

EAST ASIAN OBSERVER

The Removal of Offshore Installation in Indonesian National Regulation

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An offshore installation is built or installed for the purposes of exploration and exploitation in any part of the sea. The offshore installations that are presently in existence reflect great scientific progress in the field of marine resources. However, they become a source of concern when they are no longer in use. Due to the potential to disrupt activities conducted around their location, they interfere with navigational safety. Therefore, it is important to remove such installations. Their removal should be based on the provisions of the IMO Guidelines and Standards. Indonesia is a coastal State and should adhere to the above mentioned guidelines and standard in designing policies and regulations.

Keywords

Offshore Installation, International Maritime Organization, UNCLOS, Indonesia.

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DOI: <http://dx.doi.org/10.14330/jeail.2018.11.1.09>

1. Introduction

Indonesia embraces extensive marine territory. As an archipelagic state, it has small and big islands, islets and rocks spreading all over its territory. The outcome of a research conducted in 2000 revealed that the number of islands all over the national territory has reached 17,508.¹ Five thousand seven hundred and seven islands are named, while 11,801 islands are unnamed. Presently, the total size of Indonesia's territory (land and water) is 5,193,250 square kilometers (km²), embracing 2,027,080 square kilometers of land territory and 3,166,170 square kilometers of water territory.²

If an archipelagic territory exists in a position between two oceans and two continents, it constitutes a center of international traffic for foreign ships of all kinds.³ Besides the role of passage area or transit for ships, many parts of the waters under the sovereignty and jurisdiction of a territory constitute a good location for installing offshore installations for exploration and exploitation of natural resources, particularly oil and gas existing in the seabed and its subsoil. Indonesia is obliged to guarantee the safety of navigation for all foreign ships passing through its national water territory and to give due publicity to any danger existing therein,⁴ mainly the existing locations of offshore installations that have been abandoned or disused.

According to existing legal provisions, disused offshore installations must be removed.⁵ For removing offshore installations, all agreements or contracts between Indonesia and another party should be relevant. The other party might be a private corporation, domestic or foreign, which secured a license for exploration

¹ The Geospacial Information Agency states that currently the number of islands registered and coordinated by Indonesia are 13,466. However, Indonesia owns islands more than the number mentioned above, i.e., about 17,000 islands including 'gosong' (low tide elevation) and the unnamed island in the Union State of Indonesian republic (NKRI). See The Geospacial Information Agency of Bakosurtanal RI, Indonesia Owns 13,466 Islands Registered and Coordinated [*Indonesia Memiliki 13.466 Pulau yang Terdaftar dan Berkoordinat*], available at <http://bakosurtanal.go.id/berita-surta/show/indonesia-owns-13.466> (last visited on Apr. 25, 2018).

² R. Cribb & M. Ford, *Indonesia as an Archipelago: Managing Islands, Managing the Seas*, at 1, available at <https://ses.library.usyd.edu.au/bitstream/2123/16146/2/Cribb%20%26%20Ford%20Indonesia%20as%20an%20Archipelago.pdf>. See also *Indonesia-Location, size, extent*, NATIONS ENCYCLOPEDIA, available at <http://www.nationsencyclopedia.com/Asia-and-Oceania/Indonesia-LOCATION-SIZE-AND-EXTENT.html> (all last visited on Apr. 25, 2018).

³ K. KANTAATMADJA, INTERNATIONAL COMPENSATION FOR OIL POLLUTION OF THE SEA [*Gantirugi Internasional Pencemaran Minyak di Laut*] 3 (1981).

⁴ Indonesia should guarantee the safety of navigation based on both Article 24, Paragraph 2 and Article 60, Paragraph 3 of the UNCLOS. Such the obligation is under Indonesian national laws such as Article 6, Paragraphs 2 and 3 of Laws Number 1 Year 1973, Article 17 of Government Regulation Number 17 Year 1974, and Article 7, Paragraph 4 of Government Regulation Number 37 Year 2002.

⁵ M. Iqbal, *The Offshore Structure Removal in Indonesia* [*Pembongkaran Bangunan Lepas Pantai di Indonesia*], J. MARITIME YOUTH [Jurnal Pemuda Maritim] 1 (2014).

and exploitation of oil and gas in certain parts of national water. In this case, some problems may arise: What are the international provisions regarding the removal of offshore installation which has been abandoned or disused?; To what extent does the Indonesian national laws regulate the removal of abandoned or disused offshore installation?

