

Auditing of Environmental Assessment of Major Projects in Oil Industry

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Introduction

Pollution from the oil industry can be divided into two categories:

Direct Pollution:

This includes direct pollution caused by waste remained in the process of drilling and extracting oil.

Indirect Pollution:

This group includes those of oil pollution that directly contaminated the environment from the use of petroleum products such as Use of non-standard gasoline lead to air pollution.

In our country, laws and regulations have special attention to pollution released from the oil industry and its effects on the environment. Environmental Rules and regulations are considered as a reliable and valid tool for law enforcement, wise management, fulfillment of goals, and implementation of environmental auditing.

Therefore, due to various types of contaminations, legislator has enacted related laws that we mention here to the most significant of them:

Significant Laws and Regulations Related to Oil Pollution:

- ✓ Act on protection of marine and navigable rivers against oil pollution;
- ✓ Statute for environmental decontamination by oil activities;
- ✓ Statute for road transportation of hazardous materials;
- ✓ MARPOL International Convention for Prevention of intentional pollution of the marine environment by oil and other harmful substances that Iran joints it;
- ✓ Act on quality of Prevention of air pollution;
- ✓ Approval of Cabinet on Production of Standard Gasoline; and
- ✓ Approval of the Council of ministers on Principles and Criteria of establishment of industries.

Act on Protection of Marine and Navigable Rivers against Oil Pollution

- ✓ Environmental Protection Organization under international conventions, national laws, and regulations has been prepared and notified requisite environmental standards on industrial capabilities and plants of this article. Environmental Protection Organization also with cooperation of Ports and Marine organization oversees on implementation of these standards.
- ✓ On arrival at the waters under this act, all ships, tankers, and vessels are required to be insured against possible damage caused by pollution of waters. Otherwise, it is necessary to bring financial commitment for compensate of possible damage.

- ✓ With the aim of preventing pollution, Ports and Shipping Organization is required to inspect Oil tankers, ships, buoys, and oil installations covered by this law and in case of being faults or defects prevent them from their activities to obviate the problem.
- ✓ Ports and Shipping Organization is obliged upon becoming aware of the occurrence of contamination, instantly take following measurements and take legal claim against polluter in competent judicial authorities:
 - To inform the military and police to take the necessary measurement in accordance with the law;
 - Setting the process-verbal of the estimated rate of pollution and gather evidence relating to the causes of pollution and its consequences;
 - Prevent the spread of contamination and eliminate its effects;
 - Informing about the extent and direction of displacement of pollution to Environmental Protection Organization, Fisher organization and its subordinate units as the case required ;
 - Cooperation with Environmental Protection Organization, Fisher organization and its subordinate units as the case required about study, gather evidence and document to determine the amount of pollution and damage to the environment and aquaculture resources and setting the process-verbal.
- ✓ If the discharge or spill of oil installations occurs due to unexpected events; relevant authorities do not punish; unless, before the outbreak of contamination, appropriate precautionary measurement taken by them or ,after that incident, emergency proceedings measurements to be taken.
- ✓ The judiciary is required to allocate specialized courts in each coastal province to deal with maritime claims.

Regulations on Environmental Decontamination by oil Activities

- ✓ All companies and units with oil activities are required to provide their comprehensive programs against related environmental disaster. In addition they are obliged to provide their programs to Environmental Protection Organization by Departments of Health, Safety and Environment of Oil Ministry.
- ✓ All companies with oil activities are required to, within twenty-four hours, inform Environmental Protection Organization about possible environmental disaster as to the location of the accident and quality of its outbreak.
- ✓ All companies with oil activities are obliged to set environmental planning and training courses as part of the fundamental in-service training of their employees.
- ✓ All companies with oil activities are required to comply with the priorities and related requirements to have environmental management concentrated on environmental training and recognition of non-compliance with environmental standards and regulations in the country.
- ✓ All companies with oil activities are required to install pollution monitoring system at the flue outlet and industrial wastewater treatment to determine their amount of industrial pollution.

