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Execution of Oil Contracts on the Basis of Environmental Standards in the U.S.A. and Iran's Law

Faezeh Amjadian[1], *Fathollah Rahimi[2], Ismail Shahsoundi[3], Mojtaba Asgharian[4]
1.Ph.D. Student in Public International Law, North Tehran Branch, Islamic Azad University, Tehran, Iran
2. Assistant Professor, International Law, Faculty of Humanities, North Tehran Branch, Islamic Azad University, Tehran, Iran
3. Assistant Professor, Law, Islamic Azad University, North Tehran Branch, Tehran, Iran
4.Assistant Professor, Faculty of Law and Political Science, Kharazmi University, Tehran, Iran
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اجرای قراردادهای نفتی بر اساس معیارهای محیط‌زیستی در حقوق آمریکا و ایران

فائزه امجدیان[۱]، *فتح‌الله رحیمی[۲]، اسماعیل شاهسوندی[۳]، مجتبی اصغریان[۴]
۱. دانشجوی دکتری حقوق بین‌الملل عمومی، واحد تهران شمال، دانشگاه آزاد اسلامی، تهران، ایران
۲. استادیار، حقوق بین‌الملل، دانشکده علوم انسانی، واحد تهران شمال، دانشگاه آزاد اسلامی، تهران، ایران
۳. استادیار، گروه حقوق دانشگاه آزاد اسلامی واحد تهران شمال، تهران، ایران
۴. استادیار، دانشکده حقوق و علوم سیاسی دانشگاه خوارزمی، تهران، ایران
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Abstract

One of the concerns regarding the environment is the pollution caused by the extraction and transportation of oil products. In this regard, paying attention to international oil contracts is crucial. The observance of the principles of environmental law in oil contracts affects reduction of oil pollution, and the role of these contracts in adjusting the behaviors of the parties must be monitored. Insertion of responsibility for compliance with environmental principles in oil contracts means recognition or the possible aggrieved party, determining the pollutant, facilitating the legal process in favor of the aggrieved party, and protecting their rights in regards of receiving compensation or restoration. Determining the guarantee of proper execution for oil pollution in oil contracts, will obligate the parties to use standards that will reduce oil pollution. These standards are the governing principles over the environmental regulations such as the principle of prevention, the principle of public action, the principle of joint responsibility, the principle of transparency, the principle of compensation by the polluter, and the principle of precautionary approach which will be imperative in the document text; their implementation will reduce oil pollution and gradually eradicate it. In this article, using the Descriptive-analytical method, the implementation of oil contracts in the light of environmental standards in US and Iranian law is examined and environmental challenges and solutions to upstream oil contracts are presented.

Keywords: Oil Contracts, Oil Pollution, Liability for Environmental Pollution, Iran.

چکیده

یکی از نگرانی‌ها در زمینه محیط‌زیست، آلودگی ناشی از استخراج و انتقال مواد نفتی است. در این راستا، توجّه به قراردادهای بین‌المللی نفتی حائز اهمیت است، این‌که رعایت اصول حقوق محیط‌زیست در قراردادهای نفتی چه تأثیری بر کاهش آلودگی نفتی دارد، باید به نقش محوری و تأثیرگذار این قراردادها در تنظیم رفتار طرفین توجّه داشت. درج مسئولیت رعایت اصول محیط‌زیستی در قراردادهای نفتی به معنای به رسمیت شناختن زیان‌دیده احتمالی، تعیین آلوده‌کننده و تسهیل فرآیند دادرسی به نفع زیان‌دیده و احقاق حقوق وی ازلحاظ دریافت غرامت و یا اعاده به وضع سابق است. تعیین ضمانت اجرای مناسب برای آلودگی نفتی در قراردادهای نفتی، طرفین قرارداد را ملتزم به رعایت استانداردهایی خواهد کرد که آلودگی نفتی را به حداقل کاهش دهد. این استانداردها، همان اصول اساسی حاکم بر قواعد محیط‌زیستی از قبیل اصل جلوگیری، اصل اقدام همگانی، اصل مسئولیت مشترک، اصل شفاف‌سازی، اصل پرداخت خسارت توسط آلوده‌ساز و اصل برخورد احتیاطی در متن سندی لازم‌الاجرا می‌باشند که اجرای آنها به کاهش و رفع تدریجی آلودگی نفتی منجر خواهد شد. در این مقاله با استفاده از روش توصیفی- تحلیلی، به بررسی اعمال و اجرای قراردادهای نفتی در پرتو موازین محیط‌زیستی در حقوق آمریکا و ایران پرداخته‌شده و چالش‌ها و راه‌حل‌های محیط‌زیستی در قبال قراردادهای بالادستی نفت ارائه شده است.

واژه‌های کلیدی: قراردادهای نفتی، آلودگی نفتی، مسئولیت آلودگی محیط‌زیستی، ایران.