2. The Removal of Offshore Installation based on International Regulations

Presently, there are about 6,500 offshore installations for oil and gas production in the world. These installations are located in the maritime areas of 53 States. More than 4.000 installations are located in the Gulf of Mexico; about 950 installations exist in Asia; approximately 700 installations exist in the Middle East, and about 600 installations are in the North Sea and the Eastern Atlantic Sea.⁶ Based on the number of installations, it is clear that there are many oil and gas fields that have already entered into a period of non-productivity. This represents a challenge for the offshore oil and gas mining sector, i.e., the problem concerning the removal of offshore installations that have been abandoned or disused.⁷

In Indonesian national waters, there are about 530 offshore installations, 70 of which are not in operation anymore.⁸ As most of them are 20 to 40 years old, some of these installations are already causing problems. Currently, the removal of abandoned or disused offshore installation is a crucial issue, mainly because it has the potential to interfere with the safety of navigation.

Each relevant country for the construction and use of offshore installations should remove them under international and national regulations. In particular, the Convention on the Continental Shelf regulates disused offshore installations and their removal.⁹ Article 5, Paragraphs 4 and 5 of the Convention stipulates:

⁶ G. Gibson, *The Decommissioning of Offshore Oil and Gas Installation: A Review of Current Legislation, Financial Regimes and the Opportunities for Shetland*, in *id.*

⁷ L. Selengkapnya, *The Removal of Offshore Structure in Indonesia* [Pembongkaran Bangunan Lepas Pantai di Indonesia], *PEMUDA MARITIM* 2 (Mar. 2014), available at <http://www.pemudamaritim.com/2014/03/pembongkaran-bangunan-lepas-pantai-di.html> (last visited on Apr. 25, 2018).

⁸ H. Prasajo & F. Zaky, *Analysis of Use of MIGAS Release of Post-Production Beach for Budi Paya Fisheries* [Analisis Pemanfaatan Anjungan Migas Lepas Pantai Pasca Produksi Untuk Budi Daya Perikanan], Bab II (2.1).

⁹ M. HENDRAPATI, *THE REMOVAL OF OFFSHORE INSTALLATION AND NAVIGATION SAFETY IN INDONESIA* 2-3 (Pustaka Pena Press, 2014).

Such installations and devices, though under the jurisdiction of the coastal State, do not possess the status of islands. They have no territorial sea of their own, and their presence does not affect the delimitation of the territorial sea of the coastal State. Due notice must be given of the construction of any such installations, and permanent means for giving warning of their presence must be maintained. Any installations which are abandoned or disused must be entirely removed.

Article 60, Paragraph 3 of the United Nations Convention on the Law of the Sea 1982 (“UNCLOS”) applies *mutatis mutandis* to the installation built in the continental shelf. It provides:

Due notice must be given of the construction of such artificial islands, installations or structures, and permanent means for giving warning of their presence must be maintained. Any installations or structures which are abandoned or disused shall be removed to ensure safety of navigation, taking into account of any generally accepted international standards established in this regard by the competent international organization. Such removal shall also have due regard to fishing, the protection of the marine environment and the rights and duties of other States. Appropriate publicity shall be given to the depth, position and dimensions of any installations or structures not entirely removed.

According to Brown any part of an abandoned and disused installation left potentially interferes with navigational activity, fishing and protection of marine environment.¹⁰ In addition, the resolution established by International Maritime Organization (“IMO”) specifies the guidelines and standards for the removal of offshore installations. In January 1986, the IMO decided to develop the Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone (hereafter IMO Guidelines).¹¹ In the 33rd session, the Sub-Committee on Safety of Navigation prepared a preliminary draft text of guidelines and standards “in terms the Ministry Regulation for Energy and Mineral Resources Affairs concerning Technical Guidelines for the Removal of Offshore Oil and Gas Installation (The Ministry Regulation Number 01 Year 2011).

¹⁰ E. Brown, *Decommissioning of offshore structures: legal obligations under intern, and municipal law*, 1 OIL & PETROCHEM POLLUTION 23 (1982), available at <https://www.sciencedirect.com/sdfe/pdf/download/eid/1-s2.0-S0143712782904495/first-page-pdf> (last visited on Apr. 25, 2018).