Environmental impact assessment of major oil projects

Under the law, in order to reduce pollution and environmental destruction all manufacturing, infrastructural, and service projects must be evaluated before implementation and on the feasibility studies and site location due to approved criteria by the Environmental Protection supreme Council.

Under the law, on the stage of the feasibility studies and site location, oil and non oil project administrators need to prepare environmental assessment report for approval of the environmental impact assessment working groups of Environmental Protection Organization. In this sense, they must prepare environmental assessment reports for approval to Environmental Protection Organization on refineries with any title and in any scale, petrochemical plants, oil and gas fields, docks and oil rigs, gas pipelines. As a result, in recent years, supreme audit court has been evaluated compliance with laws and regulations related to the assessment of plans and projects in different industries, for many times.

Regulations on Road Transportation of Hazardous Material

- ✓ The provisions of these regulations is binding on materials that are fire potential, explosives, liquefied gases under pressure, flammable liquids , and road transportation;
- ✓ Vehicle carrying hazardous materials are only during days allowed to travel on country roads;
- ✓ Transportation of the vehicles, as far as possible, must be occurred in sparsely populated areas and belt ways;
- ✓ Motor Engine of vehicle carried hazardous material shall have no leakage or overflow; and
- ✓ Vehicle carried hazardous material need to stop in areas with low slope.

Law on Prevention of Air Pollution

- ✓ Any measurement leads to air pollution is prohibited;
- ✓ Use of vehicles that produce excessive smokes prohibited;
- ✓ Permitted emissions of motor vehicles have been determined through standards;
- ✓ Construction of refineries, petrochemical factories, etc. must be according to criteria and standards of Environmental Protection Organization;
- ✓ Environmental Protection Organization is needed to codified clean air standards and contaminants resulting from factories, and workshops;
- ✓ If the owners of factories contribute to pollution; they must act within the prescribed period to decontamination. Otherwise the Environmental Protection Organization prevents continuing their activities;
- ✓ Manufactories, workshop, and power plants are required by using the proper fuel and combustion systems to reduce air pollution.

MARPOL Convention

- ✓ MARPOL was signed in 1973 It was developed by the International Maritime Organization in an effort to minimize pollution of the oceans and seas, including dumping, oil and air pollution. Iran joint to this convention;
- ✓ The objective of this convention is to preserve the marine environment in an attempt to completely eliminate pollution by oil and other harmful substances and to minimize accidental spillage of such substances;
- ✓ Any violation of the requirements of the Convention is prohibited and penalties provided for violators;
- ✓ MARPOL Annex I detail the discharge requirements for the prevention of pollution by oil and oily materials. It also introduces the idea of "special areas"

which are considered to be at risk to oil pollution. Discharge of oil within them has been completely outlawed but there are a few minor exceptions.

Ropme Convention

- ✓ The ROPME sea area (Persian Gulf and Oman Sea) is endowed with valuable natural resources and a great biodiversity of plant and animal species;
- ✓ The Convention is the basic legal instrument binding the eight States (Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Imprimatur) of the region to coordinate their activities towards protection of their common marine environment;
- ✓ The impact of land based activities on coastal waters is significant. The municipal sewage and industrial effluents from such industries as petroleum refineries, power, desalination, and petrochemical plants are major contributors to pollution loads;
- ✓ Oil is major polluter in the region. Two of four Rompe protocols devoted to preservation of Marine environmental against oil pollution; and
- ✓ These protocols are in relation to marine pollution from exploration and exploitation of the continental shelf. In addition, these protocols concerning regional cooperation in combating pollution by oil and other harmful substances in case of energy.

Approval of Cabinet on Production of Standard Gasoline

- ✓ Oil Ministry is obliged with the aim to minimize pollution from fuel emissions and completely replace unleaded gasoline with regular gasoline and other

appropriate fuels take necessary steps in the production and supply of required unleaded gasoline.

- ✓ Since the beginning of the year 2010 to year 2012 Oil Ministry is needed to provide gasoline complying with Euro 3 and distribute around the country.
- ✓ Since the beginning of the year 2012, Oil Ministry is needed to provide gasoline complying with Euro 4 and distribute around the country.
- ✓ Imported vehicle and domestic production of cars must be adapted to above standards.

