

Offshore Installation Removal in the Interest of Navigation Safety from International Law Point of View

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Abstract

The offshore installation construction is a technological product developed by state and corporation for the purpose of exploring and exploiting in the sea areas which are unlimited to shallow areas of the sea. The offshore installation existing does also show the science development occurred in the history of human being civilization, mainly related with the use of marine resources. One problem which brings about any concern is the removal of offshore installation when such the installation is abandoned and disused any more. This condition has certainly an impact on various activities in the sea, such as any interference with the safety of navigation with the result that it is urgent to conduct the removal. International Maritime Organization creates the international standards used as guidelines for coastal states in formulating and establishing the provisions regarding removal of any disused offshore installation.

Key Words: removal, offshore installation, safety of navigation.

I. Introduction

Geographical circumstance of the Indonesian Republic Union State for the greater part consists of ocean and it is categorized as an archipelagic state or maritime continent state, which indicates that Indonesian territory is looked as a maritime continent on which big and small islands scattered about. Physically Indonesia does consist of thousands of the big and small islands. The last research outcome up to year 2000 reveals that the number of islands all over the Indonesian archipelagic territory has already reached 17.508 islands¹. From such the number there are 5.707 named islands and 11.801 islands unnamed. While nowadays the extent of the land

¹ The other data owned by the Geospacial Information Agency under Bakosurtanal Republic of Indonesia states that nowadays the islands registered and coordinated are 13.466 in number. Through United Nations Group of Experts on Geographical Names (UNGEGN), where Indonesia is a member state, can offer information every year if there is any additional number of islands.. The accounting of the islands' number is done by National Team on the Mapping of Indonesian Earth Surface. Many societies have a view that Republic of Indonesia own the islands' number more than the number mentioned above, that is to say more than 17.000 islands. Nevertheless the number of 17.000 islands might be possibly right, since the societies suppose that "gosong" (low tide elevation), namely a land just existing when the sea water is in low tide is also supposed as an island by the society. Besides lowtide elevation (gosong), the unnamed island is supposed as the island as well. Such the thing causing the society have a view that Indonesia has the number of islands more than 17.000 ones. The most important thing is that the territory with thousands islands in number are joined and united in the Union State of Indonesian republic (NKRI). The thing which is not overcome is that Indonesia is adjacent to ten neighbour states in number. The boundaries exist on ninety two outermost islands which needs to be well guarded and managed, since those islands are used as baselines to make delimitation lines between Indonesia and the neighbour states. 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), See http://bakosurtanal.go.id/berita-surta/show/indonesia owns 13.466 islands registered and coordinated (indonesia-memiliki-13-466-pulau-yang-terdaftar-dan-berkoordinat)



and water territory is 5.193.250 square kilometers (km2) consisting of 2.027.080 square kilometers in the form of land territory and 3.166.170 square kilometers in the form of water territory.

Besides such the geographical condition, the archipelagic territory location existing in cross position between two oceans and two continents, with the result that it constitutes one centre of the international traffic for foreign ships of all kinds¹. Many locations of waters both which are subject to souvereignty and jurisdiction territory, besides have function as areas of passage or transit area for the ships, in fact they constitute as well the location for constructing offshore installation for eksploration and eksploitation of natural resources, particularly oil and gas existing in the seabed and its subsoil. As an archipelagic state Republic of Indonesia is obliged and responsible to ensure safety of navigation for the foreign ships within its national water territory and to make due publication of any danger existing therein, mainly the existing location points of any offshore installation which is abandoned due to disuse anymore.

According to legal provision and regulation existing nowadays, offshore installation which is disused must be remove². That is why the problem regarding the removal of installation is inevitable one with the result that an arrangement on such the issue has a clear cut relevancy and its arrangement should be an integral and inseparable part of an agreement or contract between Indonesian Republic and any other party. The other party concerned might be a private company or corporation, national or overseas one, which gets or has a license for exploration and exploitation of oil and gas on the certain location within Indonesian national water. Based on the description, some problems which have to be discussed could be formulated. The first is what kind of arrangement relating to the removal of offshore installation, which is abandoned or disused? The second is, what kind of role of International Maritime Organization (IMO) in drafting international guidelines and standards for the coastal states in formulating and establishing any policy and law regulations respecting any disused offshore installation?