¹¹ See IMO Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone [hereinafter IMO Guidelines], IMO Resolution A.672 (16) (Oct. 19, 1989), available at [http://www.imo.org/blast/blastDataHelper.asp?data_id=22503&filename=A672\(16\)E.pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=22503&filename=A672(16)E.pdf) (last visited on Apr. 25, 2018).

At the 16th IMO session in 1989, it endorsed the Guidelines and Standards for the Removal of Offshore Installations and Structures. The IMO Guidelines and Standards was finally adopted in the form of a resolution on October 19, 1989.¹² It is the first set of international regulations aiming at regulating the issues of dismantling or relocating offshore oil installations. The IMO Guidelines and Standards generally require that an abandoned or disused installation be dismantled unless ‘non-removal’ or ‘partial removal’ is in conformity with the existing guidelines and standards.¹³

When the IMO Guidelines are meant for partial removal,¹⁴ abandoned or disused offshore installations or structures on the continental shelf or in the EEZ are required to be removed, “except where non removal or partial removal is consistent with the following guidelines and standards.”¹⁵ It can be seen that partial removal is the exception to the rule of complete removal.

Meanwhile, the coastal State is responsible for the removal of the installation. However, the removal is not necessary if a subsequent new use of the installation emerges or if a reasonable justification cited in the IMO Guidelines exists for allowing the installation to remain on the seabed. In cases of non-removal or partial removal, the coastal State is under a duty to notify the IMO. In Paragraph 1 (the last part), a link can be seen between the UNCLOS and the Convention on the Continental Shelf. Here, the coastal State is permitted to create and implement more stringent removal requirements so that any potential conflict between the national laws of the coastal State and treaty obligations can be avoided.¹⁶

In principle, the disused installation shall be totally removed by the coastal State or the owner State. Nevertheless, it does not have to be totally removed, but just partially or even not removed at all. These actions, however, must be in conformity with the IMO Guidelines.¹⁷

The total or partial removal should be conducted soon if the installation is abandoned or if it is not permanently used. If the coastal State makes a decision to conduct non removal or partial removal, it shall notify the decision to the IMO. The design and implementation for the removal shall be permitted more stringently by the coastal State concerned than the IMO Guidelines. In this case, the installation’s owner State should evaluate each case on whether the installation or its parts could

¹² *Id.*

¹³ *Id.*

¹⁴ T. Ijlst, *Removal and Disposal of Offshore Installations*, 1(4) MARINE POL’Y 273-4 (1989).

¹⁵ *Supra* note 11.

¹⁶ Ijlst, *supra* note 14, at 274.

¹⁷ *Supra* note 11.

be left to exist on the seabed taking into account the IMO Guidelines.¹⁸ In this regard, the guidelines spell out the following to be considered:

- 1) Any potential effect on the safety of surface or subsurface navigation, or of other uses of the sea;
- 2) The rate of deterioration of the material and its present and possible future effect on the marine environment;
- 3) The potential effect on the marine environment, including living resources; the determination should be based on scientific evidence, including the effect on water quality, the presence of endangered or threatened species, existing habitat types, local fishery resources, and the potential for pollution;
- 4) The risk that the material will shift or move from its position at some future time;
- 5) The coasts, technical feasibility, and risks of injury to personnel associated with a removal of the installation and structure; and
- 6) The establishment relating to a new use or other reasonable justification for allowing the installation or structure or parts thereof to stay on the seabed.¹⁹

Furthermore, the installation standing in less than 75 meters of water and weighing less than 4000 tons should be entirely removed.²⁰ It is difficult to say how many installations are in waters of less than 75 meters, but a vast majority of the installations would fall into this category.²¹ Installations placed on the seabed on or after January 1, 1998 standing in less than 100 meters of water and weighing less than 4000 tons should be totally removed.²² In the future, engineers should design installations in such a way that are removable, even in relatively deep water. The standards contain an express provision for a design so that the entire removal would be feasible after the installation is abandoned or permanently disused.²³ The removal should be conducted in such a way that would prevent serious injury to the marine environment and ensure navigational safety. While total or partial removal is being conducted, the installation should be carried out with warning signals according to the recommendation established by the International Association of Lighthouses Authorities (“IALA”).²⁴ Where partial removal is permitted, an unobstructed water column sufficient to ensure navigational safety but not less than 55 meters should be

¹⁸ IMO Guidelines ¶ 2.1.

¹⁹ *Id.*

²⁰ IMO Guidelines ¶ 3.1. *See also* Ijlstra, *supra* note 14, at 275.

