
STATUTORY RULES OF NORTHERN IRELAND

2015 No. 387

**The Storage of Carbon Dioxide (Licensing
etc.) Regulations (Northern Ireland) 2015**

General

Citation and commencement

1. These Regulations may be cited as the Storage of Carbon Dioxide (Licensing etc.) Regulations (Northern Ireland) 2015, and come into operation on 4th January 2016.

Interpretation

2.—(1) The Interpretation Act (Northern Ireland) 1954(1) applies to these Regulations as it applies to an Act of the Assembly.

(2) In these Regulations—

- (a) any reference to a numbered section is to that section of the Energy Act 2008(2) and any reference to Chapter 3 is a reference to Chapter 3 of Part 1 of that Act; and
- (b) any reference (except in paragraph (4)) to an EU instrument, or a provision of such an EU instrument, is to that instrument or provision as amended from time to time.

(3) In these Regulations—

“appraisal term” has the meaning given to it in regulation 4(a);

“the authority” means the Department of Enterprise, Trade and Investment as licensing authority under section 18(2);

“CO₂” means carbon dioxide;

“corrective measures plan” has the meaning given to it in regulation 8(6);

“the Directive” means Directive [2009/31/EC](#) of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive [85/337/EEC](#), European Parliament and Council Directives [2000/60/EC](#), [2001/80/EC](#), [2004/35/EC](#), [2006/12/EC](#), [2008/1/EC](#) and Regulation (EC) No [1013/2006](#)(3);

“entering”, in relation to premises, includes, where applicable, boarding, and cognate expressions are to be construed accordingly;

“the Environmental Liability Directive” means Directive [2004/35/EC](#) of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage(4);

(1) [1954 c.33 \(N.I.\)](#)

(2) [2008 c.32](#) as amended by [S.I. 2011/2453](#)

(3) OJ No L 140, 5.6.2009, p 114, as amended by Directive 2011/92/EU (OJ No L26 28.1.2012. p.1) of the European Parliament and of the Council

(4) OJ No L 143, 30.4.2004, p 56, as amended by Directives [2006/21/EC](#) (OJ No L 102, 11.4.2006, p 15), [2009/31 EC](#) (OJ No L 140, 5.6.2009, p 114) and [2013/30/EU](#) (OJ No L 178, 28.6.2013, p 66) of the European Parliament and of the Council

“the ETS Directive” means Directive [2003/87/EC](#) of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive [96/61/EC](#)(**5**);

“financial security” includes—

- (a) a charge over a bank account or any other asset;
- (b) a deposit of money;
- (c) a performance bond or guarantee;
- (d) an insurance policy;
- (e) a letter of credit;

“injection” means injection of CO₂ into a storage site;

“inspection” means an inspection of a storage complex for the purpose of discharging a function described in sub-paragraph (a) or (b) of regulation 16(1);

“inspection report” has the meaning given to it in regulation 17(1);

“inspector” means a person appointed by the authority under section 27(1);

“legislation” means legislation in force in the United Kingdom (whether passed, or made, before, after or at the same time as the commencement of these Regulations);

“licence” means a licence (other than a Northern Ireland exploration licence) granted by the authority under section 18(1) in respect of activities within section 17(2)(a) to (d), and “licence holder” is to be construed accordingly;

“licensed area” means the area within which activities are authorised under a licence;

“monitoring plan” has the meaning given to it in regulation 8(5);

“Northern Ireland exploration licence” means a licence granted by the authority under section 18(1) which authorises only activities within section 17(2)(c) and the establishment or maintenance of an installation in a controlled place for the purpose of such activities and which—

- (a) does not grant to the holder the sole right to carry out exploration of a controlled place, and
- (b) is issued in combination with –
 - (i) a licence under section 2 of the Petroleum (Production) Act (Northern Ireland) 1964(**6**) to search for petroleum;
 - (ii) a prospecting licence under section 11(1)(b) of the Mineral Development Act (Northern Ireland) 1969(**7**) to search for mines and minerals;
 - (iii) a licence under section 3 of the Petroleum Act 1998(**8**) to search for petroleum; or
 - (iv) a licence under section 4 to explore any controlled place with a view to carrying on activities within section 2(3)(a) to (d) and establish or maintain an installation in a controlled place for the purposes of such exploration;