*Corresponding Author: Fathollah Rahimi E-maill: Rahimif_law@yahoo.com

Introduction

One of the challenges in industries such as oil, is the dependency of the country's economy to them. Activities in this industry include producing oil and gas through extraction, refining and transforming it into petrochemical products, and distribution and transfer through pipelines (Najafi Estemal et al., 2021). Though considering the vastness of the scope of activity of each, there exists the potential for pollution in all three sections and each one has various effects over the environment such as soil, air, water, living creatures, plants, trees, and even humans (Khosravi et al., 2021). Oil and its revenue have remained unchallenged over the past half century, and a developed economy over a devastated environment has been the price some regions paid for development with oil (Quraishi et al., 2021). Therefore, is solving this challenge, the experts are obliged to solution finding and providing operational-strategic solutions to control and reduce the adverse environmental effects, including the necessity of environmental strategy and inclusion relevant considerations in planning for oil, gas, and petrochemical industries (Sakai et al., 2022). Moving towards industrialism without considering the environment is not justified. Spilling millions of liters of oil into the sea due to various sea accidents and dumping oil waste into the environment due to the movement of land, air, and sea vehicles, pollution to the activities of refineries and their related industrial complexes, huge volume of industrial sullage,… all caused extreme considerations in regard of safety and quality to be implemented in extraction, refining, transportation and exploitation of oil, leading to guidelines and environmental rules (Ahmad et al., 2022).

Proving the challenge in enforcing the environmental principles and rules in oil contracts, requires precise understanding of the laws ruling over environmental rights and precise definition of aggrieved party in environmental damages caused by oil pollution, the responsibility of the mentioned damage, and the responsibilities of the parties of the oil contract towards international conventions and the text of their own contract (Salimzadeh & Shamloo, 2020). In other words, with realization of the objective element of responsibility, which is "Breach of obligation ", it should be determined whether the inflicted damage should be limited to damages towards humankind and its properties, or should it encompass any damage that is caused for the humans and the environment due to oil pollutions (Christopher et al., 2021). Defining the clear relationship between inflicting damage and aggrieved party in oil contracts is what enables the aggrieved party of the ecological damages to file a lawsuit in the courts and demand compensation (Heydari, 2020). Considering all, today in the field of environmental rights, various principles such as principle of caution, principle of prevention and principle of evaluation, and principle of the necessity of payment are used towards the goals of environmental rights and sustainable development and preventing oil pollutions, acting as the framework and guideline to codification of various legal documents in numerous national, regional, and global stage; it is in such a way that the actions of the people and members are evaluated and analyzed within such standards (Hakimzadeh & Asadzadeh, 2019). To answer these ambiguities and achieve the desired result, it is necessary to study and review the implementation of oil contracts in the light of environmental standards in US and Iranian law.

Research Methodology

The present research is descriptive-analytical and its data have been collected by library-documentary method. After proposing the problem and explaining the hypotheses, the data in accordance with the research questions in national and international documents (both Persian and Latin) have been searched, collected, summarized and analyzed.

Research Findings

Therefore, there are principles in the environmental rights for which there is no comprehensive definition for even amongst the experts and sometimes in soft or binding legal texts and documents, due to their recent exposure (Hryhorskyi et al., 2022). Even in some cases, there is not even a clear framework and precise and comprehensive contents are not

drawn, which leads to mixture of the subject and premature conclusions, or even wrong and misleading one. In this case, a comprehensive demarcation of the principles seems necessary. Amongst these principles, we could mention "the principle of necessity of payment for the polluter or oil pollutant in sustainable development (Tunç et al., 2021). so, the question that this legal research tries to answer is the how of enforcing principles and environmental regulations in oil contracts in United States? It sems that environmental changes in United States are a product of change and transformation in public opinion like many other societies, in search for the how of enforcing the environmental principles and regulations, we have to go back a few centuries.

1 .Oil reserves and oil extraction contracts

In order to discover, excavate and produce oil, it is critical to sign contracts with credible international companies to benefit from the high-end technology. Usually, Extensive oil companies will get oil and gas field to production more quickly. In addition to that, increase in the production of gas and oil also requires signing contracts with big oil companies and cooperation with foreign firms and attract their investment to activity in joint fields and increasing the recovery factor from non-common fields (Badini & Jafari Chaleshtari, 2018).

Even though it is not possible to have an accurate estimation of the amount of crude oil in the world, but according to the U.S. Energy Information Administration (EIA), oil production around the globe is estimated to be 94.7 million barrels daily and USAn corporations produce more than 15% of it (Kocaarslan & Soytas, 2019). USA's oil reserves according to the latest examinations was declared around 260 billion barrels. Even with huge companies such as Exxon Mobil, the definite oil production and reservoir are around 1.73 trillion barrels which is a small percentage of the global oil reserve and actually less than 3% of the world's definitive reserves; but the influence and penetration of USAn oil giants is evident all around the world (Weijermars & Al-Shehri, 2022). The production statistics of the greatest oil companies show that two of the ten big oil companies are located in the USA. Even though the total collective oil production of the 10 big companies is around 34.73 million barrels daily, two USAn companies, Exxon Mobil and Chevron produce around 4.13 million barrels daily which equals to 11 percent. This is while ARAMCO in Saudi Arabia produces more oil than Exxon and Chevron combined (Hammoudeh et al., 2022).