²¹ Ijlstra, *supra* note 14, at 275.

²² IMO Guidelines ¶ 3.2.

²³ *Id.* ¶ 3.13. *See also* Ijlstra, *supra* note 14, at 275.

²⁴ IMO Guidelines ¶ 3.3.

provided above any partially removed installation or structure that does not project above the surface of the sea.²⁵ However, there are a number of exceptions relating to partially removed installation. For example, if there is any existing installation that will serve a new use or be in water of less than 75 meters that can be left without unjustifiable interference to other uses of the sea, the coastal State may determine if the installation should be left wholly or partially in the location.²⁶ These provisions open an opportunity for government more concerned to compare the financial implications of removal with the management of the sea area under their jurisdiction, and serve as an escape from the application of more stringent provisions.²⁷

3. The Offshore Installation Removal based on the Indonesian National Regulations

Technically, the removal of offshore installations follows the guidelines existing in Government Regulation of the Indonesian Republic Number 17 Year 1974 regarding Control of Offshore Oil and Gas Exploration and Exploitation Operation.²⁸ Any offshore installation which is disused shall be entirely removed in a period established by the Director General, through adequate activities to ensure the security of project and navigation lanes.²⁹ The entrepreneur is obliged to make a written notification to Director General in a period of seven days before the offshore installation removal is conducted. S/he is asked to describe some points such as the location of the offshore installation declared in geographical coordinates and the date of the commenced removal activities.³⁰ The Entrepreneur should also report if any parts of the offshore installation are removed or can not be removed in a period of 14 days after the project activities finalize.³¹ Further, there is the Ministry Regulation for Energy and Mineral Resources Affairs concerning Technical Guidelines for the Removal of Offshore Oil and Gas Installation (Ministry Regulation Number 01 Year 2011) designed to achieve the following purposes to: guarantee the safety of work

²⁵ *Id.* ¶ 3.6.

²⁶ *Id.* See also Ijlstra, *supra* note 14, at 276.

²⁷ *Id.* at 276.

²⁸ L.N.1974 No.20. T.L.N.1974 No.3031. This government regulation is to specify and implement the Law of Indonesian Republic Number 1 Year 1973 concerning the Continental Shelf of Indonesia.

²⁹ *Id.* art. 21(1).

³⁰ *Id.* art. 21(2).

³¹ *Id.*

personnel; implement environmental management; guard offshore installation as state asset; and guarantee the navigation safety.³²

Article 2 of the Ministry Regulation Number 01 Year 2011 states that the removal of offshore installation is exercised if the offshore installation is not used any more or will be used again for activities of oil and gas exploration and exploitation in another location. The removal of offshore installation must be conducted by applying technological devices which meet Indonesian domestic, regional, or international standard and by applying a technical rule that fulfills the work safety, health and environment preservation. The removal is carried out by the Contractor of Joint Work Contract, called Kontraktor Kontrak Kerja Sama (“KKKS”), after the contractor obtains an approval from the Director General of Oil and Gas (Dirjen Migas). For gaining the approval, KKKS has to submit an application to Director General of Oil and Gas,³³ including a document of offshore installation removal plan. The Director General of Oil and Gas begins evaluating the document of the removal plan within thirty working days after the complete document is received.³⁴ During the evaluation, KKKS has to make a presentation of the removal plan document. Then, the document is certified as complete and correct. Within ten working days, the Director General of Oil and Gas gives an approval for offshore installation removal, which is valid for only three years. The approval is no more valid if the plan is changed or not exercised within 3 years from commencing the removal of the installation.³⁵ While dismantling offshore installation, KKKS should use a dismantling officer with appropriate competence and qualification or utilize the services of national companies that have obtained Certificate of Registration from the Director General of Oil and Gas.³⁶ Before carrying out the demolition, KKKS has to disseminate the dismantling, transfer and transport plans to the public and related agencies; install navigation signs around the demolition site; and ensure the permanent closure of all wells in conformity

³² The Ministry Regulation for Energy and Mineral Resources Affairs concerning Technical Guidelines for the Removal of Offshore Oil and Gas Installation (The Ministry Regulation Number 01 Year 2011), art. 3, *available at* <http://prokum.esdm.go.id/permen/2011/Permen%20ESDM%2001%202011.pdf>. *See also* Technical Guidelines for the Removal of Oil and Gas Offshore Installation, at 1, *available at* <http://migas.esdm.go.id/post/read/Pedoman-Teknis-Pembongkaran-Instalasi-Lepas-Pantai-Minyak-dan-Gas-Bumi> (all last visited on Apr. 25, 2018).

