordance with paragraph (1)(c) are completed by the date specified.

Operator’s duties in relation to excavations and tips which are a significant hazard (“notifiable” excavations and tips)

28.—(1) Where the conclusion recorded by a geotechnical specialist in accordance with regulation 27(1)(b) following a geotechnical assessment of a proposed or existing excavation or tip is that the excavation or tip represents a significant hazard by way of instability or movement, the operator shall ensure, subject to regulation 27(1)(d), that the said excavation or tip is subject to a further geotechnical assessment at least every two years.

(2) Without prejudice to paragraph (1), where, in relation to an excavation or tip which falls within paragraph (1) there is any reason—

- (a) to suspect that there has been or will be a significant change to—
 - (i) the matters to which the geotechnical assessment relates; or
 - (ii) any neighbouring land which may be affected by movement by or instability of the excavation or tip; or
- (b) to doubt the validity of the conclusion of the current assessment,

the operator shall ensure that a further geotechnical assessment is undertaken as soon as is reasonably practicable.

(3) For the purposes of these Regulations, excavations and tips falling within paragraph (1) shall be known as “notifiable excavations” and “notifiable tips” respectively.

Operator’s duties in relation to excavations and tips which are not a significant hazard

29. Where the conclusion reached by a geotechnical specialist in accordance with regulation 27(1)(b) following a geotechnical assessment of a proposed or existing excavation or tip is that it presents no significant hazard, the operator shall ensure that—

- (a) the said geotechnical specialist specifies the frequency with which appraisals pursuant to regulation 26 are to be conducted in order to ensure the continued safety and stability of the excavation or tip; and
- (b) a record of that specification is made.

Duty to keep record of substances tipped

30. The operator shall ensure that sufficient records are kept of the nature, quantity and location of all substances accumulated or deposited at a notifiable tip to enable an accurate assessment of the stability of that tip to be made.

Notification of excavations and tips

31.—(1) Subject to paragraph (2), the operator shall in relation to any—

- (a) proposed excavation or tip which it is reasonable to expect will be a significant hazard;
- (b) notifiable excavation; or
- (c) notifiable tip other than a notifiable tip which was—
 - (i) a classified tip within the meaning of regulation 2(1) of the 1995 Regulations; and
 - (ii) in respect of which notice has been given in accordance with regulation 8(1) of those Regulations,

give not less than 30 days notice (or such shorter period as the Executive may permit) to the Executive of his intention to commence or, in relation to excavations and tips falling within subparagraphs (b) and (c), continue, operations.

(2) Paragraphs (1)(b) and (1)(c) shall not apply to an excavation or tip in relation to which notice of intention to commence operations has previously been given.

(3) The 30 days notice referred to in paragraph (1) shall be given—

- (a) in the case of excavations and tips falling within paragraph (1)(a), before the commencement of operations; and
- (b) in the case of excavations and tips falling within paragraphs (1)(b) and (1)(c), as soon as possible after the date on which the operator is notified of the geotechnical specialist's conclusions, reached in accordance with regulation 27(1)(b).

(4) The following information shall be included in any notice given by the operator in accordance with paragraph (1)—

- (a) a brief description of the excavation or tip, including its location, size, and the material to be excavated or tipped; and
- (b) in relation to excavations and tips falling within paragraphs (1)(b) and (1)(c), the conclusions reached by the geotechnical specialist carrying out the geotechnical assessment in accordance with paragraphs (1)(b), (c) and (d) of regulation 27.

(5) Where the conclusion reached by a geotechnical specialist during the geotechnical assessment of an excavation or tip which has, in accordance with regulation 28(1), been subject to a geotechnical assessment at least every two years is that the excavation or tip no longer presents a significant hazard by way of instability or movement, the operator shall give notice of that conclusion and the reasons for that conclusion to the Executive within two months of the geotechnical assessment.

Transitional provisions

32. Where, at the coming into operation of these Regulations, a report has been obtained in accordance with regulations 9(2)(a), 12(1) or 18(1) of the 1995 Regulations and is less than two years old, that report shall be treated as a geotechnical assessment for the purpose of regulation 26(4) of these Regulations and shall remain valid for a maximum of two years from the date when it was first made.

