#### **CLOSURE MINES AND ABANDONMENT OF OIL IN LATIN AMERICA**

As the world's eyes move to the abundant mineral and hydrocarbon resources available for extraction in Latin America, it is important for natural resources companies to have one eye on the future, from the outset of their projects, and to be mindful of what they have to do to comply with mine and oil well closure requirements. In many Latin American jurisdictions, the industry is not yet matured, which can make complying with the requirements and implementing the most beneficial tax strategies difficult.

This paper will address (i) the requirements for submitting, updating and having mine and oil well closure plans approved; (ii) the remediation requirements in the extraction zone; (iii) tax incentives and amortization of closing costs across the life of the resource; (iv) the implications for changing or terminating labor contracts; and (v) potential liabilities upon closure of the resource.

# I. REQUIREMENTS FOR SUBMITTING, UPDATING AND HAVING MINE AND OIL WELL CLOSURE PLANS APPROVED

The requirements for and need for a mine closure plan vary within each jurisdiction. This is due to a range of factors, not least of which is whether it is handled at a national, provincial/state level or a combination of these two. Brazil provides the case in point. Although mine closure and oil well abandonment is principally regulated at the national level through its constitution, the Brazilian Mining Code and the Brazilian Petroleum Law. However, this is also supplemented by regulations at the state level concerning local taxes, environmental matters and soil usage. Moreover, the situation varies between mining on the one hand and hydrocarbons on the other.

A mine closure plan must be submitted as part of a series of studies in order to obtain an environmental installation license in Brazil. Specifically, it must cover the minimizing of environmental degradation and negative impacts on the environment generally. The Brazilian National Department of Mineral Production, ("DNPM") evaluates the plan and issues a report on it. This report must form part of the application to the Ministry of Mines and Energy to close a mine. The application must contain:

- a report on the work so far performed;
- · characterization of the remaining resources;
- a topographic and landscape report considering the stability, erosion control and drainage aspects; and
- a work and financial chronogram of the proposed decommissioning activities.

Approval shall only be granted if the decommissioning plan has clear evidence of the compliance with the environmental conditions and the possibility of the area being used for other economic activities. The plan for closure may not be taken into action without the DNPM's prior approval.

The plan for closure must be updated periodically, although the regularity of such update is not expressly provided. It has to contain all items mentioned in section 20.4.1 of Annex I from Ordinance No. 237/2001.

For oil well abandonment in Brazil during the exploration and development phases, oil companies must simply notify the Brazilian National Petroleum Agency ("ANP"), and (ii) during production phase, oil companies can abandon oil wells only after ANP's formal authorization is sought. Oil wells cannot be abandoned if the necessary operations for such actions may impact neighboring oil wells, unless the well to be abandoned represents a safety or environmental threat to the environment. There is no requirement for an abandonment plan, since ANP Ordinance No. 25/2002 already sets out in detail the procedure to be followed by oil companies to carry out well abandonment. Nevertheless, ANP Resolution No. 13/2011 provides for a report for the handover of the concession areas, which may be submitted for only part of or the entire area of concession and must encompass all wells abandoned. The content of the report is detailed in the abovementioned Resolution.

In cases where there is non-compliance with mine closure and oil well abandonment, sanctions can be applied which range from a fine through to the termination of the license or concession agreements.

Generally, across the region, it could be said that some form of closure or abandonment plan must be submitted to the government at the start of the project. Most jurisdictions require that this plan be updated over the course of the project. In some jurisdictions there are proscribed times for doing this,<sup>1</sup> However, in Colombia, it must be updated only when there are variations in the mining operation and in relation to oil and gas, there are no specific time frames.

Peru also provides an interesting case study on this point. In the case of the abandonment of hydrocarbon areas, license holders can submit a plan for temporary cessation, partial abandonment or abandonment (effectively, total abandonment). Each of the plans mentioned must comply with the following requirements: (i) include actions for remediation, reforestation, decontamination and removal of facilities, and other necessary measures to abandon the area, in compliance with the corresponding timetable, described in the Environmental Impact Assessment, (ii) the compliance of the Plan will be supervised by the Authority of Environmental Supervision ("OEFA").

# II. REMEDIATION REQUIREMENTS IN THE EXTRACTION ZONE

Argentina provides an interesting example of the remediation requirements following the closure of natural resources projects. Argentine mining legislation is silent regarding remediation requirements following the closure of mines. It simply provides that the Environmental Impact Assessment may contain post-closure supervision of the operations. The reality is that this is a relatively new concept in Argentina.