“operator” means the person who carries on or (where different) controls activities (within the meaning of section 17(2)) at a storage site;

(5) OJ No L 275, 25.10.2003, p 32, as amended by Directives [2004/101/EC](#) (OJ No L 338, 13.11.2004, p 18) and [2008/101/EC](#) (OJ No L 8, 13.1.2009, p 3) of the European Parliament and of the Council, Regulation [\(EC\) No 219/2009](#) of the European Parliament and of the Council (OJ No L 87, 31.3.2009, p 109) Directive [2009/29/EC](#) (OJ No L 140, 5.6.2009, p 63) of the European Parliament and Council and Regulation (EU) No 421/2014 of the European Parliament and of the Council (OJ No L 129, 30.4.2014, p 1)

(6) [1964 c.28 \(N.I.\)](#)

(7) [1969 c.35 \(N.I.\)](#)

(8) [1998 c.17](#)

“post-closure plan” has the meaning given to it in regulation 13(3) or (4);

“premises” includes—

- (a) any carbon storage installation (within the meaning of section 30(5)); and
- (b) any land, vehicle, vessel, aircraft, hovercraft or moveable structure, excluding any such thing or part thereof that is used as a dwelling;

“provisional post-closure plan” has the meaning given to it in regulation 13(2);

“routine inspection” has the meaning given to it in regulation 15(1);

“storage permit” means a consent granted under a licence, authorising the use of a place as a storage site;

“target date” has the meaning given to it in regulation 11(3)(a).

(4) The following expressions have the meanings given by Article 3 of the Directive (and cognate expressions are to be construed accordingly)—

“closure” (in relation to a storage site);

“corrective measures”;

“CO₂ plume”;

“CO₂ stream”;

“exploration”;

“hydraulic unit”;

“leakage”;

“migration”;

“significant irregularity”;

“significant risk”;

“storage complex”;

“storage site”;

“substantial change”;

“waste”;

“water column”.

Licences

Limitation on licensing powers

3. A licence shall not be granted for the purpose of storing CO₂ in the water column.

Applications for a licence

4. An application for a licence shall be made in writing to the authority, and shall include either—
 - (a) a request that the licence specify a period (the “appraisal term”) during which the licence holder has the right to explore the licensed area before making an application for a storage permit; or
 - (b) if no such period is requested, a statement of the reasons why such exploration is not considered necessary.

Appraisal term

5.—(1) A licence shall include an appraisal term where the authority determines that exploration is required to generate the information necessary to select a storage site.

(2) The appraisal term shall not exceed the period necessary to—

- (a) generate the information necessary to select a storage site; and
- (b) prepare the documents required for an application under regulation 7.

(3) Subject to paragraph (2), the appraisal term may be extended by the authority at the written request of the licence holder, under the conditions laid down by the licence, provided that the authority is satisfied that any exploration so far carried out has been in accordance with the licence.

(4) Where a licence includes an appraisal term, the licence (unless sooner determined under any of its provisions) shall cease and determine—

- (a) at the end of the appraisal term, if no application for a storage permit is made before that date; or
- (b) if such an application is refused, when that refusal is notified to the licence holder.

Content of a licence

6. A licence shall include the provisions contained in Schedule 1.

Storage permits

Applications for a storage permit

7.—(1) The licence holder may, under the conditions laid down by the licence, apply to the authority for a storage permit in respect of a storage site within the licensed area.

(2) Where the licence includes an appraisal term, the application may not be made unless the exploration required by the licence has been completed, and all other terms and conditions of the licence have been complied with.

