

## **RIGS-TO-REEFS: THE EFFICIENT DISPOSAL OF OIL RIGS IN ORDER TO MAXIMIZE THE SOCIAL-ENVIRONMENTAL BENEFITS, IN ACCORDANCE WITH REPETRO.**

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### **Resumen**

El presente trabajo expone las consecuencias ambientales y fiscales del abandono de pozos de petróleo y gas natural, especialmente a la luz de Repetro y sus requisitos para la eliminación permanente de los impuestos suspendidos resultantes de dicho Régimen Especial. En este artículo se compara la legislación local con la Ley de extranjería y con las prácticas de la industria de petróleo y gas en el extranjero. Propone soluciones para contemporizar los aspectos legales involucrados, mediatos e inmediatos, proporcionando mayor eficiencia a las prácticas en este sector de la economía y la satisfacción de las necesidades sociales, económicas, culturales y ambientales de la empresa (papel social de la Compañía), proporcionando a la naturaleza y los residentes locales un medio ambiente ecológicamente equilibrado.

### **Summary**

The present work investigates the environmental and fiscal consequences of the abandonment of oil and natural gas wells, especially in the light of REPETRO and its requirements for the permanent removal of suspended taxes arisen from that Special Regime. It compares the local legislation with alien law and with the practices of the oil and gas industry abroad. It proposes solutions that contemporize the mediate and immediate legal aspects involved, providing further efficiency to practices in this sector of the economy and meeting the social, economic, cultural and environmental needs of the company (Company's social role), providing the nature and local residents an ecologically balanced environment.

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## Key Words

Oil and Natural Gas, REPETRO, Taxes, Company's social role.

## 1. Introduction

The *Oil & Gas* Industry has had many major legal challenges to its development in Brazil since the relaxation of the monopoly of the Union promoted by the Constitutional Amendment number 09/95, especially in the environmental and fiscal scope. The State's interest in promoting this business activity always bumps into the mandatory protection of the environment and the aggressive tax collecting habits of the National Treasury.

Such areas of legal knowledge seem isolated and sometimes they are. However, in this case, they are necessary and complementary pieces to solve a problem to be faced in a not so distant future: that is, the decommissioning of the offshore rigs at the end of the production cycle of oil and natural gas wells.

From the environment standpoint, the removal of artificial structures, after being installed for several years, has potential implications in the marine environment developed on site, that is, the marine life developed on site is threatened by the removal of the habitat (Artificial reef).

On the other hand, the most important tax benefit of the oil industry in Brazil, REPETRO, has strict rules for its use and for the permanent removal of the temporary suspended import taxes from when the rigs/platforms were originally imported. It's necessary that such structures are either *re-exported* or *destroyed* (among other options mentioned below but less common and unimportant for this work).

However, from the experience of the U.S. *Rigs-to-Reefs* program and the recent Brazilian regulation on artificial reefs, (Still in the works) we will see that it's possible to set the decommissioning of offshore rigs/platforms without placing the environment at risk, keeping the structures in place to support the life they have developed, functionally destroying the equipment to the task it was acquired, meeting the tax legislation requirements and enabling the permanent: removal of the temporarily suspended import taxes.

The *Rigs-to-Reefs* program is, actually, embodied in a valuable instrument for asserting, both, the fiscal and environmental standards at the same time. While the tax regulations are met to the extent that rigs are functionally destroyed in favor of an ecological function, the nature benefits from it and the relevant environmental standards are rigorously met while protecting and keeping the marine environment.

This article serves the purpose of bringing this important and imminent legal discussion to our present time, allowing a democratic maturity over the issue, which is indispensable for Brazil to be legally and technically prepared to deal with it in the near future.

In order to fulfill this agenda, the following will be discussed in this article, albeit in a synthetic form: (i) the history and role of this program in the United States; (ii) the ways the artificial reefs are currently regulated in Brazil; (iii) the compatibility of the *Rigs-to-Reefs* program with the fiscal and environmental legislation in the homeland; (iv) the social role of the enterprise in a Democratic State.