In the last two decades, there have actually only been two mine closures in Argentina. The closure of Mina Angela, in the province of Chubut, which was operated by Cerro Castillo S.A., began in 1998. Closure was carried out in accordance with the environmental impact statement. In the absence of formal requirements, the company adopted best practices which had been implemented in other jurisdictions, to that end, it hired British and Canadian

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<sup>&</sup>lt;sup>1</sup> Argentina, Chile and Peru (mining).

companies to define, design and provide technical supervision of the closure. The closure was successfully completed in 2000.

The most recent closure was of Mina Martha in the province of Santa Cruz, which was operated by Ceour D'Alene Mines Corporation. The decision to close the mine was announced in 2012 and is expected to take years to be finalized. Again, in the absence of the formal requirement to obtain a closure certificate, as such the company is expected to implement industry best practices in order to protect itself from potential liabilities in the future. The strict remediation requirements will depend on the environmental impact assessment of the project. As set out above, the Environmental Impact Assessment may include post closure supervision requirements – it doesn't have to.

In terms of the abandonment of oil wells, the situation is not dissimilar to what was described about Peru in relation to closure plans, in that Argentine legislation foreshadows two types of abandonment — temporary and permanent. In cases of temporary abandonment, there are a series of specific technical requirements that must be observed. However, final abandonment must be treated in different ways, depending on the characteristics of the area where the well is located. If the well is located in a desert, forest or a mountainous area, the abandonment must be done through a legible and durable notice, which must show the position of the well. If the well is located in an urban area or in an area of crops, topographic references must be used from fixed, non-alterable points. Such references must be recorded and filed with the report of abandonment of the well. In all cases, the land must be left free of liquid waste, all constructions must be demolished and auxiliary wells and debris basins must be filled. Finally, oil concessionaires may agree with land owners different methods to perform the final abandonment, as long as the spirit of conservation and preservation of the environment is maintained.

In the remaining jurisdictions considered, for both mine closure and oil well abandonment the concession or license-holder is generally required to remediate the property in accordance with the relevant closure plan, howsoever termed, in relation to the natural resource. The position in Chile perhaps best encapsulates the general requirements across the region, which is that actions must be taken in accordance with the closure plan in order to ensure the physical and chemical integrity of the area, in compliance with applicable environmental regulations. The implementation of these measures and actions should provide appropriate regard to health, life, the security of people and the environment.

In Brazil, there is a particular focus on health and safety. For the closure of mines, in addition to following the closure or decommissioning plan, companies must submit a health condition report to the DNPM detailing the company's employees health during the mining process. Specific health and safety regulation on the mining industry is provided for in the Mining Regulation No. 22, issued under DNPM Ordinance No. 237/2001, which establishes work health and safety rules that should be observed by mining companies. Such rules establish standards for work procedures and safety conditions, emergency operations and personnel training, among others. Mining companies must also comply with or implement certain work health and safety programs regulated by the Consolidation of the Labor Laws, including the occupational health control program, prevention program for environmental risks, in-house

commission for prevention of accidents in mining activities, social security professional profile and risk-management program.

## III. TAX INCENTIVES AND AMORTIZATION OF CLOSING COSTS ACROSS THE LIFE OF THE RESOURCE

In order to analyze amortization, it is necessary to consider the requirements for guarantees. Guarantees are required in many jurisdictions as a form of insurance for the carrying out of closing works in accordance with the requisite plans. In some form or other, mining companies operating in Argentina, Chile, Colombia and Peru are required to have in place a deposit guaranteeing the closure work, an account allocated to that effect within the company's own funds or an insurance policy covering this event in case the company cannot carry out the works. Argentina is the only one of those states that does not require a guarantee in respect of hydrocarbon reserves and a guarantee is not required for either mining or hydrocarbon reserves in Brazil.

With that background, it is worth looking specifically at the situation in Peru. Holders of mining concessions are bound to grant an Environmental Guarantee in favor of the Ministry of Energy and Mines in order to support the costs associated to the execution of the mine closure plan. according to article 51 of the Peruvian Mining Regulations, the Environmental Guarantee is granted by means of annual contributions. The amount of each annual contribution is the result of dividing the total amount of the Environmental Guarantee by the number of expected remaining years in the lifespan of the mine.

According to article 50 of the Peruvian Mining Regulations, the Environmental Guarantee shall be granted one year immediately after the approval or amendment of the mine closure plan, within the first twelve (12) working days of each year. Bear in mind that the holder shall not be able to develop exploitation and/or beneficiate mining activities before the granting of the Environmental Guarantee. Finally according to article 11 of the Peruvian Mining Law, and article 55 of the Peruvian Mining Regulations, the environmental guarantees, may consist in one or more of the following alternatives: (i) Guarantee Trust, (ii) Standby Letter of Credit and other similar instruments, (iii) Corporate Guarantee, (iv) Performance Bonds and other type of insurance coverage, (v) Mortgage, (vi) Warrant, (vii) Security Interests over Personal Property.