PART VI

DUTIES OF EMPLOYERS AND PARTICIPATION AND DUTIES OF PERSONS AT WORK

Co-operation

33. Every employer of persons at work at a quarry and every person at work at the quarry shall co-operate with the operator to the extent requisite to enable the operator to comply with the relevant statutory provisions.

Participation of persons at work

34.—(1) It shall be the duty of the operator to make and maintain arrangements which will enable him and those persons who regularly work at the quarry to co-operate effectively in promoting and developing measures to ensure the health, safety and welfare of persons who regularly work at the quarry and in checking the effectiveness of such measures.

(2) For the purposes described in paragraph (1), a committee of persons with suitable practical experience of quarrying operations may be appointed for the quarry—

- (a) in a case where there is a trade union representative of a majority of the total number of persons working at the quarry, by that trade union; or
- (b) jointly by trade unions which are together representative of such a majority.

(3) Where an injury or dangerous occurrence which is notifiable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (Northern Ireland) 1997(a) occurs at a quarry, the operator shall permit two members of the committee appointed under paragraph (2) to inspect together the place where the injury or dangerous occurrence occurred and, so far as is necessary for ascertaining its cause, any other part of the quarry and any plant, and to take samples of the atmosphere, dust or water at that place.

(4) The operator of a quarry shall permit sufficient inspections to be carried out by members of the committee appointed under paragraph (2) to enable every part of the quarry and any plant and equipment at the quarry to be inspected once a month by two of those committee members together.

(5) The operator of a quarry shall permit members of a committee appointed under paragraph (2) who are carrying out an inspection under paragraph (4) to—

- (a) scrutinise any documents which are kept at the quarry in compliance with the relevant statutory provisions;
- (b) review the risk assessment referred to in regulation 7(1)(a) and the measures referred to in regulation 7(1)(b) and to suggest improvements thereto; and
- (c) be accompanied by their advisers.

(6) The operator of a quarry shall ensure that any improvements suggested under paragraph (5)(b) are considered and, if they are not accepted, written reasons for this are given to the members of the committee who made the inspection.

(7) The operator of a quarry and any person nominated by him shall be entitled to accompany the two committee members appointed under paragraph (2) who are carrying out an inspection under paragraph (4) during that inspection.

(8) Where any two committee members appointed under paragraph (2) have carried out an inspection under paragraph (4), they may make a written report of the matters ascertained as a result of the inspection and, if such a report is made, the two committee members and the operator or any person nominated by him shall sign the report.

(9) Where a written report is made, a copy of the report signed in accordance with paragraph (8) shall be posted in a conspicuous position at the quarry and kept posted there for 28 days.

Duty of employers of employees at work at a quarry

35.—(1) An employer shall not employ any person to work at a quarry unless there is an operator.

(2) Without prejudice to regulation 6, where the employees of more than one employer are at work at a quarry, it shall be the duty of each employer to comply with those relevant statutory provisions which apply to the quarry.

(a) S.R. 1997 No. 455 as amended by S.R. 1998 No. 375, S.R. 1999 No. 150, S.R. 2000 No. 375, S.R. 2001 No. 436 S.R. 2004 No. 196 and S.R. 2005 No. 45

Duty of persons at work at a quarry

36. Every person at work at a quarry shall—

- (a) to the extent of his responsibility and authority, carry out the duties allocated to him with reasonable care for the health and safety of himself and other persons who may be affected by his acts or omissions; and
- (b) comply with the rules put in place at the quarry by the operator in accordance with regulation 10.

Health surveillance

37. An employer of a person at work at a quarry shall ensure, where health surveillance under regulation 6 of the 2000 Regulations is required in respect of any work to which that person is to be assigned, that the health surveillance commences before that person begins to carry out such work.

PART VII

MISCELLANEOUS AND GENERAL

Record keeping

38.—(1) It shall be the duty of the operator to ensure that—

- (a) every report or record which is required to be made under these Regulations is in a suitable form and is kept at the quarry or at some other suitable place for at least three years from the date on which the report or record was made unless the provision concerned expressly imposes some other requirement; and
- (b) a copy of the written statement of duties of all persons appointed at the quarry under these Regulations is kept at the quarry or at some other suitable place for at least twelve months after the date on which the appointment ceased to have effect.