## 2. History and Role of the Program in Comparative Law

*Rigs-to-Reefs* is an American program for the disposal of obsolete oil rigs for use as artificial reefs, encouraged by the *Minerals Management Service - MMS*, an agency of the *Bureau of Ocean Energy Management, Regulation and Enforcement - BOEMRE*, the federal regulatory agency of that country responsible for the development of energy and mineral resources in its continental area. The program is funded by the federal Government due to its notorious environmental benefits, which works with the coastal states and oil companies.<sup>2</sup>

Paul Hammerschmidt, director of the artificial reef program of Texas, with didactic sensitivity, defines:

*“One biological truism states that habitat diversity creates ecological diversity. You’ve also probably heard, ‘If you build it, they will come.’ Texas Artificial Reef Program has been applying both these concepts for decades in creating new reefs.*

*Natural structure and hard bottom are rare in the Gulf of Mexico where the bottom is pretty much a vast featureless plain of mud and sand. Where structure does occur, natural or otherwise, it is like an oasis in a desert. Virtual gardens of sessile (permanently attached) invertebrates like barnacles, corals, sponges, clams, anemones, bryozoans and hydroids quickly attach (o every available surface and in every nook and cranny. On the natural side, this biological richness can be seen in the Flower Garden Banks National Marine Sanctuary, a natural reef complex located about 100 miles from Galveston, Texas, and 400 miles north of the nearest tropical coral reef: On the man-made side,*

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<sup>2</sup> <http://www.gomr.boemre.gov/homepg/regulate/enviro/rigs-to-reefs/information.html> . Accessed on 12/09/2010.

*the hundreds of petroleum platforms dotting the Gulf of Mexico also support a vast array of natural reef-like communities, functioning as hard substrate upon which animals and plants can settle.*<sup>3</sup>

Generally speaking, an artificial reef is a man-made structure placed on the marine environment in order to attract life in its many varied forms, enabling the biological development of that *habitat*, in addition to bearing social, economic and cultural fruit to people by serving as sites for fishing and environmental tourism.

On the solid structure of artificial reefs, the marine life begins with the settling of sessile organisms which attract reef fishes, which in turn attract predators, creating a food chain managed by humans, whom may now fish in that environment which was probably unproductive up to that point. In this sense, teaches Les Dauterive the author of *Rigs-to-Reefs Policy, Progress, and Perspective*:

*“The removal of platforms from the GOM [Gulf of Mexico] has resulted in the loss of valuable reef and fishery habitat. Researchers report fish densities to be 20 to 50 times higher at oil and gas platforms than in nearby open water. Each standing platform seasonally serves as critical habitat for 10,000 to 20,000 fishes, many of which are of recreational and commercial importance (Stanley and Wilson, 1997). Reggio (1987) estimated that 70 percent of all saltwater fishing trips offshore Louisiana were destined for one or more oil and gas platforms. Avanti Corporation, Inc. (1991) estimated that 30 percent of the recreational fisheries catch, a total of approximately 15 million fish, was caught near platforms offshore Louisiana and Texas.”*<sup>4</sup>

The American history on the subject has strong roots in the state of Texas, which in the 70s had successful experiences with the deliberate sinking of 12 obsolete warships in the Gulf of Mexico, where productive life develops even today, paving the way for the *National Fishing Enhancement Act* (1984) and of *Texas Artificial Reef Act* (1989).<sup>5</sup>

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<sup>3</sup> Information courtesy of Texas Parks and Wildlife Department © 2004, Paul Hammerschmidt, Artificial Reef Program Director. Em <http://www.tpwd.state.tx.us/fishboat/fish/didyouknow/reefcreation.phtml>. Accessed on 12/07/2010.

<sup>4</sup> Dauterive, Les. *Rigs-to-Reefs Policy, Progress, and Perspective*. Published by the U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region: New Orleans, October 2000.