(3) An application shall be made in writing, and shall contain (at least) the following—

- (a) the name and address of the proposed operator;
- (b) evidence of the matters referred to in regulation 8(1)(a) to (d);
- (c) in relation to the CO₂ that is to be contained within the storage site—
 - (i) the total quantity that is to be injected and stored;
 - (ii) a proposed date on which injection is to commence;
 - (iii) the prospective sources and transport methods;
 - (iv) the composition of the CO₂ streams that are to be injected;
 - (v) the proposed injection rates and pressures;
 - (vi) the proposed location of the injection facilities;
- (d) a description of measures to prevent any significant irregularities;
- (e) a proposed monitoring plan drawn up in accordance with Annex II to the Directive and that takes into account the obligations imposed on the operator under legislation implementing Article 14 of the ETS Directive;
- (f) a proposed corrective measures plan;
- (g) the proposed provisional post-closure plan drawn up in accordance with regulation 13(1);

- (h) the information required to be provided in relation to the storage site under legislation implementing Article 5 of Directive 2011/92/EU⁽⁹⁾ of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment;
 - (i) details of a financial security that will satisfy the requirements in paragraph 7(1) of Schedule 2, including proof that (if the storage permit is granted) such a security will be in force before the proposed date on which injection is to commence.
- (4) The authority shall forward to the European Commission—
- (a) the permit application (within one month after receipt); and
 - (b) any other related material that the authority proposes to take into account in considering the application.
- (5) The authority shall also (within one month after receipt) forward a copy of the permit application to the Department of the Environment.

Grant of storage permits

- 8.**—(1) Before granting a storage permit the authority shall be satisfied that—
- (a) the storage complex and the surrounding area have been sufficiently characterised and assessed in accordance with the criteria set out in Annex I to the Directive;
 - (b) no part of the storage complex extends beyond the territories of the member states;
 - (c) under the proposed conditions of use of the storage site, there is no significant risk of leakage or of harm to the environment or human health; and
 - (d) the conditions in paragraph (3) are met.
- (2) For the purposes of paragraph (1)(b), the territory of a member state includes its exclusive economic zone and continental shelf within the meaning of Articles 55 and 76 of the United Nations Convention on the Law of the Sea⁽¹⁰⁾.
- (3) The conditions are that the proposed operator—
- (a) is technically competent (including in the operation of environmental management systems), financially sound, and can be relied upon to carry out the functions of an operator; and
 - (b) has in place an appropriate programme of professional and technical development and training.
- (4) Where more than one proposed storage site is contained within the same hydraulic unit, before granting a storage permit for either site the authority shall be satisfied that the requirements for the grant of such a permit can be met simultaneously.
- (5) In considering the application for the storage permit, the authority may—
- (a) approve the proposed monitoring plan; or
 - (b) require the applicant to make such modifications to it as the authority (after consulting the applicant) considers necessary,
- and (if the permit is granted) the monitoring plan is the plan as so approved or modified.
- (6) In considering the application for the storage permit, the authority may—
- (a) approve the proposed corrective measures plan; or—

⁽⁹⁾ OJ No L 26, 28.1.2012. p.1. This Directive was implemented in Northern Ireland by [S.R. 2012 No. 59](#)

⁽¹⁰⁾ Cmnd. 8941

- (b) require the applicant to make such modifications to it as the authority (after consulting the applicant) considers necessary,
- and (if the permit is granted) the corrective measures plan is the plan as so approved or modified.
- (7) If the authority is minded to grant a storage permit—
- (a) the authority shall forward a draft of the proposed permit to the European Commission, together with any material taken into consideration that has not already been provided under regulation 7(4); and
- (b) the authority shall before granting the permit consider any opinion on the draft that is issued under Article 10(1) of the Directive.
- (8) If the authority is minded to grant a storage permit—
- (a) the authority shall forward a draft of the proposed permit to the Department of the Environment; and
- (b) the authority shall before granting the permit consider any opinion on the draft given by the Department of the Environment within one month of the date on which the draft permit was forwarded to it.