(2) Paragraph (1)(a) shall apply to copies of information notified to the Executive under these Regulations but shall not apply to the record made in accordance with regulation 5(2) by the person entitled to work the quarry.

Notification of quarrying operations

39.—(1) It shall be the duty of the operator to ensure that within fourteen days of any of the events specified at paragraph (2)(a) to (c), written notice thereof is given to the Executive.

(2) The events referred to at paragraph (1) are—

- (a) the beginning of operations for the purpose of opening a quarry;
- (b) the abandonment of or ceasing of operations at a quarry; and
- (c) the appointment or change of the operator of a quarry.

(3) Without prejudice to the duty to give notice under paragraph (1) in respect of an event specified at paragraph (2)(b), the operator of every quarry of coal shall, within three months of the date on which the quarry of coal is abandoned, send to the Executive, or a body approved by it, an accurate plan of that quarry.

(4) Where, in pursuance of paragraph (3), a plan has been sent to the Executive or a body approved by it, that plan shall be retained by the Executive or that body in accordance with arrangements approved by the Executive.

Exemptions

40.—(1) Subject to paragraph (2), the Executive may, by a certificate in writing, exempt any quarry, part of a quarry or class of quarries, any person or class of persons, any plant or class of plant or any operation or class of operations from all or any of the prohibitions or requirements imposed by these Regulations, and any such exemption may be granted subject to conditions and to a limit of time and may be revoked at any time by the Executive by a further certificate in writing.

(2) The Executive shall not grant any such exemption unless, having regard to the circumstances of the case and in particular to—

- (a) the conditions, if any, which it proposes to attach to the exemption; and
- (b) any other requirements imposed by or under any statutory provisions which apply to the case,

it is satisfied that the health and safety of persons who are likely to be affected by the exemption will not be prejudiced in consequence of it.

PART VIII

REPEALS, AMENDMENTS AND REVOCATIONS

Repeals and amendments

41.—(1) The 1983 Order shall be amended in accordance with paragraphs (2) to (6).

(2) In Article 2(2), the definitions of “overburden”, “prime mover”, “process”, “steam boiler” and “transmission machinery” shall be omitted.

(3) Articles 3, 5, 7, 8, 9, 12, 14, 15, 16, 17, 19, 20(3) to (5) and (7) to (10) shall be repealed.

(4) In Article 20(1), the words “3 to 8,” shall be omitted.

(5) In Article 20(6), the words “16 or” shall be omitted.

(6) For the words “Articles 3 to 8, 10, 11 and 14” in Article 22(2) there shall be substituted “Articles 10 and 11”.

Revocations and amendments

42.—(1) The statutory provisions specified in column 1 of Part I of Schedule 2 shall be revoked.

(2) The statutory provisions specified in column 1 of Part II of Schedule 2 shall be amended to the extent specified in the corresponding entry in column 2 of that Part.

Sealed with the Official Seal of the Department of Enterprise, Trade and Investment on 2nd May 2006.



M. Bohill

A senior officer of the Department of Enterprise, Trade and Investment.

CONTENT OF GEOTECHNICAL ASSESSMENTS**Site survey**

1. An accurate plan which should be prepared on a scale not less detailed than 1:2,500 showing—

- (a) the boundaries of the quarry or premises upon which the excavation or tip or proposed excavation or tip is or is to be situated;
- (b) the site of the excavation or tip or proposed excavation or tip;
- (c) any contiguous land or structures which might be affected by the excavation or tip or proposed excavation or tip; and
- (d) all mine workings (whether abandoned or not), buried quarry workings, known cave systems, active or former landslips, springs, artesian wells, watercourses and other natural or man-made features including tunnel pipes or culverts which might affect the safety of the excavation or tip or proposed excavation or tip or which might be relevant for the purpose of determining whether excavation or tipping operations can be carried out safely, which plan shall be contoured to Ordnance Datum at a vertical interval not greater than five metres and orientated to and correlated with the Irish Grid and marked with squares corresponding to the 100 metre squares shown on Ordnance Survey of Northern Ireland sheets on the scale of 1:2,500.