Research Method

This research is a normative legal one³ with applying any law regulations. The datas which are used are secondary datas in the form of any primary law materials (international and national law instruments), secondary law materials (such as textbooks, journals and reports regarding research outcome) through library research. All the law materials which are collected, will be qualitatively analized.

Research Outcome and Discussion

A. Arrangement on the Removal of Offshore Installation

Nowadays there are about 6.500 offshore installations and structures for oil and gas production all over the world, where these installations are located on 53 states. More than 4.000 installation units exist in the Gulf of Mexico, about 950 installations in Asia, more or less 700 installations exist in the middle East and about 600 installations lie in the North Sea and the Eastern Atlantic Sea. From such the number of the installations, nowadays there are many oil and gas fields which have already entered into a period of non productivity anymore, with the result that the offsore oil and gas mining sector affords akind of challenge, namely the problem relating to the removal of offshore installation which is abandoned or disused⁴.

In Indonesian national waters there are about 530 offshore installations, a number of 70 installations was not in operation anymore. A greater part of those installations has 20 until 40 years old. In this condition a few of installations have already made any problems be present both relating to any structure condition of

¹ Komar Kantaatmadja, *International Compensation for Oil Pollution of the Sea (Gantirugi Internasional Pencemaran Minyak di Laut*, Bandung: Alumni, 1981, P. 3.

² Muhammad Iqbal, *The Offshore Structure Removal in Indonesia (Pembongkaran Bangunan Lepas Pantai di Indonesia)*, Jurnal Pemuda Maritim Edisi 2014, P.1.

³ Amiruddin dan Zainal Asikin, *Introduction to Legal Research Method (Pengantar Metode Penelitian Hukum)*, Jakarta: Rajawali Pers, 2013, P.118

⁴ Graeme, Gibson, *The Decommissioning of Offshore Oil and Gas Installation: A Review of Current Legislation, Financial Regimes and the Opportunities for Shetland*, UK: STEP Placement, 2002, dalam Muhammad Iqbal, *Supra 3*.



installations and to any position of the existing installation in the sea areas, mainly the installations which were disused anymore ¹. Therefore one of the crucial problems is the removal of offshore installation when the installation is abandoned or disused. If such the problem does get any unfair attention, it does certainly impact to a variety of maritime activities, particularly can result in any interference with the safety of navigation.

Such the situation indicates that at any rate the subject of the removal does need any care of the states, particularly the states which have any jurisdiction relating to the construction and use of offshore installation with the result that such the subject needs to have any proper international and national arrangement. There are four conventions on the law of the sea which are produced during the 1958nd Geneva conference 1) Convention on the Territorial Sea and Contiguous Zone; 2) Convention on the High Seas; 3) Convention on Fishing and Conservation of the Living Resources of the High Seas; 4) Convention on the Continental Shelf ². Three conventions mentioned above (namely the first, second and third convention) do not rule any offshore disused installation and its removal. Nevertheless the fourth convention of the Geneva Convention, in this case the article 5 paragraph 4 and 5 does specificly stipulate that:

"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".

Furtherly, United Nations Convention on the Law of the Sea 1982, especially in article 60 ayat 3 stipulates as follow:

"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".

The provision in article 60 paragraph 3 does also apply mutatis mutandis on the installation constructed in the continental shelf, as stipulated in the article 80 of UNCLOS 1982. According to Brown a part of installation left, namely the installation abandoned and disused can disturb navigation activity, fishing and protection of marine environment 3. Besides those conventions (the Geneva Conventions 1958 and UNCLOS 1982, then the resolution established by International Maritime Organization 1989 specifies in detail guidelines and standards on the removal of offshore installation. Article 60 Paragraph 3 of the United Nations Convention on the Law of the Sea of 1982 sets forth the existence of an international organization which has the authority to establish and develop international standards as a guideline for coastal states in particular those parties to the convention or convention participants. These standards may be used by coastal states in establishing policies and arrangements concerning the removal of unused installations. The dismantling or removal of offshore installations and buildings is not only related to the interests of shipping, but also relates to other aspects such as fisheries and

¹ Research and Development Centre under the Ministry of Indonesian Republic for Energy and Mineral Resources (Pusat Penelitian dan Pengembangan Kementerian ESDM RI), in Muhammad Iqbal, *Ibid*.