Approval of the Council of Ministries on Principle and Criteria of Establishment of Industries

- ✓ Construction, development, and changes in the production line of manufactories and workshops must be due to the rules and standards of Environmental Protection Organization;
- ✓ In respect to Location of establishment, power plants, refineries, petrochemical plants, military factories subject to the rules and standards of the Environmental Protection Organization; and
- ✓ The proposed location for the establishment of industries should expertly evaluated and remarked by Environmental Protection Organization in respect to the main production process, topography of region, climatic conditions, environmental carrying capacity, direction of prevailing winds, urban development and other environmental indicators.

Auditing of Environmental Assessment of Major Projects in Oil Industry

Islamic Republic of Iran is a major player in the oil and gas supply and demand in the region and the world. In this sense, in Iran development and maintenance of energy balance is very important. On the other hand, environmental impact of these projects is considered as an important challenge in oil and gas industry. Oil and gas resources have many benefits for our country. But besides these advantages, it is required to minimize damage caused by contamination of water, soil, and air that result from implementation of oil project. As a result, environmental assessment as a tool to align the country's development process is essential for sustainable development.

Environmental impact assessment procedure is considered as a method in which the impact of implementation of a project on the environment is investigated and predicted in order to minimize the hazardous impact due to recognition of conditions. So legislator with the aim to minimize the environmental impact of the projects and confirmed by Environmental Protection Organization focuses on this issue.

Benefits of Environmental Assessment

- Environmental audit prevent the damaging effects of oil industry;
- Approval of environmental assessment and monitoring its operations to help reassure the society;

- With attentions to environmental approach, implementation of projects supported by local, regional, and the international community .

The importance of the subject:

Due to the following reasons, the Supreme Audit Court of I. R. Iran chose the “Auditing of Environmental Assessment of Major Projects in oil industry”:

1. In the laws related to the National Development Plans, the Iranian Legislature (Islamic Consultative Assembly) has ratified some commitments that help the creation of desirable environment. One of such commitments is the “Auditing of Environmental Assessment of Major Projects”. Therefore based on this law, “all large production and service programs and projects must be evaluated environmentally at the stage of feasibility and finding the right location. The compliance with the assessment results by the executors of programs and projects is mandatory. The President’s Deputy of Strategic Planning and Control is responsible for supervising this article.
2. With regard to the fact that sustainable development is the development without degradation and destruction of environment without deprivation of the future generation from natural resources, the proper implementation of the above mentioned law plays a significant role in realization of the national sustainable development.
3. Since sustainable development is considered as development without environmental destruction ;without the denial of right of the future to natural resources; and oil industry is considered as main industry of Iran; So environmental assessment of oil projects play main role in achievement of sustainable development.

4. Reassurance to the community by supreme audit court that implementation of project have no destructive environmental impacts.

Objectives:

1. Examining the assurance of environmental assessment of major projects and plans.
2. Examining the assurance of correct procedures and policies adopted in implantation of large projects and plans in process of granting environmental assessment of oil projects permission.
3. Ensuring the absence of impairment in process of granting environmental assessment of oil projects permission, law and regulation enforcement.

The scope of the auditing:

Examining all large production and service programs and projects due to environmental assessment (subject of first section, article 192 of The Fifth Development Plan) in oil industry(2012-2014).

Methodology:

Supreme Audit Institutions as the most important supervision organizations have the ability to identify problems regarding the systems, procedures, rules, regulations, etc and as the result reflect such problems to their respective governments and therefore help them to achieve their environmental objectives.

In order to help the government including the Department of Environment and the President's Deputy of Strategic Planning and Control, the Supreme Audit Court of I. R. of Iran (SAC) has made every effort to make a pathological study, through examining the governing facilities for the assessment of environmental projects and plans, to review the adopted procedures and policies in assessment of environmental projects. The SAC using the audit findings has proposed some recommendations for improvement of the situation of environmental assessment. The SAC believes that if the current procedures are formed and implemented properly, the problem of having no environmental assessment permission will be improved at national level. In addition to improve the situation provide a report to Parliament.