Site investigation

2. A record of all relevant site investigation information including surveys, tests, boreholes and groundwater measurements made for the purpose of the geotechnical assessment together with the results of any testing including the strength of materials within and beneath the tip or within the excavated slope. The record shall include any known historical information relevant to the site investigation.

Cross-sections based on site investigation

3. Sufficient accurate cross-sections on a scale not less detailed than 1:1,250 of the site of the excavation or tip or proposed excavation or tip showing the existing ground surface and all relevant superficial materials and bedrock underlying the said site and—

- (a) any variation in the thickness, level or character of the superficial deposits and bedrock materials based on the site investigation; and
- (b) the position of any surface whether natural or manmade which may affect the safety of the excavation or tip or proposed excavation or tip.

Plans based on site investigation

4. Plans showing the position of all boreholes, wells and trial pits used in the site investigation and the location and levels of all materials and surfaces which may affect the safety of the excavation or tip or proposed excavation or tip.

Assumptions made before analysis

5. A record of any assumptions relevant to the assessment of ground conditions relating to the safety of the excavation or tip made by the geotechnical specialist including a record of any relevant information which was not available when undertaking the assessment.

Findings of analysis

6. A record of the calculations carried out in order to determine the safety of the excavation or tip, including any variables or parameters used in those calculations and the reasons for using them and the findings of those calculations expressed as the factor of safety or the probability of failure or other recognised basis of assessing stability.

Design coming out of analysis

7. An accurate plan on a scale not less detailed than 1:2,500 recording—
- (a) in relation to tips or proposed tips, the design of the tip, including the area of land covered or to be covered, the gradients of that land, the designed contours at vertical intervals of not more than two metres, the side slopes and boundaries of the tip and the designed position and nature of construction of any wall or other structure retaining or confining the tip; and
 - (b) in relation to excavations or proposed excavations, the design of the excavation, including the height or proposed height of the slope, the position and width of any benches and representative contours of the excavation at vertical intervals of not more than five metres.

Requirements during and after construction

8. A record of the nature and extent of inspection, supervision and safety measures necessary to ensure the safety of the excavation or tip and a specification of necessary engineering works and safety measures. A record of the action to be taken regarding defects specified in the report.

SCHEDULE 2

Regulation 42(1)

REVOCATIONS AND AMENDMENTS

PART I

REVOCATIONS

<i>Column 1</i> <i>Title</i>	<i>Column 2</i> <i>Reference</i>
Quarries (Safety, Health, Equipment and Explosives) Rules (Northern Ireland) 1962	S.R. 1962 No. 180
Quarries (Returns and Records) Rules (Northern Ireland) 1963	S.R. 1963 No. 41
Quarries (Metrication) Regulations (Northern Ireland) 1992	S.R. 1992 No. 216
Quarries Miscellaneous Health and Safety Provisions Regulations (Northern Ireland) 1995	S.R. 1995 No. 378

PART II
AMENDMENTS

Regulation 42(2)

<i>Column 1</i> <i>Title</i>	<i>Column 2</i> <i>Amendments</i>
<p><i>Safety Representatives and Safety Committees Regulations (Northern Ireland) 1979(a)</i> Regulation 5</p>	<p>In paragraph (4), after the words “Mines Act (Northern Ireland) 1969” there shall be inserted the words “or regulation 40 of the Quarries Regulations (Northern Ireland) 2006”.</p>
<p><i>Electricity at Work Regulations (Northern Ireland) 1991(b)</i> Regulation 3</p>	<p>For sub-paragraphs (b) and (c) of paragraph (1) there shall be substituted the following sub-paragraph—</p> <p style="padding-left: 40px;">“(b) (i) manager, in relation to a mine within the meaning of the Mines Act (Northern Ireland) 1969; and</p> <p style="padding-left: 40px;">(ii) operator, in relation to a quarry within the meaning of regulation 3 of the Quarries Regulations (Northern Ireland) 2006,</p> <p style="padding-left: 40px;">to ensure that all requirements and prohibitions imposed by or under these Regulations are complied with in so far as they relate to the mine of which he is the manager or the quarry of which he is the operator, as the case may be, and to matters which are within his control.”.</p>
<p><i>Workplace (Health, Safety and Welfare) Regulations (Northern Ireland) 1993(c)</i> Regulation 2</p>	<p>In paragraph (1), for the definition of “quarry” there shall be substituted the following definition—</p> <p>‘ “quarry” means a quarry within the meaning of the Quarries Regulations (Northern Ireland) 2006;’.</p>
<p><i>Mines and Quarries (Tips and Tipping Plans) Regulations (Northern Ireland) 1995(d)</i> Regulations 6(4), 6(5), 12(1), 17(1), 17(2), 17(3), 17(4), 18(1), 19(1), 20(1), 20(2), 28(1), 29(1), 31(1), 31(3), 31(4), 32 and 35(1) Regulation 2</p>	<p>The words “or quarry” shall be omitted wherever they occur.</p> <p>In paragraph (1)—</p> <p>the definition of “the 1983 Order” shall be omitted;</p> <p>in the definitions of “active tip”, “closed tip” and “tip”, paragraph (b) shall be omitted;</p> <p>the definition of “owner” shall be omitted;</p> <p>in the definition of “the person having responsibility for a tip”, sub-paragraph (a) shall be omitted; and</p>