² Marcel Hendrapati, *The Removal of Offshore Installation and Navigation Safety in Indonesia*, Makassar: Pustaka Pena Press, 2014, pp. 2-3.

³ Paul Peters, A.H.A. Soons and Lucie A. Zima, "Removal of Installation in the Exclusive Economic Zone", Nederlands Yearbook of International Law, Volume XV, 1984, Martinus Nihhoff Publishers, p.. 173.



marine environmental protection, while with these latter two aspects the International Maritime Organization has no interest.

Formerly the international maritime organization and its members were reluctant to assume liability unrelated to the shipping issue. However, if the organization itself or in conjunction with other competent international organizations, may set up installation transfer standards under the provisions of Article 60 paragraph 3 of the United Nations Convention on the Law of the Sea 1982, the actual safeguard of shipping occupies the highest priority in comparison with those interests, namely other interests.

Subject to the provisions of Article 59 of the IMO Convention, this organization is expected to become a single body authorized to establish international standards for dismantling and removing unused or disused installations. Where the organization is not a single body so that there must be cooperation between the organization and other international organizations, the preparation of standard dismantling and removing of installation can be complicated and soluble with all its consequences. With the provisions of the IMO Convention it is intended to implement the provisions of Article 60 paragraph 3 of the United Nations Convention on the Law of the Sea 1982 because the provisions of Article 60 paragraph 3 are only the guiding principles which require further regulation for achieving order and legal certainty among countries. The provisions of the IMO Convention are used as the basis for Pasal 60 ayat 3 United Nations Convention on the Law of the Sea 1982 mengemukakan adanya suatu organisasi internasional yang mempunyai kewenangan untuk menetapkan dan mengembangkan standar-standar internasional sebagai pedoman bagi negara pantai khususnya yang telah menjadi peserta konvensi. Standar-standar ini dapat digunakan oleh negara pantai dalam menetapkan kebijaksanaan serta pengaturan mengenai pemindahan instalasi yang sudah tidak digunakan lagi. Pembongkaran instalasi dan bangunan lepas pantai tidak hanya berkaitan dengan kepentingan pelayaran semata, tetapi juga berkaitan dengan aspek-aspek lain seperti perikanan serta perlindungan lingkungan laut, sementara dengan kedua aspek terakhir ini International Maritime Organization tidak berkepentingan. Dahulu organisasi maritim internasional dan anggota-anggotanya enggan memikul kewajiban yang tidak berkaitan dengan masalah pelayaran. Namun demikian jika organisasi itu sendiri atau bersama dengan organisasi internasional lain yang berwenang, dapat menyusun standar-standar pemindahan instalasi berdasarkan ketentuan Pasal 60 ayat 3 United Nations Convention on the Law of the Sea 1982, maka sebenarnya keselamatan pelayaran menempati prioritas utama dibandingkan dengan kepentingan-kepentingan lainnya. Berdasarkan ketentuan Pasal 59 Konvensi IMO, maka organisasi ini diharapkan dapat menjadi sebuah badan tunggal yang berwenang menetapkan standarstandar internasional pembongkaran dan pemindahan instalasi yang ditinggalkan atau sudah tidak digunakan lagi. Bilamana organisasi tersebut tidak merupakan badan tunggal sehingga harus ada kerjasama antara organisasi tersebut dengan organisasi internasional lain, maka penyusunan standar pembongkaran instalasi dapat menjadi rumit serta berlarut larut dengan segala konsekuensinya. Dengan ketentuan-ketentuan dari Konvensi IMO tersebut dimaksudkan untuk mengimplementasikan ketentuan Pasal 60 ayat 3 United Nations Convention on the Law of the Sea 1982 karena ketentuan Pasal 60 ayat 3 hanya merupakan ketentuan-ketentuan pokok saja (the guiding principles) yang memerlukan pengaturan lebih lanjut bagi tercapainya ketertiban dan kepastian hukum di antara negara-negara. Ketentuan-ketentuan dari Konvensi IMO yang digunakan sebagai dasar bagiTop



of Formthis organization to further regulate the provisions of Article 60 paragraph 3 and thereby the product of its law can not be annulled by the United Nations Convention on the Law of the Sea 1982 in accordance with Article 311.

