

**KURDISTAN REGION – IRAQ**

**COUNCIL OF MINISTERS**

**MINISTRY OF NATURAL RESOURCES**

In the exercise of our powers and functions under Law No. 22 of 2007 and pursuant in particular to Articles 6, 7, 8, 53 and 60 of the said Law, we have decided to issue the following Instructions.

**DRAFT INSTRUCTIONS (NO. ) OF 2014 ON THE ABANDONMENT AND RECLAMATION OF LAND USED FOR PETROLEUM OPERATIONS**

**Purpose of these Instructions**

**First Article.**

These Instructions impose obligations on Petroleum Operators regarding the abandonment of oil and gas wells and the abandonment and reclamation of any areas of land used for Petroleum Operations, and are aimed at ensuring that Petroleum Operators leave such wells and land in a condition that is safe and stable, protects natural resources and future land uses and best facilitates eventual ecosystem restoration.

**Definitions**

**Second Article.**

In these Instructions:

**1. "abandonment":**

- (a)** means the disuse of a well or site for exploration or production of oil or gas for a continuous period of one hundred and eighty days unless, upon an application submitted by the Operator prior to the expiration of that

time, the Ministry determines that such discontinued use was the result of adverse market conditions or absence of equipment, in which case the said period shall be extended by no more than one hundred and eighty days;

- (b)** shall be deemed to be permanent abandonment in every case unless it falls within the definition of temporary abandonment; and

“abandon” shall be construed accordingly;

- 2.** “Abandonment Date” means the earlier of the following two dates:

- (a)** the first day on which:

- (1)** the well or site (as applicable) is no longer in use for the exploration or production of oil or gas; and

- (2)** it is clear to the Operator, or would be clear to a reasonable person in the Operator’s place, that the well or site is being abandoned; or

- (b)** the date on which the period specified in Paragraph 1 of this Article expires;

- 3.** “non-saline water” means water that has less than or equal to four thousand milligrams per litre of total dissolved solids (TDS);

- 4.** “permanent abandonment” means any abandonment of a well or site other than a temporary abandonment, and “permanently abandon” shall be construed accordingly;

- 5.** “Petroleum Operations” have the definition given to them in Law No. 22 of 2007 and “Operations” shall be construed accordingly;

6. “Petroleum Operator” or “Operator” means an Operator as defined in Law No. 22 of 2007, shall mean “Operators” in respect of any Petroleum Operations of which there are more than one Operator and may be an individual or a legal entity or a combination thereof, and “it” when used in these Instructions to refer to an Operator shall mean “he”, “she” or “they” as applicable;
7. “reclamation” means restoration and rehabilitation, and “reclaim” shall be construed accordingly;
8. “Region” means the Kurdistan Region of Iraq and “Regional” shall be construed accordingly;
9. "rehabilitation" means any re-vegetation and other activities required after restoration is complete to return a site to a condition:
  - (a) that approximates and blends in with the surrounding land; and
  - (b) in which the site’s ability to support various land uses is similar to the ability that existed prior to the commencement of Petroleum Operations on the site;
10. "restoration" means the clean up and contouring of a site, including any application of topsoil, required to return the site as nearly as possible to its original condition and to render the site ready for vegetation, and “restore” shall be construed accordingly;
11. “site” means any area of land used for activities relating to Petroleum Operations, means both the whole site of any given Petroleum Operations and any portion of it and includes any land used for wells;

- 12.** “temporary abandonment” means the abandonment of a well or site where all of the following conditions are met:
- (a)** The abandonment is intended to be temporary such that the Operator has a genuine and demonstrable intention to use the well or site again in the foreseeable future;
  - (b)** By no later than the Abandonment Date, the Operator submits an application to the Ministry for the temporary abandonment of the well or site, which application must describe the well or site, the proposed period of, and reasons for, the temporary abandonment, and the steps taken or proposed to be taken in respect of the environmental and health and safety risks of the abandonment;
  - (c)** The Ministry approves the Operator’s application under Clause (b) of this Paragraph, which approval shall be for a period of no more than two years at a time;
  - (d)** Unless the Ministry allows an extended period in highly exceptional circumstances, the total period of abandonment is no more than five years; and
- “temporarily abandon” shall be construed accordingly;
- 13.** “well”, unless otherwise clear, has the same meaning as that in Law No. 22 of 2007 and means a perforation in earth’s surface, involving dug or bored through subsurface rock formations, for the purpose of exploring for or producing petroleum;
- 14.** any other word or expression which is assigned a meaning in Law No. 22 of 2007 shall have the same meaning as in the said Law.