(a) S.R. 1979 No. 437 as amended by S.R. 1992 No. 459 and S.R. 1996 No. 511

(b) S.R. 1991 No. 13 as amended by S.R. 1996 No. 247, S.R. 1998 No. 47, S.R. 1999 No. 150 and S.R. 2000 No. 85

(c) S.R. 1993 No. 37 as amended by S.R. 1995 No. 378, S.R. 1996 No. 510 and S.R. 2003 No. 423

(d) S.R. 1995 No. 296 as amended by S.R. 1999 No. 150

<i>Column 1</i> <i>Title</i>	<i>Column 2</i> <i>Amendments</i>
Regulation 4	<p>in the definition of “tipping operations”, the words “or quarry” shall be omitted.</p> <p>In paragraph (2)— the words “or quarry” shall be omitted wherever they occur; in sub-paragraph (a), the words “or as the case may be, the 1983 Order” shall be omitted; in sub-paragraph (b), the words “or the 1983 Order”, “respectively” and “or Order” shall be omitted; and in sub-paragraph (c), the words “or quarries” shall be omitted where they twice occur.</p> <p>In paragraph (3), the words “and the 1983 Order in relation to quarries” shall be omitted.</p> <p>In paragraph (1), the words “and of the owner and of the agent of every quarry” shall be omitted.</p> <p>In paragraph (2)— the words “, and the agent of a quarry as such shall not be guilty of an offence by virtue of Article 20(2) of the 1983 Order” shall be omitted; for the word “provides” there shall be substituted the word “provide”; for the word “they” there shall be substituted the word “he”; the words “or quarry” shall be omitted; in sub-paragraph (a), the words “the 1983 Order,” and “or Order” shall be omitted; and in sub-paragraphs (b) and (c), the words “, the 1983 Order” shall be omitted wherever they appear.</p> <p>In paragraph (4), the words “or quarry” shall be omitted.</p> <p>In paragraph (5), the words “or quarry” and “or, as the case may be, the agent of the quarry” shall be omitted.</p>
Regulation 5	In paragraph (6), sub-paragraphs (b), (c), (d) and (e) shall be omitted.
Regulation 7	In paragraph (1), the words “and quarry” shall be omitted.
Regulation 8	<p>In paragraph (1), the words “and of the owner of every quarry” shall be omitted.</p> <p>In paragraph (2), the words “and quarry” shall be omitted and for the words “, Regulations made under section 128 of the 1969 Act or Rules made under Article 9 of the 1983 Order” there shall be substituted the words “or Regulations made under section 128 of the 1969 Act”.</p> <p>In paragraphs (1), (2), (5) and (6), the words “or quarry” shall be omitted.</p>
Regulation 9	<p>In paragraph (3), sub-paragraphs (b), (c), (d) and (e) shall be omitted.</p> <p>In paragraph (1), the words “or quarry” shall be omitted wherever they occur and the words “or the owner of the quarry” shall be omitted.</p> <p>In paragraphs (2) and (3), the words “or quarry” shall be omitted wherever they occur.</p>
Regulation 10	<p>In paragraph (4), sub-paragraphs (b), (c), (d) and (e) shall be omitted.</p> <p>In paragraph (1), the words “or quarry” shall be omitted wherever they occur and the words “or, as the case may be, the owner of the quarry” shall be omitted.</p> <p>In paragraph (3), the words “or, as the case may be, the owner of the quarry concerned,” and “or owner” shall be omitted.</p> <p>In paragraph (4), sub-paragraphs (b), (c), (d) and (e) shall be omitted.</p> <p>In paragraph (7), for the words “, Regulations made under the 1969 Act or Rules made under the 1983 Order” there shall be substituted the words “or Regulations made under the 1969 Act”.</p>