In addition to Exxon Mobil and Chevron, other USA big oil companies include Conoco Phillips, EOG Resource, Anadarko, ،Marathon, DEON energy and Wal Co., and they are active all around the world (Tunç et al, 2021). Exxon Mobil in Iraq, Chevron & Anadarko in Brazil, Marathon oil and Cocona Phillips in Canada, Chevron in Kuwait, Oxidant in Oman, Exxon Mobil in Russia, Walco in Equatorial Guinea, chevron & Occidental in Qatar, chevron in Venezuela, Marathon oil and Walco in Gabon and some others are active in Trinidad, England and China (Cardoso et al, 2021). USA,s oil companies shave been competing with British oil companies who controlled over two third of the oil production in Middle East since 1943 (Mirtorabi, 2017). The USAn market share was only 14 percent. Even though the direct penetration of USAn oil companies in Middle East is reduced due to the nationalization of oil industries, but they have kept their presence in the region and are still active in Iraq, Kuwait, Oman, and Qatar (Quraishi et al, 2021). This weakness in penetration can also be seen in other regions such as Venezuela, Libya, and Nigeria. Of course, in parallel to that, in new oil fields such as Guyana and Suriname, oil companies such as Exxon have an exploitative status due to their good contracts. Nonetheless, even though USAn oil companies hold 15% of the world's oil reserves at most, but they have a share in 98% of the global oil production market's growth (Fox & Lefsrud, 2021).

Air pollution is considered a side effect of industrial activities. Oil, gas, and petrochemical industries are one of the key sources of emitting air pollutants and greenhouse gases. The pollutants produced in various phases differ in terms of quality and quantity as well (Equiza-Goñi & Gracia, 2020). Oil discovery and extraction consist of a few stages and each one has its own unique pollution. By focusing over the air pollutants produced by these activities, we could summarize the most important ones as: emission of suspended particles, evaporation of hydrocarbons, greenhouse gases

and acidic gases. Flaring, venting, Hydrocarbon leakage and evaporation, burning phosphorus and acidic gases, garbage incinerators, explosions and extraction are among the most important air pollutants in this sector. The effects of these pollutants are either Global (Global warming), or regional (Effects over the biological environment of the region) (Nikbakht et al., 2018).

2. Oil contracts

Signing oil and gas contracts in a totally technical matter which has a strong connection to the political, legal, and economical system of any country. Today, in the world of international business, contracts in all forms play a serious role. Considering the ever-increasing demand of the industries for gas and oil energy, the importance of these contracts only goes up. On one hand, discovery, extraction, production and exploitation of oil requires enormous expenses. That is why the legal effects of various contracts and motivation for foreign investment in oil and gas industries is very crucial (Ebrahimi et al., 2015). The possibility of maximum exploitation of the available facilities, encouraging and attracting foreign investment in upper hand oil and gas activities, especially in joint fields and exploratory projects are among the special goals of the state in the oil and gas field (Badini & Jafari Chaleshtari, 2018). Therefore, in order to protect the country's oil and gas reserves and increasing the recycling coefficient, transfer and implementing new technologies in management and optimum exploitation of oil and gas fields, signing contracts where there is a relative between the mentioned benefits is important (Heydari, 2020).

3. The environmental aspects of oil contracts in Iran and USA law

USA is the biggest state player in the global oil market. We should consider the fact that the oil industry in its modern form was essentially founded in this country and the first oil exchanges through ship also began there as well (Kocaarslan & Soytas, 2019). USA has transformed into the biggest Shale oil producer in the world while studies in USA, s universities show that producing this product has significantly increased environmental pollutions (Fatum et al., 2021). One of the methods to produce Shale oil is inserting the chemicals into the drinking water and pressure-injecting millions of gallons into the ground to excavate gas and oil which is considered as one of the main factors in the acceleration of global warming and climate change (Nikbakht et al., 2018).

In fact, the chemicals used in fracking which are toxic, enter the underground water reservoir through the cracks caused by this procedure and pollute them, it is also said that fracking also produces loads of sewage (Fani et al., 2022). Even now the oil USA produces under the Shale type is an agent of environmental degradation and the cracks it makes into the earth layers cause earthquakes, and the penetration of toxic substances such as arsenic into the water reservoirs intensifies cancer; on the other hand, researchers in Texas have found out that the carcinogenic substances which have been used in the hydraulic break of Shale oil extraction have indeed made its way into the underground water reservoirs and led to alert status in the region. During the hydraulic break that is used for the extraction of Shale oil, extensive plane of chemicals and water are injected into the Shale layers underground at high pressure (Rébufa et al., 2022). Water breaks the so-called Shale clay texture underground with this pressure and oil and gas come out. It is said that this method can also be responsible for earthquakes, and will increase the emission of methane gas as well. There is also the fact that underground water reservoirs might get polluted as well (Najafi et al., 2021).