## **Abandonment of Oil and Gas Wells**

### **Third Article.**

Any Petroleum Operator who abandons a well must take all necessary measures, including those specific measures set out in these Instructions, to ensure that:

1. excessive pressure will not build up in any portion of the well;
2. the long-term integrity of the wellbore will be maintained;
3. freshwater aquifers and underground sources of drinking water will be protected;
4. surface soils, surface waters and future land uses will be protected; and
5. the migration of oil, gas, water or other substance from the formation in which it originally occurred will be prevented.

### **Fourth Article.**

An Operator who permanently abandons a well must:

1. by no later than the Abandonment Date, notify the Ministry in writing that it is permanently abandoning the well, specifying the location of the well and the Abandonment Date; and
2. ensure that by no later than ninety days from the Abandonment Date, the following sequential steps are taken:
  - (a) Testing of the well to identify:
    - (1) any wellbore integrity issues;
    - (2) all oil or gas formations;
    - (3) all groundwater zones; and
    - (4) the condition of the existing cement in the well;
  - (b) Taking of any measures including any further testing, repairs or application of products and technology, to ensure that any leaks or other wellbore problems are

addressed and that the well will not pose any risk to the environment or the public once abandoned;

- (c) Plugging of the well in the accordance with the following steps:
- (1) Cleaning the inside of the wellbore, removing any oil and gas that may cause the casing to corrode or limit the effectiveness of the abandonment cement plugs;
  - (2) With cement, isolating all porous formations penetrated by the well bore from one another and any groundwater zones from the wellbore in a manner that effectively seals the formations, prevents the commingling of oil, gas, salt water and fresh water, and isolates potentially extractable minerals;
  - (3) Filling the well with non-saline water or other non-corrosive fluid;
  - (4) Testing the well for any integrity issues, including for any gas migration or fluid leaks or escapes and taking any necessary measures on the basis of that assessment, to ensure the well's long-term integrity;
  - (5) Cutting the well casing at least four feet below the surface of the ground, and capping it with a sufficiently strong cement or steel cap such that the top of the cap is at least three feet below ground level; and

- (6) Placing a two foot steel peg and affixing a steel identification tag on top of the cap which tag must specify that it is an abandoned oil and/or gas well, the name of the operator who abandoned it and the date of the abandonment;
- (d) Removing from the vicinity of the well all surface equipment, cement pads, debris and produced liquids associated with the well within ninety days of the completion of the plugging process set out in Paragraph 3 of this Article; and
- (e) Restoring the site of the well.

**Fifth Article.**

For the purpose of the steps set out in Paragraph 2 of the 4th Article:

1. The cement used for plugging must meet industry standards of high quality, may only contain additives that improve its ability to provide necessary protection, and must maintain a minimum compressive strength of five hundred pounds per square inch (PSI) after seventy two hours;
2. Drilling water or mud may be used as fillers between the cement plugs; and
3. No substance of any nature or description other than that normally used in plugging processes in accordance with acceptable industry standards shall be placed in any well at any time during the plugging process.

**Sixth Article.**

An Operator who temporarily abandons a well must ensure that all of the following requirements are fulfilled in respect of the well:

1. By no later than ninety days from the Abandonment Date:

- (a) the Operator must conduct comprehensive tests to identify any wellbore integrity issues and must address any such issues identified;
  - (b) the well must be capped in such a manner as to have no open casing exposed to the environment and to have no wellhead leaks; and
  - (c) the well must be plugged as necessary to ensure that the obligations in the 3rd Article are complied with;
2. By no later than ninety days from the Abandonment Date and on an on-going basis, the Operator must take such other measures as are necessary to comply with the obligations in the 3rd Article;
  3. The Operator must implement a regular and comprehensive monitoring programme for the well to ensure that any integrity and other issues that may cause a breach of the obligations in the 3rd Article are detected and addressed without delay; and
  4. The Operator must keep records of any testing, monitoring and other measures undertaken for the well during its temporary abandonment and must make those records available to the Ministry upon request.