<i>Column 1</i> <i>Title</i>	<i>Column 2</i> <i>Amendments</i>
Regulation 11	In paragraph (8), the words “or quarry” shall be omitted wherever they occur and the words “and the owner of every quarry” shall be omitted. In paragraph (9), the words “or the owner of a quarry” and “or quarry” shall be omitted. The words “or quarry” shall be omitted wherever they occur.
Regulation 13	In paragraph (a), the words “or, as the case may be, the owner of the quarry” and “or, as the case may be, by the owner of the quarry” shall be omitted.
Regulation 14	In paragraph (1), the words “or quarry” shall be omitted wherever they occur and the words “or, as the case may be, of the owner of the quarry” shall be omitted. In paragraph (2), the words “or the owner of the quarry”, “or owner” and “or quarry” shall be omitted.
Regulation 15	The words “or quarry” and “or, as the case may be, of the owner of the quarry” shall be omitted wherever they occur.
Regulation 21	The words “or of the owner of the quarry” shall be omitted.
Regulation 33	The words “and quarry” shall be omitted.
<i>Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (Northern Ireland) 1997(a)</i>	In paragraph (2), sub-paragraphs (b), (c), (d) and (e) shall be omitted.
Regulation 2(1)	For the definition of “quarry” there shall be substituted the following definition— ‘ “quarry” means a quarry within the meaning of regulation 3 of the Quarries Regulations (Northern Ireland) 2006’. The following definition shall be inserted— ‘ “operator” in relation to a quarry has the meaning assigned to it by the Quarries Regulations (Northern Ireland) 2006;’. In the definition of “owner”, paragraph (c) shall be omitted. In sub-paragraph (a)(ii) of the definition of “responsible person”, for the words “owner, occupier or agent” there shall be substituted the word “operator” and in paragraph (a)(iii), the words “or quarry” shall be omitted.
Regulation 8	In the heading, the words “and quarries” shall be inserted at the end. After the words “relating to mines” there shall be inserted the words “or quarries”.
Schedule 2, Part III	In paragraph 45, for the words “to which Article 9 of the Quarries (Northern Ireland) Order 1983 applies” there shall be substituted the words “to which the Quarries Regulations (Northern Ireland) 2006 apply”.
Schedule 5	In the heading the words “or quarries” shall be inserted at the end. In paragraph 1, after the words “In this Schedule—” there shall be inserted the following definition:

(a) S.R. 1997 No. 455 as amended by S.R. 1998 No. 375, S.R. 1999 No. 150, S.R. 2000 No. 375, S.R. 2001 No. 436; S.R. 2004 No. 196 and S.R. 2005 No. 45