<sup>5</sup> Information provided by courtesy of Texas Parks and Wildlife Department © 2004, Paul Hammerschmidt, Artificial Reef Program Director. <http://www.tpwd.state.tx.us/fishboat/fish/didyouknow/reefcreation.phtml>. Accessed on 12/07/10.

During this period, the slowdown in the oil industry in the Gulf of Mexico resulted in the scrapping of platforms used for oil production in the area. Such platforms were ideal to be allocated as artificial reefs since they were environmentally safe, durable and stable, resisting to storms and bad weather in the marine *habitat*. In addition, these platforms had already created an ecosystem there for decades and the removal of them would result in a large environmental impact, since it would end the life support it had developed there. Thus was born the *Rigs-to-Reefs program*, in which the state and the industry joined efforts together so that instead of removing the platforms *onshore* at a high cost, they can be designated as artificial reefs as long as they comply with the criteria established by the MMS. In summary, it's a great project which seeks to efficiently allocate resources to maximize social and environmental benefits.

### 3. Regulation of artificial reefs in Brazil

The artificial reefs in Brazil are regulated by Decree n° 5.300/2004 and 5.377/2005, which delegated regulation of the instrument to IBAMA, which in turn enacted TN IBAMA n° 22/2009.

IBAMA, through Complementary Regulation, recognizes the importance of artificial reefs for the development of marine life and the legitimate interest of the fishermen and eco-tourism, taking into consideration the scientific knowledge on the subject. It stresses, however, that the deployment and disposal of these structures offer lasting and permanent changes in the marine environment, reason why it is qualified for environmental licensing.

According to the norm under discussion, the definition of artificial reef in the homeland law is:

*“Art. 1°. (...)*

*III - The artificial reef structure made out of natural or anthropogenic materials, inert and non-polluting, placed intentionally amid underwater in direct contact with the substrate, able to significantly change, in a planned manner, the natural relief of the ocean floor or influencing physical, biological, geochemical and social-economic processes, according to national, regional and local interests.”*

The reasons for the implementation of artificial reefs includes fishing, biodiversity conservation, scientific research, seashore protection, recreational diving or the development of artificial background to the formation of waves

for water sports. IBAMA will discuss proposals for the deployment of artificial reefs once other agencies of the public administration are consulted.

The standard provides for special treatment for ships and offshore platforms, stating on the third and fourth paragraphs of art. 10, specific regulation for the allocation of these structures into artificial reefs, demanding logistic plan for decommissioning and treatment to fit the proposed plan with the total removal of potentially polluting substances and materials:

*“Art. 10. The installation of artificial reefs in places that threaten, in its direct area of influence, the health of reef formations and other habitats protected by specific legislation, is prohibited.*

*(...)*

*§ 3°. In the case of vessels and offshore platforms, a logistic plan for the decommissioning of them covering all treatment given to fit the proposed plan, with the removal of sharp edges and the total removal of potentially polluting substances and materials (oils and fuels, asbestos, PCBs, antifouling paints, floating materials that pose a risk, plastics, glass, batteries, antifreeze, Mercury lamps, etc.) shall be submitted to IBAMA in accordance with the rules of the Maritime Authority for naval inspection.*

*1 - The Maritime Authority may contribute to the verification of the adequacy of vessel/platform as to the removal of potentially polluting substances and materials. The verification of suitability will be by means of naval inspection action, through which the inspectors will board them in order to inspect the location of the spaces intended for the storage of such substances and/or materials, using both general arrangement plans and capacity of the vessel/platform, and others found relevant by the Maritime Authority.*

*§ 4°. The contractor shall be responsible for the removal of the structures installed, by decision motivated by IBAW, in case of environmental damage found as well as for repairing the damage.”*

So, it seems that from the environmental point of view the subject matter currently has regulation in Brazil similar to the U.S. rigs-to-reefs program, allowing oil rigs to be transformed into artificial reefs, making it possible the use of such instrument for the improvement of the environment and the reduction of costs on the removal of submerged equipment.