Content of storage permits

- 9.—(1) A storage permit shall include at least the following—
- (a) the name and address of a single person who is a licence holder and who is designated as the operator of the storage site;
- (b) the precise location and delimitation of the storage site and storage complex, and any relevant information concerning the hydraulic unit;
- (c) the operational requirements for storage, including—
- (i) the total quantity of CO₂ authorised to be stored;
- (ii) the reservoir pressure limits; and
- (iii) the maximum injection rates and pressures;
- (d) the provisions relating to acceptance and injection of CO₂, including composition of the CO₂ stream;
- (e) any other requirements relating to injection and storage that the authority considers necessary, in particular to prevent significant irregularities;
- (f) requirements designed to prevent any undue interference with other uses of the area surrounding the storage site;
- (g) the provisions relating to monitoring, including the monitoring plan;
- (h) the provision relating to reporting, and notification of leakages and significant irregularities;
- (i) the provisions relating to notification and implementation of changes, and to review and modification or revocation of the permit;
- (j) the provisions relating to corrective measures, including the corrective measures plan;
- (k) the conditions for closure of the storage site;
- (l) the provisional post-closure plan; and
- (m) the provisions relating to financial security.
- (2) In this regulation, “provisions” means the provisions contained in Schedule 2.

Powers and duties of the authority

Corrective measures

10.—(1) This regulation applies where—

- (a) a significant irregularity or a leakage has been detected; and
- (b) the licence under which the storage permit is granted is still in force,

but does not apply where the storage permit has been revoked.

(2) Without prejudice to the obligations of the operator under the provisions in the storage permit included by virtue of regulation 9(1)(j) and paragraph 6 of Schedule 2, or to the powers of the authority under section 24 (licensing authority's powers of direction),—

- (a) the authority may direct the operator to take any corrective measures (and any measures for the protection of human health) that the authority (after consulting the operator) considers necessary; and
- (b) if the operator fails to take the measures so directed, the authority shall exercise its powers under paragraph (4).

(3) The measures directed to be taken under paragraph (2)(a) may be additional to, or different from, those set out in the corrective measures plan.

(4) Whether or not a direction has been given under paragraph (2) or under section 24—

- (a) the authority may at any time take such measures itself (or arrange for another person to take them on the authority's behalf); and
- (b) the reasonable costs of doing so shall be paid by the operator.

(5) Section 24(5) to (8) apply to action taken under paragraph (4) as they apply to action taken under section 24(4).

Review, modification and revocation of storage permits

11.—(1) Subject to paragraph (2), where a notification is given under the provisions in a storage permit included by virtue of regulation 9(1)(i) and paragraph 4(1) of Schedule 2, the authority—

- (a) may make such modifications to a storage permit as the authority considers appropriate; and
- (b) shall notify the operator of—
 - (i) the modifications to be made;
 - (ii) the date on which the modifications are to come into effect; and
 - (iii) the date on which the change in question may be implemented.

(2) Where it appears to the authority that the matters so notified would amount to a substantial change, the authority shall—

- (a) make such modifications to a storage permit as the authority considers appropriate (and give a notification in accordance with paragraph (1)(b)); or
- (b) notify the operator that the change may not be implemented.

(3) The authority shall give a notification under paragraph (1)(b) or (2) on or before—

- (a) the date (“the target date”) on which the operator proposes to implement the change notified to the authority under the provisions in a storage permit included by virtue of regulation 9(1)(i) and paragraph 4(1) of Schedule 2; or
- (b) if the authority considers more time is required to allow it to give the notification, the later date notified by the authority under paragraph (4).

- (4) The authority shall notify the operator of the later date—
 - (a) no less than one week before the target date; or
 - (b) if one or more later dates have already been notified by the authority, no less than one week before the date last notified.
- (5) This paragraph applies where the authority becomes aware of—
 - (a) any (or any risk of) leakages or significant irregularities;
 - (b) any breach of the terms or conditions of the storage permit; or
 - (c) any scientific finding or technological development which appears to have a bearing on the conduct of operations at the storage site.
- (6) The authority shall consider whether to modify or revoke a storage permit—
 - (a) where paragraph (5) applies; and
 - (b) in any event, on the date (“the review date”) falling on the fifth anniversary of the grant of a storage permit, and subsequently on every tenth anniversary of the review date.
- (7) Following that consideration, the authority may—
 - (a) make such modifications to a storage permit as the authority considers appropriate; or
 - (b) if it decides that modifications to a storage permit would be insufficient in the light of the matters referred to in paragraph (5), revoke the permit.
- (8) Before making any modification to a storage permit or revoking a storage permit under this regulation, the authority shall consult the operator and any other licence holder.