As it has been argued that under articles 16i and 59 of the IMO Convention, the International Maritime Organization becomes a single body that can set international installation transfer standards. In this connection the Maritime Safety Committee of IMO in January 1986 decided to develop "Guidelines and Standards for the Removal of Offshore Installations and Structures." In the 33rd session "the Sub Committee on Safety of Navigation" prepares "a preliminary draft text of guidelines and standards "in terms of shipping safety.

At the 16th IMO session in 1989, it endorsed "the Guidelines and Standards for the Removal of Offshore Installations and Structures" into a resolution. "IMO Guidelines and Standards" set forth in the form of a resolution is the first set of international regulations passed on 19 October 1989 with the aim of regulating the issues of dismantling or relocating offshore oil installations. "IMO Guidelines and Standards" specifies a general requirement that an abandoned or unused installation or building must be dismantled unless "non-removal" or "partial removal" is in conformity with existing guidelines and standards.

The increasing construction and operation of offshore installation do potentially bring about any conflict of marine use. Such the conflict could occur between the right of coastal state in arranging the construction and use of offshore installation in general and the removal of disused offshore installation on one hand and the right of the other state to exercise the navigation activity through souvereignty and jurisdiction territory of the Indonesian archipelagic state. Therefore the arrangement on the removal of offshore installation which is not used or operated anymore needs to care, since there are variable factors which have to be considered by the coastal state in establishing a policy and law regulations concerning the removal of offshore installation which is abandoned or disused. Such the factors embrace safety of navigation on and under the surface of the sea, the fishing activity, financial and technological, the marine environment protection ¹.

Since the Guidelines and Standards for the Removal of Offshor Installations and Structure on the Continental Shelf and in the Exclusive Economic Zone (hereafter, Guidelines) are meant for partial removal, the first paragraph asserts the transition from complete removal to partial removal². 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". It can be seen that partial removal is the exception to the rule of the complete removal. The coastal state is responsible for the removal of the installation. However in certain circumstances is not necessary. The removal is not necessary if a subsequent new use of theinstallation does occur or if no other reasonable justification cited in the Guidelines exists for

¹ Komar Kantaatmadja, op. cit., p. 104. In relation with the interest of the marine environment protection around the installation, in Saint Barbara Case, a tragedy emerged on an installation or platform at Saint Barbara, California, United States 28nd January 1969. The Court of California states inter alia that at the sea which is quite deep, then the installation bringing about pollution with a level less than 100 ppm can result in any nutrients.

² Ton Ijlstra, Removal and Disposal of Offshore Installations, *Marine Policy* Reports, Volume 1. Number 4. 1989, Taylor & Francis, pp.273-274.



allowing the installation to remain on the seabed. In cases of nonremoval or partial removal the coastal state has to notify IMO. In the last part of the first paragraph, a link can be seen between the 1982 UNCLOS and the 1958 Geneva Convention on the Continental Shelf, where the coastal state is permitted to create and implement more stringent removal requirements with the result that any potential conflict can occur between national laws of coastal state and treaty obligations.

In principle the installation disused shall be totally removed by the coastal state or the owner state. Nevertheless the disused or inoperated installation does not need to be totally removed, but it is just partially removed (partial removal) or even it is not removed at all (non removal), provided that such these actions attend guidelines and standards existing within "*IMO Guidelines*".

