MOZAMBIQUE

ENVIRONMENTAL PROTECTION AND MANAGEMENT IN OIL & GAS UPSTREAM OPERATIONS

Criminal liability; Environmental impact assessments; Environmental remediation; Environmental risk; Mozambique; Oil and gas industry; Strict liability

Abstract

Pursuant to Mozambican laws, petroleum operations shall be carried out in a manner consistent with the environmental laws in force as to prevent or mitigate damages, pollution and/or spills, ensure the safety of the operations, implement clean-up activities when needed and repair damages caused and/or rehabilitate affected areas. Hence, assessing potential impacts, and implementing appropriate environmental protection and management schemes is key to prevent or mitigate risks, avoid or minimize damages and address emergency situations when carrying out oil and gas upstream operations. Considering the rules in force, it seems safe to say that the rules in force aim at achieving a threefold purpose: assess (impacts), mitigate (risks), repair (damages).

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Oil and gas upstream operations can cause severe impacts to the physical and social environment. Thus, assessing potential impacts, and implementing appropriate environmental protection and management schemes is key to prevent or mitigate risks, avoid or minimize damages and address emergency situations.

Mozambique has a rather comprehensive and somehow sophisticated legal framework in place aimed at protecting the environment and ensuring that economic activities carried out in-country comply with the required environmental safeguards, minimize their impacts and repair damages

caused, notably: the Petroleum Law[1], the Petroleum Operations Regulations,[2] the Environmental Law,[3] the Environmental Impact Assessment (EIA) Regulations (EIA Regulations),[4] the EIA General Directive (EIA Directive),[5] the Public Participation Directive,[6] the Petroleum Operations Environmental Regulations (POER),[7] the Regulations on Environmental Standards and Emissions,[8] the Marine Pollution Prevention Regulations,[9] the Biodiversity Conservation Law[10] and the Regulations on Biodiversity Conservation.[11]

Without prejudice, it is also not unusual for international companies to also resort to International Performance Standards, such as those approved by the International Finance Corporation and the World Bank. This is more common in the case of projects involving international financing, notably financing provided by multilateral organisations and Export Credit Agencies. Other than that, companies engaged in the petroleum industry are required to carry out operations pursuant to best international practices of the industry, including in terms of health, safety and environmental protection matters.

Specifically, in what concerns the petroleum sector, the Petroleum Law provides for some general environmental protection duties applicable to concessionaires and/or operators, which are further regulated under the Petroleum Operations Regulations. Overall, both such statutes set forth that petroleum operations shall be carried out in a manner consistent with the environmental laws in force as to prevent or mitigate damages, pollution and/or spills, ensure the safety of the operations, implement clean-up activities when needed and repair damages caused and/or rehabilitate affected areas. In particular art.89 of the Petroleum Operations Regulations sets forth that, when carrying our petroleum operations, petroleum concessionaires and/or operators shall: (a) resort to up-to-date operation practices, methods and/or technics aimed at preventing environmental damages, managing waste and preventing loss or damages to natural resources; and (b) company with environmental protection obligations provided under the concession contract and/or any plans approved in connection thereto. It further stresses that the concessionaire and/or the operator undertake to implement the required and/or appropriate measure to: (a) ensure the payment of appropriate compensation for damages caused by the operations; (b) prevent irremediable damages caused by the petroleum operations both within the concession area and/or any neighbouring onshore and offshore areas; and (c) rehabilitate, at their expense, all areas affected by environmental damages caused by petroleum operations. The concessionaire and/or the operator are also required to take all measures required to prevent: (a) accidents and material damages; (b) pollution, damages or risks to personnel and/or third-party assets; (c) damages to fauna and/or flora, marine life and monuments; (d) air pollution; and (e) damages to petroleum deposits. The concessionaire is also required to notify the National Petroleum Institute (in Portuguese, *Instituto Nacional de Petróleo* or INP) of any accidental operational discharges and/or spills, including quantity thereof, and implement and keep updated records on all environmental impacts caused by the operations. The concession contracts typically mirror these general provisions set out in the petroleum legal framework.

[1] Law No.21/2014, of 18 August 2014, as amended by Law No.16/2022, of 19 December 2022.
[2] Decree No.34/2015, of 31 December, as amended by Decree No.48/2018, of 6 August 2018.
[3] Law No.20/97, of 1 October 1997.
[4] Decree No.54/2015, of 31 December 2015.
[5] Ministerial Diploma No.129/2006, of 19 June 2006.
[6] Ministerial Diploma No.120/2006, of 19 June 2006.
[7] Decree No.56/2010, of 22 November 2010.
[8] Decree No.18/2004, of 2 June 2004, as amended by Decree No.68/2010, of 31 December 2010.
[9] Decree No.45/2006, of 30 November 2006.
[10] Law No.16/2014, of 20 June 2014, as amended and republished by Law No.5/2017, of 11 May 2017.
[11] Decree No.89/2017, of 29 December 2017.

Considering the rules in force, it seems safe to say that the rules in force aim at achieving a threefold purpose: assess (impacts), mitigate (risks), repair (damages).