Concepts of pathology:

Problems: Whatever obstacle to reaching the goal or makes it difficult.

Pathological requires attitudinal and systemic View to the whole process and it aims to identify the nature and type of the problem that needs solving. Identification of vulnerabilities and finding solution reforms general trends of affairs. Pathology is the first step in pushing affairs through legal channels, prevents of violations of obligations, and facing to problem.

Steps Required to Identifying Problems

I. First stage: understanding the nature and mechanisms;

II. Second stage: Recognition of pathological signs;

III. Third stage: Recognition of pathological causes and factors;

IV. Fourth stage: deliberation on alternative ways to deal with problems; at this stage, presented recommendations for dealing with the causes of problems.

Other Notable Points:

In this section propose issues held significant during consideration and benefit from the merit mention as their audit findings.

Loading a Protest (Violation)

In this section propose reckoned loading a protest due to their legal reference and documentation and legal measurement taken for sending to prosecutors.

Reckoned Impairments:

In this section, existing impairments are mentioned with their applicability: lack of adequate legislation relevant to the subject; controversial rules and regulations; lack of comprehensive program in law enforcement agencies to monitor the related subject; ambiguity of the objectives and tasks; and lack of sufficient sanctions.

Audit Recommendations

In this section reckoned recommendations to come front cause of impairments; deviation of investigation related to subject; and improvement of affair.

Improvement in the Affairs

In this section reckoned any activities leads to Improvement in the affairs with its documented appendix.

Audit Follow-Up

In this section reckoned any measurement taken related to last year deviations, violations, the audit recommendations; impairments of environmental assessment of major projects.

Check list of Environmental Assessment of Major Projects in Oil Industry

Area of Examination	Sl.NO	Audit Enquiry	Yes	No	Inflection the audit worksheet/ found evidence
Compliance with laws and regulations, procedures, and policies	1	Have all of major projects in oil industry been reckoned?			
	2	Does oil industry provide its project to Environmental Protection Organization, at stage of feasibility and finding the right location?			
	3	Have announced project to Environmental Protection Organization benefit from physical progress?			
	4	Does management planning organization assured of confirmation of environmental assessment of projects before recording in budget bill?			
	5	Do project managers prepare reports at the stage of feasibility and finding the right location?			
	6	Does prepared environmental assessment reports sent to environmental assessment working group at Environmental Protection Organization for detailed enquiries?			
	7	Has oil ministry in preparing its environmental assessment reports benefit from competent natural and legal advisors?			
	8	Does environmental assessment include both the construction and exploitation stage?			
	9	Is the responsibility for implementing defined at the stage of announcement due to minimizing the environmental impact?			

Area of Examination	SI.NO	Audit Enquiry	Yes	No	Inflection the audit worksheet/ found evidence
	10	Does a three-member working group observed determined time in preparing brief assessment report?			
	11	Does extension of one month deadline for preparing brief assessment report observed?			
	12	Does extension of one month deadline for preparing detailed assessment report observed?			
	13	Does three-member working group agree with implementation of plan?			
	14	Does three-member working group contingently agree with implementation of plan?			
	15	Does three-member working group disagree with implementation of plan?			
	16	In a case of implementation of project without environmental assessment; does Environmental Protection Organization notify subjected institution and agencies?			
	17	Does Environmental Protection Organization due to Islamic penal Law initiate legal proceeding against institution and agencies implemented their project without environmental assessment			
Regulation and plan assessment	1	Does the laws and regulations benefit from appropriate sanction?			
	2	Do existing laws and regulations in line with international commitments and conventions to which Iran is committed?			
	3	In case of ambiguity, contradiction, or gaps in laws and regulations: Is there any compensatory measurement?			
	4	If there is a contradiction in the law: does it reflect to authorities?			
	5	Is a comprehensive environmental assessment to be carried out by enforcement institution and agencies?			