**Seventh Article.**

Any Operator who either temporarily or permanently abandons a well must submit a Well Abandonment Report to the Ministry by no later than one hundred and twenty days from the Abandonment Date, which report must:

1. contain a Declaration of Truth, signed by an authorised representative of the Operator, affirming that the Operator believes the facts stated in the report to be true and accurate;



2. provide a detailed account of the manner in which the abandonment process was carried out, including a detailed description of (as applicable):
  - (a) the tests carried out and a summary of their results;
  - (b) the nature and quantities of materials used in plugging;
  - (c) the location and extent (by depths) of the plugs;
  - (d) the amount, size and location (by depths) of casing and junk left in the well; and
  - (e) the volume and weight of non-saline water and mud fluid used; and
3. provide Universal Transverse Mercator (UTM) coordinates for the surface location of the abandoned well and the location of the end of the well bore.

**Eighth Article.**

An Operator:

1. who permanently abandons a hitherto temporarily abandoned well must do so in accordance with the 4th Article; and
2. must, notwithstanding the foregoing Articles, temporarily or permanently abandon a well in accordance with these Instructions, if at any time required to do so by the Ministry.

**Ninth Article.**

It shall be the duty of the Operator drilling a well or causing a well to be drilled to ensure that the well is abandoned in compliance with these Instructions.

## **Reclamation**

**Tenth Article.** Reclamation measures must begin as soon as possible after any disturbance of land for the purpose of Petroleum Operations and continue until successful reclamation is achieved.

**Eleventh Article.** Whilst the Petroleum Operations are on-going on a site, the Operator must:

1. design and conduct its Operations in a manner that would best facilitate successful reclamation following the termination of the Operations on that site;
2. achieve maximum interim reclamation by:
  - (a) minimising the footprint of disturbance; and
  - (b) reclaiming all portions of the site (including any roads) not needed for the Operations, in accordance with the 12th Article.

**Twelfth Article.** Any Operator who permanently abandons a site (which for the avoidance of doubt, includes permanently abandoning a portion of a site) must ensure that by no later than one hundred and twenty days from the Abandonment Date, the successful reclamation of the abandoned site is achieved as follows:

1. Except to the extent required for compliance with these Instructions and other Regional laws, all structures, equipment and materials brought onto the site for any purpose related to the Operations must be removed from the site;
2. Any wells must be plugged and restored in accordance with Paragraph 2 of the 4th Article if this has not already been done;

3. Any water wells must be decommissioned in line with Regional laws and restored;
4. All pipelines or flowlines must be restored as follows:
  - (a) Any fluids in the pipelines or flowlines must be flushed and properly disposed of;
  - (b) All surface lines and any lines that are buried close to the surface that may become exposed due to water or wind erosion, soil movement, or anticipated subsequent use, must be removed; and
  - (c) All pipeline trenches must be restored by placing fill in the trench, compacting the fill, re-grading cut-and-fill slopes to restore the original contour and replacing topsoil;
5. All excavations and pits must be closed by backfilling when they are dry and free of waste and graded to conform to the surrounding terrain;
6. All disturbed areas must be cleared and re-contoured to their original contour or a contour that blends with the surrounding landform;
7. In re-contouring areas that have been surfaced with gravel or similar materials, the material must be removed from the location or buried deep in the re-contoured cut to prevent possible surface exposure;
8. All disturbed areas must be re-vegetated to the level that existed before the site was disturbed for the Operations;
9. When conditions are not favourable for the establishment of the required vegetation, the Ministry may allow the re-vegetation to be delayed until soil moisture conditions become

favourable, however, it shall remain the Operator's responsibility to monitor the site and take the necessary steps to ensure reclamation success; and

10. Roads must be reclaimed by the Operator unless the Ministry permits them to be left un-reclaimed.

**Thirteenth Article.** An Operator who permanently abandons a site must file a Reclamation Report within one hundred and fifty days of the Abandonment Date, which report must describe the reclaimed site, set out in detail the reclamation process undertaken, and confirm that the site meets the reclamation requirements of these Instructions and is ready for inspection.

**Fourteenth Article.** Upon receipt of a Reclamation Report for a site under the 13th Article, the Ministry will inspect the site and:

1. will approve the Reclamation Report if it is satisfied that the reclamation is fully successful; or
2. if it is not satisfied that the reclamation is fully successful, it may require the Operator to take such steps as the Ministry considers appropriate in order to achieve full reclamation success.