Assess (impacts): EIA and licensing requirements[12]

Pursuant to art.43.3 of the Petroleum Law, petroleum exploration and production rights can only be granted provided that the national interest is safeguarded, notably in what concerns environmental protection. Further, art.36.5(m) sets forth that information on the environmental impact assessment carried out shall be attached to the Development Plan, which shall be submitted for approval within two years as from the date of the declaration of commerciality. Hence, and needless to say, a key step to ensure the implementation of appropriate environmental protection measures, is to properly assess environmental impacts and determine prevention and mitigation measures in connection thereto.

That said, pursuant to the EIA Regulations, oil and gas upstream activities qualify as "Class A+" and thus is subject to an Environmental Impact Study (EIS) and supervision by Expert Surveyors (in Portuguese, *Revisores Especialistas*). Carrying out an Environmental Pre-Feasibility and Scope Definition Assessment (EPDA) is mandatory for Class A+ activities. The EPDA aims at: (a) determining the existence of fatal flaws (in Portuguese *questões fatais*) related with the implementation of the relevant activity; and (b) where no fatal flaws are identified, determining the scope of the EIA procedure and the contents of the Terms of Reference (ToRs) for EIA purposes.

For the sake of clarity, under the law, "fatal flaws" correspond to significant and irreversible environmental or social impacts which cause the implementation of the project to be against the public interest, thus preventing its approval. This includes, amongst others, situations where the envisaged target area qualifies as total protection or total conservation areas, or areas where certain critically endangered species, endemic/restricted species, migrant species are present or otherwise areas deemed of paramount relevance for domestic ecosystems services.

The EPDA shall be prepared by the project proponent and submitted to the Ministry of Environment, Agriculture and Fisheries (in Portuguese *Ministério do Ambiente, Agricultura e Pescas* or MAAP) alongside with the relevant ToRs and the Expert Surveyors report, under the form of an EPDA Report. Upon approval of the EPDA Report and of the ToRs, the EIS shall be carried out as per the latter, and a EIS Report shall be prepared including: (a) an Environmental Management Plan (EMP) detailing the impacts assessed and the corresponding mitigation measures; and (b) a Decommissioning and Environmental Rehabilitation Plan (DERP) detailing, amongst others: (i) the description of the project´s "area of influence"; (ii) the environmental and business impacts resulting from the removal, collection, disposal and closure operations carried out within the "area of influence"; (iii) the description of the technical methodology applicable to discharges and emissions of hazardous substances in order to mitigate or prevent any damages; (iv) the description of the relevant measures aimed at preventing risks to human life and the maritime environmental caused by the decommissioning of offshore infrastructures; and (v) the environmental

[12] On this topic, one must stress that the POER aims at governing the specific EIA and environmental licensing related requirements applicable to petroleum-related activities. This notwithstanding, and even though art.2.2 of the EIA Regulations expressly sets forth that petroleum exploration and exploitation activities are outside the scope of such statute, the Ministry of Environment, Agriculture and Fisheries typically ignores the provisions set forth under the POER and, in turn, applies the specific requirements set forth under the EIA Regulations and the EIA Directive. Hence, for the purposes of this article, we shall consider the requirements set forth under the EIA Regulations and the EIA Directive only.

rehabilitation and recovery of the affected areas. Where applicable, the Biodiversity Offsets Management Plan (BOMP) shall be attached to the EIS Report.

Further, where resettlement-related activities are required, the EIS Report shall further encompass the Resettlement Plan and Resettlement Action Plan (RAP) and shall be submitted to and approved by MAAP.

A critical step of the EIA procedure and for purposes of preparation of the EIS Report is the so-called public participation procedure for compliance with the Free, Prior, Informed, Consent (FPIC) principle. The Public Participation Directive details the steps and requirements applicable in connection thereto.

Upon approval of the EIS Report—which encompasses the approval of the EMP, the DERP, the Resettlement Plan and the RAP—an Environmental Installation License (EIL) is issued, which is typically valid for a two-year period. The issuance of the Environmental Operation License (EOL) follows, which is typically valid for a five-year period, renewable for similar periods. A licensing fee, corresponding to 0.3% of the investment value, applies for issuance of the EOL. As a rule, no operations can be carried out on-site prior to the EOL being issued.

Mitigate (risks): environmental management, monitoring and audit

As referenced, the EMP shall be attached to, and submitted for approval alongside with, the EIS Report. The EMP shall include the measures and actions to be implemented by the project proponent aimed at managing negative impacts of the envisaged activities and at enhancing the positive ones. The EMP shall also include, amongst others, a Monitoring Plan, environmental education programs, emergency communication and contingency measures. Monitoring activities shall be carried out as per the Monitoring Plan approved and the EMP shall be amended accordingly if and as needed.

As to verify compliance with: (a) the applicable environmental laws and the specific conditions approved under the relevant environmental license issued; as well as with (b) the relevant plans/programs approved notably: (i) the EMP; (ii) the BOMP; and (iii) and the reports on environmental monitoring, performance and audit, environmental audits (public or private) shall be carried out on a regular basis. Any recommentations thereunder are deemed mandatory and must be implemented by the project developer within the applicable timelines. Failure to comply with such recommendations attracts the payment of fines corresponding to MZN 3 million for Class A+ activities.