³³ *Id.* art. 6 (1) & (2). SKS Pelaksana Hulu Migas or SKK Migas is an ad hoc institution substituting BP Migas. The substitution or transfer has been established through the Decision of Minister for Energy and Mineral Resources Number 3135 K/08/MEM/2012 Year 2012 as implementation of the President Regulation Number 95 Year 2012 concerning the Transfer of Migas Upstream Activity’s Task and Function.

³⁴ *Id.* art. 7.

³⁵ *Id.* art. 7(5).

³⁶ *Id.* art. 10.

with the Indonesian National Standard.³⁷ In addition, KKKS has to confirm that all infrastructures connected to the offshore installation have been disconnected and that all piping systems and other equipment are free of hazardous and toxic materials.³⁸ After the dismantling process, KKKS must place the dismantled materials in the approved storage location and clean the seabed to remove the remnants of the dismantling work or derivatives of past production activities with a minimum coverage of clearance area in the prohibited region with a radius of 500 meters.³⁹ Also, KKKS must ensure safety, health and environmental management at the time of the dismantling or removal and storage of offshore installation materials. It also stipulates that the Director General of Oil and Gas shall conduct guidance and supervision on the implementation of offshore installation disposal in accordance with the Ministry Regulation.⁴⁰ KKKS shall submit a report to the Director General of Oil and Gas concerning the implementation of the installation removal no later than 14 days after the demolition activity is completed.⁴¹ Based on technical evaluation of the report, it may be accepted. Within 30 working days after receipt of the report, the Director General of Oil and Gas should issue a site clearance certificate.⁴²

4. Conclusion

The offshore installation should be totally removed when it is serving neither the primary purpose of its original design and construction, nor a subsequent new use; it exists nearby or within straits used for international navigation or archipelagic sealanes, which is usually in high density; or it exists within routing systems accepted by the IMO. The installation located in a shallow water should be totally removed by the coastal State when it is disused, unoperated and abandoned. Conversely, the installation located in a deep water can be partially removed. A coastal State's decision regarding partial removal or non-removal of such installation should be adopted case-by-case, through evaluation of the potential effect of the installation or its parts for the safety of surface or subsurface navigation; other uses of the sea;

³⁷ *Id.* art. 11 (a, b & c).

³⁸ *Id.* art. 11 (d, e & f).

³⁹ *Id.* art. 12(2) & (3).

⁴⁰ *Id.* art. 14.

⁴¹ *Id.* art. 14(2).

⁴² *Id.*

the rate of deterioration of the installation or its parts; the marine environment in present and future including living resources; and the financial costs. It should also consider such conditions as: technical feasibility of the removal and the personnel safety involved in removal project; possible shift from its position in the future; a new use of such the installation like artificial reef for search and rescue base; tourism destination point; and other reasonable justification for allowing the structure or parts thereof to stay on the seabed. These factors are corresponding to the UNCLOS and the IMO Guidelines. Furthermore, Indonesian national regulation regarding the removal of offshore installation is encapsulated in Indonesian Law Number 1 Year 1973 regarding the Continental Shelf of Indonesia. The provisions for such removal are stipulated in Government Regulation of Indonesia Number 17 Year 1974 regarding Supervision of the Exercise of Exploration and Exploitation of Offshore Oil and Gas and the Regulation of the Minister for Energy and Mineral Resources Affairs Number 01 Year 2011 regarding Technical Guidelines on the Removal of Oil and Gas Offshore Installation. Finally, the removal of offshore installation is stipulated in the Regulation of Minister for Transportation Number 129 Year 2016 regarding Marine Navigation Lanes and Structures and/or Installations in Waters. Based on Indonesian national regulations, the removal of offshore installation is conducted when it is disused and abandoned or it will be reused for the oil and gas exploration and/or exploitation activity in another location. The offshore installation removal is exercised by contractor in conformity with the Ministry Regulation. In this case, the contractor should be approved by the Director General. The owner of offshore installation has to put a deposit on a government bank as a guarantee to substitute any financial expenditures for the removal of offshore installation. As the offshore installation is regarded as state owned property, the Indonesian Government is finally responsible to carry out the removal of such the installation.