The total or partial removal should be conducted when the offshore installation has no function any more to achieve the primary purpose or does not offer a subsequent new use, or there is no other reasonable justification as stipulated within IMO Guidelines and Standards justifies the installation or its certain parts to exist on the seabed. The total removal or partial removal should be immediately conducted when the installation is abandoned or it has permanent disuse. If the coastal state decides not to conduct any removal (non removal) or to conduct partial removal, then this decision shall be notified by the coastal state to IMO. However the coastal state is permitted to draft and implement removal requirements which are more stringent than IMO guidelines' requirements. Nevertheless the installation's owner state shall pay attention of "IMO Guidelines and Standards" which can be used as guidelines in evaluating case by case whether the installation or its could be let to exist on the seabed. In evaluating the possible installation or its certain part existing on the seabed, the guidelines spell out which matters will have to be taken into account: 1) Any potential effect on th 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 of which should be based upon scientific evidence, to include the effect on water quality, the presence of endangered or threatened species; existing habitat types; localfishery resources; and potential for pollution. 4) the risk that the material will shift from its position at some future time. 5) the coasts, technical feasibility, and risks of injury to personnel associated with removal of theinstallation and structure; and 6) the determination of a new use or other reasonable justification for allowing the installation or structure or parts thereof to remain on the seabed.

Furtherly the standards to take into account of are as follow: Installation standing in less than 75 meters of water and weighing less than 4000 tons should be entirely removed². It is difficult to say how many installations are in waters of less than 75 meters, but is evident that a vast majority of the installations would fall into this category. In addition, future installations will be subject to a more stringent norm. Installations placed on the seabed on or after 1 January 1998, standing in less than 100 meters of water and weighing less than 4000 tons, should be entirely removed³. In the future, engineers should design installations in such a way that they are

¹ IMO Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone, Resolution A.672 (6), Adopted on 19 Oktober 1989.

² Paragraph 3.1 IMO Guidelines. See Ton Ijlstra, Removal and Disposal of Offshore Installations, *Marine Policy*, Volume 1.Number 4.1989, p.275.

³ Paragraph 3.2 IMO Guidelines.



removable, even in relatively deepwater. The standards contain an express provision for a design such that the entire removal would be feasible after the installation is abandoned or permanently disused¹. The removal should be exercised in such a way that it could prevent occurrence of serious injury to the marine environment and safety of navigation. While the total removal or partial removal is being conducted, then the installation should be installed with warning signals in accordance with any recommendation established by IALA (International Association of Lighthouses Authorities). Where partial removal is allowed, an unobstructed water column sufficient to ensure safety of navigation but not less than 55 meters should be provided above any partially removed installation or structure that does not project above the surface of the sea². However there are a certain number of exceptions in relation with the installation partially removed. For instance, any existing installation that will serve a new use or an existing installation in water of less than 75 meters that can be left without causing unjustifiable interference to other uses of the sea, the coastal state may determine the installation be left wholly or partially in place³. These provisions open an opportunity for government more concerned about the financial implications of removal than with the management of the sea area under their jurisdiction, and serves as an escape from the application of more stringent provisions⁴.

The Indonesian National Regulations on the Offshore Installation Removal In Indonesia itself technically regarding the removal of offshore installation refers to the guideline stipulated in Government Regulation of Indonesian Republic Number 17 Year 1974 respecting Control towards Offshore Oil and Gas Exploration and Exploitation Operation⁵. The established government regulation aims at ensuring safety of work personnel, implementing environmental life management, guarding the condition of offshore installation as state owned asset and guaranteeing the navigation safety and attending article 2 of the Government Regulation Number 17 Year 1974, specifying as follow:⁶

The Government Regulation stipulates that the removal of offshore installation is exercised in case the offshore installation is disused or will be used anymore for any activities of oil and gas exploration and exploitation in other location. The rermoval of offshore installation must be exercised with applying or using technology devices which are suitable with Indonesian national standard or regional standard or international standard and technical rule which is good and comply with the work safety aspect, working health and environmental preservation. The removal is carried out by the Contractor of Joint Work Contract, which is called Kontraktor Kontrak Kerja Sama (KKKS) after the contractor gains an approval by Director General of Oil

¹ Paragraph 3.13 IMO Guidelines. See also Ton Ijlstra, Removal and Disposal of Offshore Installations, *Marine Policy*, Volume 1.Number 4.1989, p.275.