Repair (damages): restoration and indemnification obligations/environmental liabilities

First and foremost, pursuant to art.56 of the Petroleum Law, petroleum operators shall be deemed liable for damages to the environment and/or public health resulting from the petroleum operations. Article 54.6 of the Petroleum Operations Regulations further stresses that where the petroleum operations cause environmental damages or pollution, the concessionaire shall indemnify the affected party(ies) for the losses and/or damages caused, irrespective of fault. In addition, art.89.2(c) of the Petroleum Operations Regulations provides for rehabilitation obligations of the concessionaire and/or the operator.

Neither the Petroleum Law nor the Regulations thereof provide additional guidance on restauration and indemnification obligations though. Other than that, at present, Mozambican law fails to provide a comprehensive and clear regime expressly aimed at governing environmental liability issues, but

scattered provisions governing this topic may be found in different statutes including, without limitation: (a) the Environmental Law; (b) the Biodiversity Land and Regulations thereof; (c) the Civil Code;[13] and (d) the Criminal Code.[14]

The foregoing being said, in a nutshell, considering the legal framework in force, environmental liabilities may be summarised as follows:

(a) Environmental restauration and rehabilitation obligations

At present, in addition to specific environmental restauration and rehabilitation measures that may be governed under the relevant EMPs and/or Decommissioning Plans approved, some specific provisions aimed at governing environmental restauration and rehabilitation requirements may also be found in the Biodiversity Protection legal framework. Pursuant to the latter, those who voluntarily (i.e. with fault) cause the degradation of any ecosystems are required to rehabilitate/restore the affected area. Where the need for rehabilitation is caused by illegal activities (such as pollution) the liability rests with the offender (i.e. the person engaged in the illegal activity that caused the damages). As a rule, the MAAP may determine that the offender is required to implement rehabilitation measures. In such a scenario, the relevant measures shall be adopted and implemented in as to ensure no net loss of biodiversity and ecosystems. Rehabilitation Costs would be borne by the offender.

(b) Strict liability

In what concerns civil liability, the key provisions one must bear in mind are the aforesaid art 54.6 of the Petroleum Operations Regulations, which mirrors the general provision set out in art.26 of the Environment Law and expressly provides for a strict liability regime in case of "environmental damages". Such liability arises from the environmental risks inherent to the activity rendered by the agent causing the damage, under the polluter-pays principle. As a result, those causing "environmental damages" or otherwise "cause the temporary or definitive stoppage of economic activities as a result thereof" are required to pay compensation, regardless of fault. Further, where more than one person is responsible for damages, the liability of such persons is statutorily deemed to be joint and several. Even though the Environmental Law fails to define the concept of "environmental damages", legal authors typically take the view that these encompass: (a) ecological damages (*dano ecológico*)—which compensation is typically due to the State; and (b) damages to the environment (*dano ambiental*)—which, in turn, legal authors typically agree to encompass: (i) damages or losses suffered by individuals or entities (as a result of ecological damages); and/or (ii) damages which trigger rehabilitation-related obligations. The Environmental Law also sets forth that the Government of Mozambique is responsible for overseeing and assessing the severity of the environmental damages occurred as a result of any environmental incident and for setting their respective value by way of an environmental assessment followed by an expert report. The law also fails to determine how such assessment is made and how the relevant damages are levied though. Finally, the Commercial Code[15] expressly sets forth the possibility of piercing the corporate veil and holding the shareholders liable where the company breaches, amongst others, essential environmental rights, due to the significant influence of the relevant shareholder(s) and the company's assets are not sufficient to repair the damages caused.

[13] Decree-Law No.47344, of 25 November 1966, as amended.
[14] Law No.24/2019, of 24 December 2019, as amended.
[15] Decree-Law No.1/2022, of 25 May 2022.

(c) Criminal liability

The Criminal Code provides for a set of crimes against the environment such as: (a) illegal exploration and exploitation of natural resources; (b) production, processing, import/export, trade, transport and/or storage of toxic substances; (c) spread of diseases; and (d) pollution. In certain circumstances other crimes may also apply, notably: (a) damage; (b) crimes against private property; and (c) crimes against life. As a rule, depending on the extension of the damages and the degree of fault, environmental-related crimes may be punished with imprisonment of up to three years and/or corresponding fines. In case of crimes against the environment, negligence is always punishable. This means that criminal liability is triggered in case of mere negligence as opposed to being limited to cases of gross negligence or willful misconduct. It should also be noted that, legal entities—including companies—can be deemed liable for any criminal offenses committed by (and without prejudice to their own individual criminal liability): (a) directors acting in their name and on their behalf; and (b) officers or representatives acting under the authority of any directors in breach of any vigilance or control duties applicable to the same. Legal entities are subject to the following penalties: (a) fines of up to two years calculated on a daily rate of between one and five minimum wages; and/or (b) ancillary penalties including, without limitation: (i) temporary suspension of activity; (ii) cancellation of permits; (iii) temporary exclusion from access to State benefits; (iv) closure; and/or (v) dissolution.

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