The statistics of the collapse of these wells are very limited. The researchers have previously found out in Texas that the chemicals used in hydraulic break have found their way into the underground water reservoirs. In this regard, Fatih Beyrol, the head of international energy agency has stated that a decade ago, USA and Canada produced 10 million barrels daily, but now this number has risen to 22 million barrels (Hansen et al., 2022). The civil development of the country and its accompanying with the environment is taken from the rules that either directly or indirectly, obligate economic activities to observe some environmental issues (Salari & Rezaeizadeh,

2020). But what first required environmental reports for projects was the Resolution of the High Council of Environment on April 12th 1994, during which the executioners of the septet projects (Factories, Petrochemical and refineries, power plants, steel industries, dams and hydraulic constructs, industrial cities and airports) and then through additional enactments, Agro-industry, garbage disposal centers, roads and railway, and many more, to provide an environmental evaluation report of the project in addition to the feasibility and location reports. In Iran, there is a legal obligation to evaluate the environmental effects of some industrial and civil projects (Ebrahimi et al., 2015).

In fact, evaluation of the environmental projects is to prevent the negative effect of the project over the environment and reducing the costs. In the evaluation of environmental effects, the effects of the project over the environment are predicted to prevent damages (Mirtorabi, 2017). In this regard, a document titled "ES HIA" in short, and is a comprehensive legal and contractual document which evaluates environmental damages in order to reduce the damages, and also considers social, security, safety and hygiene aspects in addition to the environment is the latest developments in environmental law regarding to oil activities (Esfandiari & Jalali, 2020). The EIA and ES HIA documents are considered floating upper hand documents and according to the requirements and temporal developments, receive updates; that is why there are regulations called HSE that the oil ministry has obligated all contractors and employers to obey by standardizing them (Razavi & Aghaei, 2020). Further studies of EIA and ES HIA documents in among the contents of the contract which is a requirement for entering the industry today, and before the execution of the projects, has to be approved by the employer, contractor and the Environmental Protection Agency. The employer has to get approval from Environmental Protection Agency and the contractor has obligation towards the employer and the Environmental Protection Agency to obey the ES HIA regulations in the project (Aminzadeh & Nasrollahi, 2020).

In order to execute the process of ES HIA, three consecutive steps should be followed. Firstly. Identifying the risks, during which the executioner of the project should identify the ES HIA related risks before the execution and while defining the project. In the second step, the identified risks are evaluated (Momeni Rad et al., 2016). In this evaluation, the possible effect of the execution of the project over the environment will be calculated and methods to reduce the destructive effects will be proposed, and a method to manage and monitor these adverse aspects will be presented. This evaluation has two goals, first, it gives the authorities an understanding about the possible adverse effects of a project and second, it allows the industry to consider methods for opposing these effects and reducing them and proposing solutions. The third step is risk management which is a name given to a series of preventive measures through which the negative effects of the project will get to their minimum. The evaluation of the environmental effects for oil and gas contracts is obligatory in many countries (Shirvi, 2014).

3.1. Creating a balance between oil exploitation and environmental protection

The lack of balance between oil production and observing environmental regulations, comes from the conflict of interests and the enthusiasm for maximum profitability (Yin, 2021). In a historical context and despite the attraction of the cooperation theory, or proper distribution between a foreign oil company and the host government, from the perspective of the foreign oil company, providing interest is considered as the main goal and this will not be achieved unless through trading stability (Nwankwo, & Iyeke, 2022). Stability means that a foreign investor oil company is within a legal, financial and economic sphere where discovery, development, production, extraction, and transfer of gas and oil into the terminals and at last supply or sales market, will guarantee its constant financial benefit and also be predictable for the firm. On the other hand, the host government is in a position of defending national rights and in order to do so, Accurate monitoring on concluding oil contracts and their execution is considered asserting their national rule over the underground reservoirs and will try to develop a structure that oversees the providing benefits through monitoring over the oil contracts and the possibility of

annulment in all contracts (Khosravi et al., 2021). In addition, the obligation to observing environmental standards in oil contracts, will only increase this conflict of interests and by doing so, this question forms that responsibility for enforcing environmental rules falls on which party of the contract and the expenses should be paid by whom, and what tools should be implemented to stablishing and institutionalizing it in oil contracts so we could keep seeing stable deals in economic activities of the oil field, where none of the parties feel like they are cheated in this cooperation (Hakimzadeh et al., 2019).

4. Environmental rulemaking in upper hand oil and gas contracts in USA and Iran

Environmental challenges exist in all stages of oil and gas, they are more common in upper hand levels. Environmental obligations such as accidental leakage, explosion, operational discharge and the production of greenhouse gases has revealed the direness of rulemaking in this sector (Vallner et al., 2015). One of the countries that has comprehensive rules in this regard in USA that in addition to regulation at the federal and state levels, has many effective organizations in this sector, meaning that in addition to the oil ministry and oil and gas organization and the Environmental Protection Agency, a segment of rulemaking is the responsibility of municipalities (Xu et al., 2021). Also, there are many rules and regulations that are approved in this regard, in such a way that all aspects of upper hand operations such as the extraction, well construction, hydraulic break, temporary inhibition or release, and well connection which causes environmental pollutions such as emitting greenhouse gases, chemicals, water pollution, and Mud production and waste are subject to these regulations (Momeni Rad et al., 2016). In the USA, various organizations interfere in rulemaking. For example, we could mention municipality, city council, and River Monitoring Commission. In this country, in addition to rulemaking on a federal and state level, there are many active organizations in this sector, meaning that in addition to oil ministry and the oil and gas management organization and Environmental Protection Agency, a segment of rulemaking responsibility is bestowed upon the municipality (Yatsyshyn et al., 2022). There is no such thing and control in Iran, and it seems that there are only two foundations for environmental rulemaking, which are the oil ministry and Department of Environment. It is better if in Iran, there are more specialized organizations for environmental rulemaking. In USA, each sector of the environment such as the rivers has its own specialized commission. That is because the conditions and the natural situation of each field in different that the others (Salimzadeh & Shamloo, 2020).