² Paragraph 3.6 IMO Guidelines.

³ *Ibid*, p.276.

⁴ *Ibid*, p.276.

⁵ Government Regulation of Indonesian Republic Number 17 Year 1974 (Peraturan Pemerintah RI Nomor 17 Tahun 1974) (L.N.1974 No.20. T.L.N.1974 No.3031) is government regulation specifying and implementing the Law of Indonesian Republic Number 1 year 1973 concerning the Continental Shelf of Indonesia.

⁶ Publication and Documentation of the General Directorate for Oil and Gas under the Ministry for Energy and Mineral Resources, *Technical Guidelines for the Removal of Oil and Gas Offshore Installation*, (Publikasi dan Dokumentasi Direktorat Jenderal Minyak dan Gas Bumi Kementerian Energi dan Sumber Daya Mineral, *Pedoman Teknis Pembongkaran Instalasi Lepas Pantai Minyak dan Gas Bumi*). See http://migas.esdm.go.id/post/read/Pedoman-Teknis-Pembongkaran-Instalasi-Lepas-Pantai-Minyak-dan-Gas-Bumi.



and Gas (Dirjen Migas). For the purpose of gaining the approval, KKKS must propose an application to Director General of Oil and Gas through SKKMigas¹, with supplementing any document of offshore installation removal planning. Director General of Oil and Gas evaluates the document of the removal planning for the longgest working thirty days after complete document is received. In the framework of evaluation and clarification of the removal planning document, KKKS is obliged to make a presentation of the removal planning document. After it is stated as complete and correct, then in the longgest ten working days, the Director General of Oil and Gas gives the approval for offshore installation removal. This approval is given for the longgest three years' time period of applicability. The approval is inapplicable when the planning is shifted or is not carried out if more than 3 years of unloading the installation. The KKKS is responsible for the demolition. In carrying out the dismantling of offshore installations, KKKS shall use the dismantling officer with the appropriate competence and qualifications or utilize the services of national companies that have obtained the Certificate of Registration from the Director General of Oil and Gas.

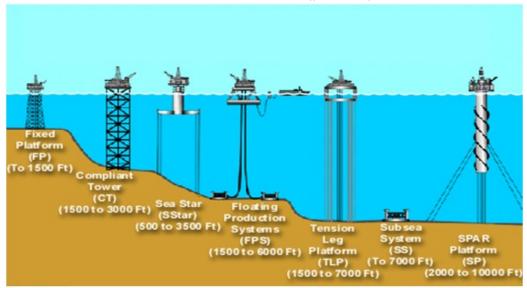
Before carrying out the demolition, the KKKS must disseminate the dismantling, transfer and transport plans to the public and related agencies, installing navigation signs around the demolition site and ensuring that all wells are permanently closed in accordance with the Indonesian National Standard. In addition, KKKS should also ensure that all infrastructure connected to offshore installations has been disconnected and that all piping systems and other equipment are free of hazardous and toxic materials. In carrying out the dismantling, the KKKS shall place the dismantled results in the approved storage location and clean the seabed from the remnants of the dismantling work or derived from past production activities with a minimum coverage of clearance areas in accordance with the prohibited area with a radius of 500 meters. In carrying out the dismantling, the KKKS shall place the dismantled results in the approved storage location and clean the seabed from the remnants of the dismantling work or derived from past production activities with a minimum coverage of clearance areas in accordance with the prohibited area with a radius of 500 meters. KKKS shall also ensure the safety and health and environmental management at the time of the dismantling, removal or cultivation and storage of offshore installation proceeds. It is also stipulated that the Director General of Oil and Gas shall conduct guidance and supervision on the implementation of offshore installation disposal, in accordance with the provisions of the law. KKKS shall submit a report to the Director General of Oil and Gas concerning the dismantling implementation no later than 14 days after the demolition activity is completed. If based on the technical evaluation of the report may be received, within 30 working days after receipt of the report, the Director General of Oil and Gas issues a site clearance certificate².