#### **4. The Compatibility of transforming platforms into artificial reefs with REPETRO -Functional destruction.**

REPETRO is the Special Customs Regime of the export and import of goods intended for Exploration and Production of Oil and Gas and it is regulated by Decree No. 6,795/2009 and IN RFB No. 844/2008. The role of this special regime, among other things, is to permit the temporary admission of goods for named activities with the suspension of the applicable taxes that would be levied on regular imports.

Its rules and specifics are beyond the object of this work, being important only to investigate the extinction of the regime. Indeed, the extinction will occur (i) with the re-export: of the imported goods, (ii) with its delivery to the National Treasure, (iii) with its destruction at the expense of the party concerned, (iv) with the transfer of it to another special customs regime or (v) with clearance for consumption. To properly bound the scope of this paper, it will deal only with the extinction hypothesis of REPETRO through the destruction of the goods imported under the regime and at the expense of the party concerned.

In this sense, Article 25, of IN RFB n° 844/2008:

*Art 25. The regime of temporary admission shall be extinguished with the adoption of one of the following steps, which shall be requested within the time limit set for the permanence of the good in the country.*

*(...)*

*III - destruction, at the expense of the party concerned;*

*(...)*

*§ 2°. The adoption of the measure for the extinction of the regime shall be requested by the interested party to the responsible for the RFB unity with jurisdiction at the place where the goods are located, who may not require the presentation of the goods, in certain cases.*

*§ 3°. The customs unity referred to in § 2°. shall notify the action for the unity which originally granted the regime in order to remove the TR.*

*(...)*

*§ 6°. In the event of the extinctions mentioned in sections II and IV of the heading, the payments of the suspended taxes will not be required by the applications of the regime (...).*

*§ 7°. The eventual residue of the destruction, if economically usable, shall be dispatched to be used as if they had been imported in that state and without exchange hedging.*

As evidenced in the text of the standard already mentioned, it's possible to the importer to request to RFB the destruction of the same, by its means, at its own expense and within the deadline for the goods to remain in Brazil, so that the suspended taxes are permanently removed, unless economically usable residue remains, in which case the residue is cleared for consumption at the value of the state it currently is.

When we combine the fiscal and environmental standards listed above, it's possible to apply the principle of *Rigs-to-Reefs* to platforms imported under the special REPETRO regime and transform them into artificial reefs, something they already were since their installation on the seabed and the consequent development of marine life on site.

Indeed, the process to be followed for the allocation of oil rigs into artificial reefs involves the elaboration of a logistic decommissioning plan for the structures and the description of the necessary steps to transform them into the intended purpose, including the total removal of potentially polluting materials and substances (oils and fuels, asbestos, PCBs, antifouling paints, floating materials that pose a risk, plastics, glass, batteries, antifreeze, mercury lamps, etc.). The entire process of transforming the oil rig into an artificial reef involves, necessarily, its functional destruction, without any economic usable residue material to be cleared for consumption, since these structures no longer serve their primary purpose, but only for the preservation of the marine life which had developed on site over the years while they were at the service of the company exploring and producing oil and natural gas.

Once the destruction/transformation of the oil rig in favor of its adequacy to remain on site as an artificial reef takes place, for environmental reasons, in line with §§ 3° and 4°, of the art. 10, of IN BAMA n° 22/2009, it will be embracing at the same time the standard introduced in item III, of art. 25, of IN RFB n° 844/2008, making possible the exoneration of the suspended taxes under REPETRO, as long as the goods imported under the REPETRO regime have been effectively destroyed without any absolute economically usable residue remaining from them, in MI accord with the terms of its § 7°.