**Fifteenth Article.** Notwithstanding the foregoing Articles, an Operator must reclaim a site or portion of a site in accordance with these Instructions, if at any time required to do so by the Ministry.

#### **Transitional provisions**

**Sixteenth Article.** Subject to the 17th Article, the obligations in these Instructions apply to all Petroleum Operations and in respect of all wells and sites used for such Operations whether or not those wells or sites have

already been abandoned by the date on which these Instructions come into effect.

**Seventeenth Article.** In respect of wells and sites already abandoned on the date on which these Instructions become effective:

1. for the purpose of all deadlines linked to the Abandonment Date, the “Abandonment Date” shall be deemed to mean the date on which these Instructions become effective; and
2. responsibility for compliance with these Instructions lies with:
  - (a) the Operator who is in charge of the well or site on the date on which these Instructions become effective; or
  - (b) if no Operator is in charge of the well or site on the said date, the Operator who was in charge of the well or site when it was last abandoned.

#### **Supplementary provisions**

**Eighteenth Article.** In addition to the requirements imposed under these Instructions, Operators must ensure that their abandonment and reclamation of any wells and sites are compliant with applicable Regional laws and in line with best international practice.

**Nineteenth Article.** The Ministry may, by a written exemption notice, permit an Operator to deviate from any specific requirement(s) in the 4th, 5th, 6th or 12th Articles in respect of a particular well or site if, on the application of the Operator, the Ministry considers that:

1. the Operator’s deviation would be preferable to compliance because it would (due to the use of more suited or advanced methods or technology than that specified in these Instructions

or for any other reason) better achieve the objectives of these Instructions and would:

- (a) better fulfil the obligations in the 3rd Article (if it relates to a well abandonment); or
  - (b) better ensure successful reclamation (if it relates to the reclamation of a site); or
2. compliance with the requirement(s) in question would be:
- (a) impracticable; and
  - (b) unnecessary to achieve the objectives of these Instructions and to:
    - (1) fulfil the obligations in the 3rd Article (if it relates to a well abandonment); or
    - (2) secure successful reclamation (if it relates to the reclamation of a site).

**Twentieth Article.** An application under the 19th Article must be submitted at least sixty days before the expiration of the deadline for compliance with the requirement(s) in question and must contain:

- 1. a detailed description of the deviation in question and the reasons for it; and
- 2. clear, detailed information and substantiating evidence to demonstrate that the application meets the relevant criteria in Paragraph 1 or 2 of the 19th Article (as applicable).

**Twenty-first Article.** If the Ministry rejects an application under the 19th Article, the Operator must ensure full compliance with the requirement(s) in question by the original due date.

**Twenty-second Article.** An Operator who has:

1. received a rejection from the Ministry in respect of a temporary abandonment application under Paragraph 12(b) of the 2nd Article;
2. received a direction from the Ministry requiring it to abandon a well under Paragraph 2 of the 8th Article;
3. received a direction from the Ministry requiring it to take any steps under Paragraph 2 of the 14th Article;
4. received a direction from the Ministry requiring it to reclaim a site under the 15th Article; or
5. been denied an exemption under the 19th Article;

may apply to the Ministry for a reconsideration of the decision in question.

**Twenty-third Article.** Any application under the 22nd Article must:

1. be made within thirty days of the date on which notice of the Ministry's decision was received by the Operator;
2. contain a clear and concise statement of the reasons for the application; and
3. include any supporting documentation.

**Twenty-fourth Article.** The Ministry will consider any application under the 22nd Article and make a determination on it within thirty days, which determination shall be final.

**Twenty-fifth Article.** In order to assess and ensure compliance with these Instructions, the Ministry may:

1. conduct such audits, inspections and assessments as it considers appropriate;

2. require an Operator to provide it with such information as the Ministry considers necessary;
3. require an Operator to take such steps as the Ministry considers appropriate in respect of the abandonment or reclamation of a well or site; and
4. take such other measures as it considers appropriate to assess and ensure compliance with these Instructions.

**Twenty-sixth Article.** These Instructions shall be effective from the date on which they are published in the official Kurdistan Gazette.

**Dr Ashti Hawrami**

**Minister of Natural Resources**