<i>Column 1</i> <i>Title</i>	<i>Column 2</i> <i>Amendments</i>
	<p>“ “appropriate person” means—</p> <p>(a) in the case of a mine, the responsible person;</p> <p>(b) in the case of a quarry, the responsible person or a person appointed in the management structure of that quarry established pursuant to regulation 8(1) of the Quarries Regulations (Northern Ireland) 2006.”</p> <p>In paragraph (b) of the definition of “nominated person”, after the words “at a mine” there shall be inserted the words “or quarry”.</p> <p>In paragraph 2, after the words “at a mine” there shall be inserted the words “or quarry”.</p> <p>In paragraph 3, after the words “at a mine” there shall be inserted the words “or quarry”.</p> <p>In paragraph 4(1)(b), after the words “Mines Act (Northern Ireland) 1969” there shall be inserted the words “or, as the case may be, regulation 34 of the Quarries Regulations (Northern Ireland) 2006”.</p> <p>In paragraph 4(3)(a)(ii), after the words “at the mine” there shall be inserted the words “or quarry”.</p> <p>In paragraph 4(5), after the words “of the mine” there shall be inserted the words “or quarry”.</p> <p>In paragraph 5(b), after the words “Mines Act (Northern Ireland) 1969” there shall be inserted the words “or, as the case may be, regulation 34 of the Quarries Regulations (Northern Ireland) 2006”.</p>
<i>Health and Safety (Enforcing Authority) Regulations (Northern Ireland) 1999(a)</i> Regulation 2	<p>In paragraph (1), for the definition of “quarry” there shall be substituted the following definition—</p> <p>‘ “quarry” has the meaning assigned to it by regulation 3 of the Quarries Regulations (Northern Ireland) 2006;’.</p>
Schedule 2	<p>In paragraph 1, for the words “Article 16 of the Quarries (Northern Ireland) Order 1983” there shall be substituted the words “regulation 39(1) of the Quarries Regulations (Northern Ireland) 2006”.</p>
<i>Ionising Radiations Regulations (Northern Ireland) 2000(b)</i> Regulation 4	<p>For paragraph (3) there shall be substituted the following paragraph—</p> <p>“(3) Duties under these Regulations imposed upon the employer shall also be imposed upon the operator of a quarry (within the meaning of regulation 3 of the Quarries Regulations (Northern Ireland) 2006) in so far as those duties relate to the quarry or part of the quarry of which he is the occupier and to matters under his control.”</p>

(a) S.R. 1999 No. 90
(b) S.R. 2000 No. 375

<i>Column 1</i>	<i>Column 2</i>
<i>Title</i>	<i>Amendments</i>
<i>Gas Safety (Installation and Use) Regulations (Northern Ireland) 2004(a)</i> Regulation 2	In paragraph (4)(b), for the words “Article 2(2) of the Quarries (Northern Ireland) Order 1983” there shall be substituted the words “regulation 3 of the Quarries Regulations (Northern Ireland) 2006” and for the words “or that Order” there shall be substituted the words “or those Regulations”.
<i>Pressure Systems Safety Regulations (Northern Ireland) 2004(b)</i> Regulation 2	In paragraph (1), in sub-paragraph (b) of the definition of “user”, for the words “Article 2(2) of the Quarries (Northern Ireland) Order 1983” there shall be substituted the words “regulation 3 of the Quarries Regulations (Northern Ireland) 2006”.
<i>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations (Northern Ireland) 2006(c)</i> Regulation 2	In paragraph (1), for the definition of “quarry” there shall be substituted the following definition— ‘ “quarry” has the meaning assigned to it by regulation 3 of the Quarries Regulations (Northern Ireland) 2006;’.

(a) S.R. 2004 No. 63
(b) S.R. 2004 No. 222
(c) S.R. 2006 No. 173

EXPLANATORY NOTE

(This note is not part of the Regulations)

1. These Regulations impose requirements with respect to health and safety in quarries, as defined at regulation 3, and supersede certain provisions formerly imposed by or under the Quarries (Northern Ireland) Order 1983, the Mines and Quarries (Tips and Tipping Plans) Regulations (Northern Ireland) 1995 and in certain other health and safety regulations.

2. The Regulations give effect in relation to quarries to Council Directive 92/104/EEC (O.J. No. L 404, 31.12.92, p. 10) concerning minimum requirements for improving the health and safety protection of workers in surface and underground mineral extracting industries with respect to—

- (a) Articles 3.1(a), (b), (c), (d), and (f), 3.2 and 3.3, 4 (except in relation to general fire precautions), 5 to 7 and 8.2;
- (b) in Part A of the Annex, Points 1.1.3, 1.2 to 1.6, 1.8, 1.9, 3.1, 4.1 to 4.3, Section 5, Point 6.6, Section 8, Point 9.1, Sections 10 and 11, Point 13.4, Section 15, and Point 16.1;
- (c) in Part B of the Annex, Sections 1 and 2.

3. The Regulations apply to all quarries where persons work and impose duties on the operator (as defined at regulation 2(1)) with respect to persons at or in the area immediately surrounding the quarry (regulation 7(1)).