With this measure, we attend the constitutional provision inserted in the heading of art. 225 (*"Everyone has the right to an ecologically balanced environment and of common use and essential to a healthy quality of life, imposing itself upon the Government and society the duty to defend and preserve it for present and future generations"*) and also the rules established by REPETRO.

## 5. The Social Role of the Company in a Right Democratic State

In addition to the full compatibility of the *Rigs-to-Reefs* program with the environmental and fiscal legislation of the homeland, including the RE-PETRO standards, it's certain that the adoption of the program in Brazil serves, above all, to the existing legal system, since the allocation given to the platforms meets the social economic role of the company by caring for the environment, especially the ecosystem that has developed on the surface of the structures installed on the seabed.

The Federal Constitution provides that the property must be compatible with its social destination, harmonizing with the interests of society. That is the social role of the property provided in section XXII, article 5°, § 2°, of article 182, and in the article 186, all of CF/88. As a corollary and backed by articles 116 and 154, of law N° 6.404/76 (Corporate laws) it comes up again the social role of the company, which according to Modesto Carvalhosa:

*“The company has an obvious social role, and many stakeholders such as the employees, suppliers, the community in which it operates and the state itself which draws fiscal and no fiscal contributions from it, they all have an interest on it. There are three main modern social roles for the company. The first one refers to the working conditions and the relationship with its employees (...) the second one refers to the interest of the consumers (...) the third one refers to the interest of the competition (...). And even more current is the concern with the urban ecological and environmental preservation interest of the community where it operates.”<sup>6</sup>*

In this sense, taking into account the aforementioned rules and regulations the functional destruction of platforms into artificial reefs and its adequacy to serve (or to continue to serve) as artificial reef for marine life is consistent with the mission of the Oil companies with society and with nature (social role). Pursuant to article 225, of CW88, everyone is entitled to an ecologically balanced environment and companies play an important role in it.

## 6. Conclusion

Considering what was stated above, the *Rigs-to-Reefs* program has its origin and practice in the U.S. Law, which has been very successful to date. If on the one hand it generates savings to oil companies on the decommissioning

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<sup>6</sup> Carvalhosa, Modesto. Comments on Corporate Law. São Paulo: Saraiva, 1977. v.3., p. 237.

and onshore transport of platforms; on the other hand, it generates environmental benefits to the marine ecosystem developed around these structures.

The program is unprecedented in Brazil, but in view of the recent regulation of artificial reef by IN IB AMA n° 2212009, there is today a forecast for the offshore platforms to be decommissioned for suitability of artificial reefs, as long as the requirements for the total removal of potentially polluting substances and materials are met.

Once the requirements of the environmental legislation are met, the decommissioning of the structures for transforming them into artificial reefs involves the functional destruction of the platforms without leaving any economical usable residue afterwards. This is also important, as a corollary, for the compliance of the REPETRO rules on the destruction of goods temporarily imported, for the final dismissal of the suspended taxes.

Furthermore, the destruction of the platforms to the intended purpose and suitability for artificial reefs benefit the marine ecosystem developed on site and provides the fulfillment of the role of the company in the social, economic, cultural and environmental spectrum, providing nature and the local population an ecologically balanced environment.

Finally, it's recommended that companies begin to process the necessary environmental licensing before IBAMA for the decommissioning of the relevant structures in advance and much before the deadline of the concession and BEPETRO's expiration. Moreover, we suggest that the regulations mentioned in this paper are amended to expressly provide for the possibility of functional destruction of the goods imported under REPETRO by means of conversion into artificial reefs, including the final extinction of the regime and exemption of the suspended taxes. Otherwise, it is advisable that the Revenue Service is consulted via Consultation Proceedings by the companies or by the agencies or representative bodies concerned.

## 7. References

CARVALHOSA, Modesto. "Comments on Corporate Law." Sao Paulo: Saraiva, 1977. v. 3.

DAUTERIVE, Les. *"Rigs-to-Reefs Policy, Progress, and Perspective"*. Published by the U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region: New Orleans, October 2000.