Consequences of revocation of a storage permit

- 12.—**(1) This regulation applies where the authority has revoked a storage permit under regulation 11(7).
- (2) The authority shall either—
 - (a) close the storage site; or
 - (b) consider any application for a new licence (and, if such a licence is granted, for a new storage permit) in respect of the storage site.
 - (3) Following the procedure under paragraph (2)(b)—
 - (a) if no new storage permit is granted, the authority shall close the storage site (but the existing licence shall continue in force);
 - (b) if a new storage permit is granted, the existing licence shall terminate on the date of that grant.
 - (4) Until the storage site is closed, or the new storage permit is granted, the authority is deemed to be the operator of the site for the purposes of the following obligations—
 - (a) in relation to the acceptance and injection of CO₂;
 - (b) in relation to monitoring;
 - (c) in relation to corrective measures;
 - (d) in relation to the surrender of allowances under legislation implementing the ETS Directive; and
 - (e) under legislation implementing Articles 5(1) and 6(1) of the Environmental Liability Directive.
 - (5) Where the storage site is closed under paragraph (2)(a) or (3)(a), the authority—

(a) is deemed to be the operator of the storage site for the purposes of the obligations referred to in paragraph (4)(b) to (e); and

(b) shall ensure that the storage site is sealed and the injection facilities removed (but this is without prejudice to the obligations of any person under Part 4 of the Petroleum Act 1998⁽¹¹⁾).

(6) The holder of the existing licence shall pay to the authority any reasonable costs incurred in meeting the authority's obligations under paragraph (4) or (5); and section 24(6) and (7) apply to the recovery of such costs as they apply to the recovery of costs under section 24(5).

(7) In this regulation, "existing licence" means the licence under which the revoked storage permit was granted.

(8) The authority may consult the Department of the Environment in relation to the carrying out by the authority of the obligations referred to in paragraph (4)(a) to (e) and paragraph (5)(b).

Closure of storage site and post-closure period

Post-closure plan

13.—(1) Before applying for a storage permit, a licence holder shall draw up a proposed provisional post-closure plan that is—

- (a) based on best practice; and
- (b) in accordance with Annex II to the Directive.

(2) Before granting a storage permit, the authority shall—

- (a) approve that proposed plan; or
- (b) require the licence holder to make such modifications to it as the authority (after consulting the licence holder) considers necessary,

and the provisional post-closure plan is the plan so approved or modified.

(3) The authority may—

- (a) approve a proposed post-closure plan submitted to it for approval in accordance with the provisions in the licence included by virtue of regulation 6 and paragraph 2(1) of Schedule 1; or
- (b) require the operator to make such modifications to it as the authority (after consulting the operator) considers necessary,

and the post-closure plan is the plan so approved or modified.

(4) Where the authority is deemed to be the operator pursuant to regulation 12(5), the post-closure plan is the provisional post-closure plan with such modifications as the authority considers necessary.

Post-closure obligations

14. The closure of a storage site is without prejudice to the obligations of the operator—

- (a) under legislation implementing Articles 5 to 8 of the Environmental Liability Directive; or
- (b) relating to the surrender of allowances under legislation implementing the ETS Directive.

⁽¹¹⁾ Section 30 of the Energy Act 2008 applies Part 4 of the Petroleum Act 1998 (c.17) to carbon dioxide installations (as defined by section 30(5))

*Inspections and enforcement***Inspections**

15.—(1) The authority shall carry out an inspection (a “routine inspection”) of a storage complex—