To fulfill this purpose where addition of environmental standards in oil contracts and their execution turns into a mutual understanding and beneficial for both the Host government and the foreign oil company, we should be able to the observance of environmental regulations to implement this goal (Badini & Jafari Chaleshtari, 2018). The first step is creating a common and convergent outlook for the Host government and the oil company. To create mutual understanding to comply with environmental regulations in oil contracts, the appropriate law governing it should also be determined (Tunç et al., 2021). To determine this law, there is always a struggle between the rule of National Law of the Host government and the transnational law that the oil company has in mind. During the historical trajectory of contracts signed with foreign investors, the tendency of developing countries is first to apply the rules of administrative law for industrial development contracts signed with foreign companies, especially for contracts regarding discovery, extraction and development of gas and oil fields; where according to those companies, this type of contract in considered an administrative contract and they were not able to create alignment between the parties (Ebrahimi et al., 2015). The oil companies refer to reasons that shows their concerns regarding the one-sided dominance of the host government over their legal relationship when they refuse administrative contract. In other words, the legal effect produced by the contract makes them feel loss on their end (Hryhorskyi et al., 2022). This mentioned dominance might be due

to the nature of the administrative contract. In an administrative contract, at least one of the parties should be considered a legal entity in general law. A contract becomes administrative when the objective is a public service or it contains one of the special and uncommon conditions in private law (Thushari, & Babel, 2022). These conditions, the party to the contract or the administration is monitored by the legal entity of public law, or place them in a lower position and places the organization (Host Government) in a better position and allows the legal entity in the general law to take some one-sided actions. This is why most regulations and rules regarding the administrative contract that governs the relationship between the parties to a contract by law are usually pre-established by the legislature or the administration (Nikbakht et al., 2018).

Oil companies believe that in such contracts, to meet the conditions related to compliance with environmental regulations in oil contracts, the Host government treats oil companies in a way that shows the same face of sovereignty with its citizens, while they consider the contract as a matter of national law governing it and the sphere encompassing the contract, and the rule of will alone, regardless of the national legal system, is respected and valid (Dortaj et al., 2018). The long-term nature of oil contracts is one of the citations that oil companies refer to and try to facilitates the possibility of inserting contract terms and make the oil contracts transnational in practice. Of course, the long-term nature of the oil contracts is a suitable context for trans-nationalization of the oil contracts. These contracts are generally long-term contracts that are signed between the oil company and the host government. In average, the validation period of these contracts is between 20 to 30 years, the discovery, development and extraction are long-term, and therefore, the oil companies have to make sure about their heavy investments in various oil fields by ensuring the contracts are long term (Mirtorabi, 2017).

5. International conventions of environmental principles regarding oil pollution

At least from 50 years ago, with considerable increase in environmental pollution, especially by oil products, the global community and international organizations started unprecedented efforts to reduce the environmental pollution which led to start of at least 200 international environmental conventions (Najafi Estemal & Darabinia, 2011). The most important international environmental conventions are:

5.1. United Nations Convention on the Law of the Sea 1982 (UNCLOS)

Among the first-rate conventions is the "United Nations Convention on the Law of the Sea 1982 (UNCLOS), this convention, provides competency frameworks for the adoption and implementation of safety rules and standards for ship-based marine pollutants, and deals with the application of "Prevention and Response" conventions (Fasoulis, 2021).

5.2. International Liability Conventions and the Establishment of an International Fund

On the other hand, there exists conventions that have specific subjects regarding the marine pollution and are about the how to exercise competence of the countries regarding the enhancement of security standards and anti-pollution rules. These conventions which look at the problem from a civil liability view, can be categorized based on various indicators. For example, there are conventions about pollutant equipment such as oil and toxic and dangerous chemicals. In this regard, International Convention for the Prevention of Pollution from Ships 1973 is ruling which was adjusted by the 1978 Mariupol protocol (Gavrilov et al., 2019).