4. A duty to ensure the suitability of the operator and to keep specified records is placed on the person entitled to work a quarry (regulation 5).

5. The Regulations—

- (a) impose a duty on the operator to take the measures necessary to ensure, so far as is reasonably practicable, that the quarry can be worked without risks to health and safety (regulation 6);
- (b) impose duties on the operator with respect to preparing a health and safety document and establishing a management structure (regulations 7 and 8);
- (c) require the operator to ensure that workers are competent (as defined at regulation 2(1)), that rules designed to secure health and safety are in place and to review health and safety measures on a regular basis (regulations 9, 10 and 11);
- (d) in Part III, which relates to risk control, require the operator to—
 - (i) prepare a written scheme for the systematic inspection of the quarry, buildings and plant (regulation 12),
 - (ii) ensure, so far as is reasonably practicable, the safety of benches and haul roads and to make vehicles rules (regulations 13 and 14),
 - (iii) ensure that there are adequate escape and rescue facilities and, where appropriate, place a barrier around the quarry (regulations 15 and 16);
- (e) in Part IV, require the operator to—
 - (i) ensure a permit to work system is in place and that regular safety drills are held (regulations 18 and 19),
 - (ii) control the risk of explosions or fires and harmful or explosive atmospheres (regulations 20 and 21),
 - (iii) take specified safety measures regarding danger areas and ensure that adequate emergency lighting is provided (regulations 22 and 23);
- (f) in Part V, which relates to excavations and tips (both as defined at regulation 2(1)), require the operator to—
 - (i) ensure that excavations and tips are designed, constructed, operated and maintained so as to ensure health and safety and that excavations and tips rules are made (regulations 24 and 25),

- (ii) ensure that all proposed or existing excavations or tips are appraised by a competent person and, where required by regulation 26, subjected to a geotechnical assessment as defined at regulation 27; that specified records are made and that remedial work is undertaken (regulations 26 and 27),
- (iii) ensure that excavations and tips are subject to further geotechnical assessments at specified intervals and in specified circumstances (regulations 28 and 29),
- (iv) ensure that records of substances tipped at notifiable tips (as defined at regulation 28) are kept and give notice to the Health and Safety Executive for Northern Ireland (“the Executive”) with respect to specified tips and excavations (regulations 30 and 31);
- (g) contain a transitional provision (regulation 32);
- (h) in Part VI—
 - (i) require employers of persons at work at the quarry to co-operate with the operator with respect to health and safety and require the operator to make arrangements to facilitate co-operation with persons at work at the quarry in promoting health and safety, including the appointment of a committee with powers of inspection (regulations 33 and 34),
 - (ii) prohibit employers from employing persons to work at the quarry unless there is an operator; impose duties on employers with respect to the relevant statutory provisions and health surveillance and impose duties on persons at work at the quarry (regulations 35, 36 and 37);
- (i) in Parts VII and VIII—
 - (i) impose duties on the operator with respect to record keeping and notification (regulations 38 and 39),
 - (ii) provide that the Executive may grant exemptions from any requirement or prohibition of the Regulations in specified circumstances (regulation 40),
 - (iii) repeal most provisions of the Quarries (Northern Ireland) Order 1983 (regulation 41), and
 - (iv) revoke and modify specified statutory provisions (regulation 42).

6. In Great Britain, the corresponding Regulations are the Quarries Regulations 1999 (S.I. 1999/2024). Those Regulations also apply to explosives at quarries, which are the subject of separate Northern Ireland Regulations. Copies of the cost benefit assessment relating to the Quarries Regulations 1999 together with a Northern Ireland Supplement prepared by the Department of Enterprise, Trade and Investment are held at the offices of the Health and Safety Executive for Northern Ireland at 83 Ladas Drive, Belfast BT6 9FR from where copies may be obtained on request.

7. A person who contravenes these Regulations or any requirement or prohibition imposed thereunder, is guilty of an offence under Article 31 of the Health and Safety at Work (Northern Ireland) Order 1978 and is liable, on summary conviction, to a fine not exceeding the statutory maximum (currently £5,000) or, on conviction on indictment, to a fine.