¹ Satuan Kerja Sementara Pelaksana Kegiatan Usaha Hulu Migas (SKS Pelaksana Hulu Migas). SKS Pelaksana Hulu Migas or SKK Migas is an ad hoc institution substituting BP Migas. The substitution or transfer is 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.

² Regulation of Minister for Energy and Natural Resources Number 01 Year 2001 regarding Technical Guidelines on the Removal of Oil and Gas Installation (Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 01 Tahun 2001 tentang Pedoman Teknis Pembongkaran Instalasi Lepas Pantai Minyak dan Gas Bumi).

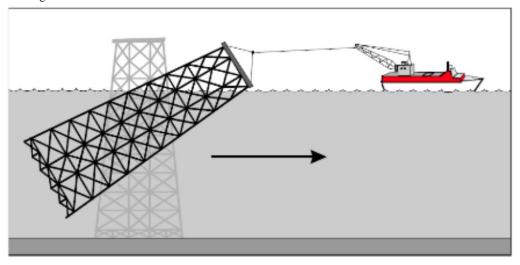


Berikut Gambaran Jenis Offshore Platform¹



Les Dauterive describes 3 (three) ways to dismantle offshore structures technically and serve as artificial reefs as follows ²:

1. Drag and move

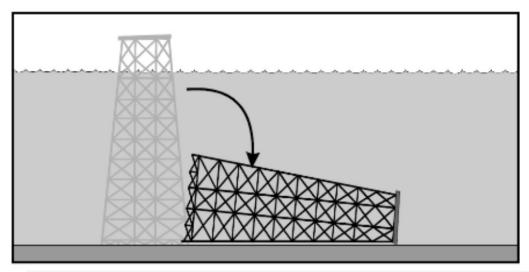


2. Crash on the spot

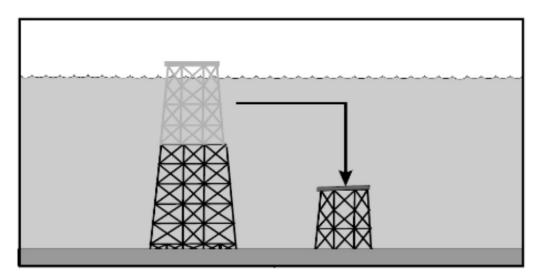
¹ http://www.naturalgas.org/images/offshore_drill_platform.gif.

² Dauterive, Les, *Rigs-to-Reefs Policy, Policy, Progress, and Perspective,* US Department of the Interior Mineral Management Service Gulf of Mexico OCS Region 2000, in Muhammad Iqbal, *Loc.Cit.*, pp.5-6.





3. Partial Removal



IV. Concluding Remarks

As concluding remarks, the author et all may conclude some important points, namely that the removal of offshore installation can be discovered its arrangement in the Convention1958, particularly article 5 paragraphs 4 and 5 of the Geneva Convention on the Continental Shelf, konvensi keempat mengenai Landas Kontinen, article 60 paragraph 3 United Nations Convention on the Law of the Sea 1982, IMO Guidelines and Standards 1989. That is the arrangement on the offshore installation removal from the international law point of view, while the national arrangement of Indonesia regarding the offshore installation removal can be seen and met within Indonesian Laws Number 1 Year 1973 regarding the Continental Shelf of Indonesia, dan the Government Regulation of Indonesia Number 17 Year 1974 regarding Supervision for the Exercise of Exploration and Exploitation of Offshore Oil and Gas, and the Minister Regulation of Energy and Mineral Resources Number 01 Year 2001 regarding Technical Guidelines on the Removal of Oil and Gas Offshore Installation.

From the legality and reality aspects International Maritime Organization becomes a single agency which does internationally establishe the guidelines and standards concerning the installation removal. In this regard the Maritime Safety Committee in January 1986 decides and developes "Guidelines and Standards for the Removal of Offshore Installations and Structures" and in 1989 adopts "the Guidelines and Standards for the Removal of Offshore Installations and Structures" to be incorporated into a resolution.



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204