Civil liability conventions and establishment of an international fund is accepted (110 countries have accepted the civil liability convention and 79 countries have joined the establishment of fund convention), but in 1992, there was some change and adjustment in them (Fasoulis, 2021). In fact, when this international system was executed to compensate for the damages caused by oil pollution in 1978 (the year of the enforcement of the convention of fund), another occurrence which is known as Amo Kadiz led to oil leakage and showed that the existing structures cannot have the required functionality. As a result, the civil liability convention and establishment of fund conventions went through changes in 1984

and 1992 and the limits in compensations and its territory increased (Knight, 2021). Even though many of the committed countries that joined 1969 convention, joined this new one and rejected the previous convention, not every single country did so and therefore, both conventions exist in parallel; but the convention for compensation fund was annulled in 2002 and it cannot be applied to any incident that happened afterwards (Sharifi & Salimi, 2020). Considering that the existing system of the international sea organization did not cover pollutions caused by ship fuel tank, the banker convention started in 2001 (Hammoudeh et al., 2022). After the coagulation of the civil liability convention, the matter of marine pollution was addressed and Mariupol convention followed it. In line with the mentioned goal, we could mention the following conventions which will be discussed here: International Convention on Maritime Education, Certification and Care or STCW, International Convention for the Protection of the Sea, International Convention Relating to the Intervention on the High Seas in Cases of Oil Pollution Casualties 1969, and the International Convention of Mutual Preparedness, Response and Cooperation (Fani et al., 2022).

6. Environmental principles in USA's oil policies

USA is the biggest state player in the global oil market. We should consider that the oil industry in its modern form was basically founded in this country and the first oil exchanges to export oil via ship began there as well (Xinmina, 2018). In 2000, the daily oil production of USA was around 11 million barrels. USA is the biggest oil consumer as well and it consumes about 20 million oil barrels daily, which is roughly a quarter of the global consumption. USA's oil strategies:

1. Preventing the dominance of enemies over the Persian Gulf oil reservoirs, because this region holds around two thirds of the discovered oil reservoirs and contains 32% of the global gas resources.
2. Keeping the stable flow of oil: since oil is a basic commodity and usually its price oscillates with even minor accidents, especially in the Persian Gulf region where it is considered an instable region due to the special circumstances, regarding providing a steady flow of the Persian Gulf oil, USA both provides context for indirect control over Asian economies, and also ensures the health and safety of the economy of the wester block, because in the age of globalization, any crisis in the eastern economic block will quickly affect the USA and European economies.
3. Controlling the oil price in the market: as stated, USA is the biggest oil consumer, and on the other hand, USA oil companies act with strength in the process of production and sale. Therefore, they have a key role in controlling the oil price. USA's relationship with countries such as Kuwait and Saudi Arabia is among these control tools (Mirtorabi, 2017).
4. Diversification of oil supply sources: the oil shocks in the 1970's had this crucial lesson for the USA and the collection of western economies not to rely on a single source to provide energy. It was due to these policies that, especially in the 1980's, the oil production in regions other than the middle-east was sped up and the production in western USA, Europe and Latin USA increased, or even began. USA is pursuing incentive policies in Nigeria, Guinea Gulf, … as well. Between 2002 to 2004, USA's financial aid for the development of oil export in Angola and Nigeria reached 300 million dollars (Mnasri et al., 2017).
5. Enhancing production and reserving oil in USA: USA deposits oil in order to reduce insecurity in the oil sector, after the September 11th incident, USA government is depositing more energy. In the prior years, USA would stop its deposit when the prices went up, but in 2004, even though the prices were high, USA added around 120.000 barrels daily to its strategic reservoirs. Despite the pressures form the congress to limit the deposits, the government still insists on keeping this strategy, even though the prices go up. The reason behind this

consistency in probably the fact that Washington is worried about increase in terrorist attacks to the oil facilities in Middle East and occurrence of a big oil shock due to severe drop in oil production (Mirtorabi, 2017).

7. A look at the transformation of environmental standards in USA's oil contracts

Ever since the discovery of oil in the United States of USA in the second half of the nineteenth century, the countries with resources and the companies with the capital to exploitation, implemented different point-based and contractual methods. At first, the major objective of the capital-receiving countries was accessing a segment of the revenue from production, generally under the title of license. In the contracts of this era, there was no discussion regarding protecting the environment, and in the rare occurrences when it did exist, it was incomplete (Mousavi & Shirmardi Dezaki, 2014). With the passage of time and the appearance of the adverse effects which was caused by wasteful exploitation, the international community of protecting the environment and the interests of mankind was able to find a logical connection; in other words, humankind learned that achieving long-term benefits and development cannot be achieved without considering the environment and the environment itself was identified as a part of humankind's interest. Therefore, rules and regulations emerged with the aim of protecting the environment which showed itself in international laws and then oil contracts (Vallner et al., 2015). Despite this, applying the rules and principles of international law in the field of oil investments was not compatible with the interests of the parties, because it meant increase in the expenses for the investor, and for the host government and especially in developing countries, strictness in this regard was accompanied by reluctance of foreign investors, something that was not sought after by those countries (Xinmina, 2018). In general, environmental developments in most societies is accompanied with the transformation and change in the public mentality and changes in the general opinion of the society. In examination of USA's environmental development, we should go back a few centuries as well. Almost from 1652, a public water reservoir was established in Boston and this activity went on over the next century in various cities in Pennsylvania. Until 1800, around 17 municipalities implemented similar tools to protect their citizens against unhealthy drinking water. During this era, no one still lived in huge cities such as New York, Philadelphia, and Charleston. Also, Boston could not escape the adverse effects of urban development after the industrial revolution in USA (Yatsyshyn et al., 2022).