- (a) during the initial period—
 - (i) no later than one year from the date that period commences; and
 - (ii) subsequently, no later than one year from the date of the immediately previous inspection; and
- (b) during the post-closure period—
 - (i) no later than five years from the date that period commences; and
 - (ii) subsequently, no later than five years from the date of the immediately previous inspection.
- (2) A routine inspection shall include an examination of—
 - (a) the injection and monitoring facilities; and
 - (b) the effects from the storage complex on the environment and human health.
- (3) The authority shall carry out an inspection of a storage complex if—
 - (a) the authority becomes aware of—
 - (i) leakages or significant irregularities; or
 - (ii) a breach of the terms or conditions of the storage permit; or
 - (b) a complaint is made to the authority about the effects from the storage complex on the environment or human health, unless the authority is of the opinion that the complaint is frivolous or vexatious.
- (4) The authority may carry out an inspection other than when required under paragraph (1) or (3) as the authority considers appropriate.
- (5) An inspection carried out pursuant to paragraph (3) or (4)—
 - (a) does not constitute a routine inspection for the purposes of paragraph (1); but
 - (b) may be carried out simultaneously with a routine inspection.
- (6) In this regulation, in relation to a storage complex—
 - (a) “initial period” means the period commencing on the date on which injection commences at the storage site and ending on the third anniversary of the date of closure of the storage site;
 - (b) “monitoring facilities” means facilities used for the carrying out of a programme of monitoring pursuant to the provisions in the storage permit included by virtue of regulation 9(1)(g) and paragraph 2 of Schedule 2;
 - (c) “post-closure period” means the period commencing on the day after the third anniversary of the date of closure of the storage site and ending on the date on which the relevant licence is terminated;
 - (d) “year” means a period of twelve months.

Inspectors

16.—(1) Subject to paragraph (3), an inspector may exercise any of the powers set out in Schedule 3 to assist the authority in carrying out its functions under Chapter 3 or these Regulations, including—

- (a) investigating whether—
 - (i) the provisions of a licence, storage permit or any consent granted under a licence; or
 - (ii) any requirements, restrictions or prohibitions imposed by or under Chapter 3 or these Regulations,have been, or are being, complied with; and
- (b) monitoring the effects of activities authorised by or under a licence or from a storage complex on the environment or human health.

(2) An inspector shall report to the authority in such manner as the authority may direct.

(3) Before exercising any of the powers set out in Schedule 3, an inspector shall on request produce evidence of appointment.

Inspection reports

17.—(1) The authority shall prepare a written report (an “inspection report”) of the results of an inspection.

(2) An inspection report shall include—

- (a) the authority’s assessment of whether or not, in respect of the storage complex inspected—
 - (i) the provisions of a licence, storage permit or any consent granted under a licence; and
 - (ii) any requirements, restrictions or prohibitions imposed by or under Chapter 3 or these Regulations,have been, or are being, complied with; and
- (b) a statement as to what action (if any) the authority considers is required to ensure such compliance.

(3) A statement made in an inspection report pursuant to paragraph (2)(b) does not preclude the authority from requiring the licence holder, operator or any other person to take any other action.

(4) The authority shall within two months of the completion of an inspection—

- (a) provide a copy of the inspection report to the operator of the relevant storage complex; and
- (b) make the inspection report available for inspection by the public.

Offences

18.—(1) It is an offence for a person—

- (a) wilfully to obstruct an inspector in the exercise of the powers or duties conferred on the inspector by these Regulations;
- (b) without reasonable excuse, to fail to comply with a requirement imposed under Schedule 3 or to prevent another person from complying with such a requirement; or
- (c) knowingly or recklessly to give information which is false or misleading in a material particular where the information is given in purported compliance with any requirement imposed under Schedule 3 for the supply of information to an inspector.

(2) A person guilty of an offence under paragraph (1) is liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum; or

(b) on conviction on indictment, to a fine.

(3) For the purposes of this regulation, section 20(2) of the Interpretation Act (Northern Ireland) 1954 applies with the omission of the words “the liability of whose members is limited”; and where the affairs of a body corporate are managed by its members, applies in relation to the acts or defaults of a member in connection with the member’s functions of management as if the member were a director of the body corporate.

(4) Where the commission by any person of an offence under this regulation is due to the act or fault of some other person, that other person may be charged with and convicted of the offence by virtue of this paragraph whether or not proceedings for the offence are taken against the first-mentioned person.

Sealed with the Official Seal of the Department of Enterprise, Trade and Investment on
1st December 2015.



Mike Thompson
A senior officer of the
Department of Enterprise, Trade and Investment