Foul smell of sewage near the rivers, unwanted human and animal manure, smell of rotting food and the deafening voice of vendors in narrow passages and the constant squeaky sound of the hoofs and iron wagons over the streets with no paving is a common image of USA during this period (Kocaarslan & Soytas, 2019). The industrial system in 19th century expanded the environmental destruction. The literate people were among the first to realize the meaning of this procedure. Herman Melvis in his epic novel (year 1851) and Henry David in the novel titled Living in the woods (1854) emphasized on the effects and the peace of the nature. The second generation of writers who might have come to their senses due to the final colonization in eastern USA wrote outside the framework of fantasy. John Bruggs published 27 volumes of environmental articles in an experimental fashion. John Moyer (Scottish missionary and foreteller) gathered his opinions in a series of books which began with "California Peaks" in 1984 (Kazemi Najafabadi & Naseri 2019). Theodore Roosevelt, the ex-president of the USA at the beginning of the twentieth century (1903) gradually turned into a symbol of fighting to protect the environment and during his office term and afterwards, protecting the environment became a serious mental concern for the rulers (Salari & Rezaeizadeh, 2020). Franklin Roosevelt (President) approved some of the units of measurement for the natural resources. The soil protection service was established in 1935 and scientific methods were implemented to reduce the erosion of the farmlands. In the text of the Pitman-Robertson in 1937, the reduction in animal life expectancy was considered and a fund to determine fish and wildlife programs from the federal tax revenue of hunting and fishing equipment was established (Kolipaka et

al., 2020). After World War 2, the definition of wild life as a huge natural resource under the management of humankind underwent changes. The appetite of the country for grand federal projects was dulled due to fighting in the fronts and on the other hand, immediate dismissal of the army forces between 1945 and 1946, led to an unprecedented rise in population. Also, cheap loans for buying house for the army members led to the development of the cities beyond their horizons and challenges such as protecting the landscapes developed and the meaning of ecology gradually penetrated the public mind with valuing aesthetics and biology beyond trade (Mohammadi et al., 2012).

8. Environmental principles in Shale oil contracts

In the USA, applying the possession law which made anyone who found oil its owner, led to a widespread competition to reach oil without any environmental consideration. Using this rule, the oil regions turned into scene of total chaos, high population density, sudden emergence of wooden structures that were hooked and assembled, Spontaneous generation of awful hotels that instead of any resting accommodations, had 5 or 6 sleeping pads on the flood for the flood of newcomers, rising of endless extraction rigs over wells and never ending storages for oil and tankers, while everyone were running around with a roar looking for money; and on top of all these, the air density and the repulsive and sticky smell of oil created a weird scenery (Quraishi et al., 2021). Streets filled with sticky and smelly mud that covered every main and side path when it rained and the main street of the city which was the major sales center of oil had the feeling of a lake filled with a sticky and thick substance or the lines were the mud was flowing. Those who came to see this scene were involuntarily reminded of the heights and calm, quiet and green villages of Pennsylvania, before it was turned into the scene of oil eruption (Shakya et al., 2022).

Unfortunately, it must be said that contracts of exploitation of oil and gas resources which can be a valuable legal vehicle for environmental protection, have acted very poorly in this regard. Basically, environmental protection was not a concern in such contracts until recent years. But since the middle of the last century onwards, and with the manifestation of unpleasant effects of industrial activities in general and oil operation in particular, concerns started regarding the continuation of the status quo that made the humankind reconsider its policies on the environment. These concerns have shown themselves in the form of various rules and regulations in the international law (Nikbakht et al., 2018).

9. Donald Trump's oil contract policies considering the environmental regulations

At the end of March of this year, Donald Trump made two major changes in USA's law which paves the way for more carbon emission. Policies that go against the validated regulations in USA to protect the environment. We should keep in mind that ever since Donald Trump came to power, he kept saying that environmental protection slogans are spread by a special group who want to benefit from the world economy and even insisted on his views in major international meetings such as the World Economic Forum (WEF). To show his disagreement with the environmental policies, he removed the obstacles that were placed during the Obama administration over oil exploration and extraction activities in USA's protected lands, and implicitly acknowledged that making a profit from the oil industry is crucial, despite the price for the environment and increased carbon emissions. This law became controversial when Trump declared that he will exit the Paris environmental agreement and stated the global warming to be a problem of other countries and emphasized that USA does not have this problem. While the world is battling Corona, he has enacted laws that have provoked protests from environmental activists around the world (Rainey et al., 2021). In the middle of March and while Corona was taking victims in USA, he announced two changes in USA's environmental law. One, he severely reduced the efficiency standard of fuel consumption for new vehicles, this led to 80 billion ton increase in the country's fuel consumption and it led to more carbon emission (Yang et al., 2021).

Another outlook towards the matter of supporting companies active in oil and gas sector goes back to Donald Trump's election campaign. Oil companies who hold a lot of power and money in USA were among his supporters and even objected to him about not supporting them during the trade war between Russia and Saudi Arabia which had paved the way for the fall in oil prices. At the exact time these objections were the loudest, ex-president Trump enacted a law that increased gasoline consumption by 80 billion tons and these companies earned a hefty profit from it. At the same time, he began negotiations with Russia and Saudi Arabia to remove the tension between the two nations to help USA companies earn more with the increase in oil prices (Khosravi et al., 2021).

Conclusion

With the performed examinations regarding the laws of environmental effects of developed countries in oil and gas contracts and its comparative comparison with the available regulations in Iran, in general it is inferenced that the laws of evaluating the environmental consequences in the country has a general level and only mentions the evaluated category in a not-so-comprehensive structure. While even though USA has different political and administrative systems within itself, but innately benefits from a comprehensive environmental law and considers environmental impact assessment studies critical for the country. What principles can be utilized to prove the challenges of environmental regulations in oil contracts? First, by describing oil transactions as international sales, the scope of these transactions, the risk of oil spillage for nature, people and properties have been considered and then, with the help of the regulations of international trade law, prescribed principles in international law, principles in the conventions governing commercial activities and the human right to have a healthy environment, a proper answer is presented. Considering the definition of international sale which is supervising the existence of the place of sale of the seller and the customer in two different countries, and the oil deals are considered as international sale based upon the given description, we can refer to the principle of the rule of will of the parties, which has been one of the principles governing international sales (Esfandiari Khaledi & Jalali, 2020).

Even though the citation of the mentioned principle is the will of the parties in demanding and drafting the provisions of the oil contract, and whatever the parties to the contract have willed and which leads to the advancement of the oil project in order to attract capital and achieve oil production is effective., but the will of the parties is limited in certain conditions. The restrictive barriers of the will are in favor of the society and general good and the objectives of balanced development consist of laws such as the constitution of the countries regarding to observance of environmental, customary and international regulations such as the regulations in international conventions on the obligation of the countries to exploitation from the resources on the condition of not causing environmental damage to nature. The existence of limiting barriers in the will of the parties is justified by the necessity of balance in exploitation from natural resources and protecting the environment and the need to distribute justice in the pursuit of benefit and turns it into a part of the agreement in oil contracts. In other words, the contract parties determine the rights and responsibilities for compliance with environmental regulations in oil contracts and subject the formation of a sale to certain conditions, determine its effects, limit liability and predict special conditions for exemption from liability or refer to other forms of regulations and not only all of these are not incompatible with the principle of the rule of will, but rather it is a part of it which confirms it and is positive (Momeni et al., 2016). Making a fair and reasonable deal that comes from the principle of goodwill in deals, is one of the ruling values in international trade. Fair trade in an oil deal not only oversees the providing the rights of the parties, but also protects third parties and more important than all, the general good of the society. Utilizing the goodwill principle makes it possible to provide mechanisms to protect the environment while also exploitation from it and it can be a guarantee for its survival and establishment (Xu et al., 2021). Therefore utilizing the functionalities and the characteristic of the goodwill principle which consists of restriction, supplementary and conversion that causes first,

excessive exercise of sovereignty and privilege in oil contracts is avoided and environmental regulations to be considered in the oil contracts as a necessity for fair behavior; and second, utilizing and citing the complementary role of the goodwill principle, try to fill the necessary voids in oil contracts which will cause damage and not deceiving compensation in due time if we fail to do so. Third, using the moderating function of the mentioned principle, Even assuming non-fulfillment of environmental obligations in oil transactions due to everchanging circumstances ،citing the rule of the aforementioned principle, by modifying the content of the contract and adapting it to the new conditions, the obligation of the parties to the oil contract to comply with environmental regulations can be re-established (Nikbakht et al., 2018).

Because the utilization of modifications resulting from the principle of goodwill in the implementation of environmental regulations in oil contracts, in fact, is the same as observing justice and fairness and harmonizing the contract with the new conditions. Citing the principle of reduction of damages in commercial contracts, which is in fact a kind of loss forecasting and an effort to reduce losses and damages as much as possible, especially in case of mostly irreversible damages and repairs, such as environmental damages resulting from the execution of the transaction emphasizes on adherence to environmental principles in oil contracts and strict observance of its provisions before the occurrence of an accident and environmental damage. The existence of the casual relationship the environmental principles and the occurrence of a damaging environmental incident is enough to remove addition of environmental rules from the list of optional and place it amongst the obligatory actions regarding the preparation and regulation of oil contracts. So, the first hypothesis of provability of The stipulation of environmental principles in oil contracts is confirmed not only by appealing to the principles governing commercial transactions, but also by the principles in international law such as Fulfillment of the right to use natural resources, Principles set forth in international conventions governing trade activities to which most of the world's countries have acceded to, such as the principle of control and prevention of waste disposal, principle of protection of maritime transport, principle of prevention of all pollutant sources, principle of preventive action to prevent oil pollution and principle of payment by the polluter, as well as principle of human rights to have a healthy environment also increases its reliability.

Considering to the above issues, the following suggestions are also crucial: Providing the required awareness regarding the environmental effects of the oil pollution from the extractor governments. Total and accurate monitoring of tanker traffic and imposing heavy fines on polluting tankers, holding scientific and specialized training courses in the region regarding the marine environment and its protection. Creating a culture between different strata of the people of the region in order to protect the environment. Establishing laws such as environmental taxes on regional oil and preventing oil from coming into the region.

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