In relation to hydrocarbons, the requirements are a little more stringent. The license holder is obliged to submit, along with its abandonment plan, a commitment guarantee (standby letter of credit),<sup>2</sup> supporting the commitments established in the abandonment plan. The standby letter of credit must be extended by a Peruvian financial institution approved by the Ministry of Energy and Mines, for an amount of thirty (30) percent of the total amount of the investment considered in the abandonment plan proposed, for no longer than ninety (90) calendar days after the scheduled date of culmination of the activities considered in the abandonment plan.

In terms of amortization of closing costs, the holder of a mining concession may require a discount up to a maximum of thirty percent (30%) of the annual amount of the guarantee, provided that such titleholder complies with continuously maintaining, for at least three

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<sup>&</sup>lt;sup>2</sup> This only applies to absolute abandonment, not partial or temporary abandonment.

years, the following conditions: (i) Corporate solvency at a national level, duly qualified with a BBB credit rating or higher; (ii) Good environmental practices credited by a certified environmental management system; and, (iii) compliance of the corresponding progressive measures in the approved terms and conditions. In relation to hydrocarbon activities, the corresponding standby letter of credit cannot be amortized until the Authority of Environmental Supervision informs the Ministry of Energy and Mines about the compliance of the abandonment plan. Once the abandonment plan is completely executed, the holder may request that the Authority of Environmental Supervision communicates to the Ministry of Energy and Mines its conformity, so that it releases the standby letter of credit.

Across the region, amortization requirements vary significantly. In Argentina, the general rule is that expenses can be deducted only when they accrue. When deductions exceed income, the income can be carried forward. However, section 23 of the Mining Investment Law establishes that in order to remedy potential damages to the environment derived from mining, mining companies must annually do a prevision in their financial statements. This amount shall be determined by the company and can be deducted for Income Tax purposes in each fiscal year up to the limit of 5% of the operative extraction costs and profits. Regarding oil well closure, Argentine Federal Tax Administration Advice No 1079/79 provides that the deduction of the expenses incurred shall be conducted only after permanent abandonment occurs

Nothing in Brazilian law prevents such an amortization in either relation to mining or oil and gas, but it would need to be reviewed on a case by case basis. Chile, by contrast, allows the amortization, but only during the last third of the projected life of the natural resource. Finally, in Colombia, expenses may be treated as deductible when they are incurred.

## IV. THE IMPLICATIONS FOR CHANGING OR TERMINATING LABOR CONTRACTS

As a general rule, employment laws in most Latin American jurisdictions are generally skewed in favor of the employee. This reflects the fact that, traditionally, employees are seen to be in a power imbalance vis-à-vis their employers. In addition to looking at the requirements in the various mining and hydrocarbon laws, it is generally the case that the most important laws concerning labor issues at the closure of a mine or a hydrocarbon deposit apply across all industries.

Compensation for termination of employees can be a significant cost which requires planning at the outset in order to avoid a cost blowout at the time of the closure of the mine or abandonment of the oil well. Colombia provides an interesting case study in this instance. There it is possible to hire people for the length of the project, that is, for a fixed term period. However, if a company decides to unilaterally terminate the agreement without just cause, it could be liable to pay out the unfulfilled portion of the contract. In Colombia, an alternative could be to relocate the worker to another project – provided that the corresponding labor agreement permits this.

Other jurisdictions go further in protecting employees. Argentina is a prime example. When a labor relationship is terminated without cause, the employer will have to pay compensation based on years of service, in addition to the amounts owed to that point. Even if an employer

dismisses an employee because there is no more work, for instance because of the closure of a mine, the employer must go through an administrative procedure with the Ministry of Labor and the representative union to in order to obtain a 50% reduction in the payout amount. In practical terms, the mining and hydrocarbon industries are heavily unionized and the unions negotiate favorable collective bargaining agreements which give dismissed employees greater benefits.

In almost all jurisdictions it is not as simple as moving an employee from one mine or well to another – even if they are neighboring. Effectively, this becomes a constructive dismissal and the employee is entitled to compensation. There are risks for employers when contracting employees on fixed term and permanent bases. In Argentina, for instance, fixed term employees are still entitled to 50% of the severance payment they would otherwise have been entitled to if they had been employed on a permanent basis.

In many instances, labor costs cannot be avoided – they can only be limited and the risks minimized. These need to be carefully considered at the outset and factored into the cost of closing the mine or abandoning a well.

#### V. POTENTIAL LIABILITIES UPON CLOSURE OF THE RESOURCE

Not all jurisdictions in Latin America issue certificates upon the closure of the resource. Chile, however, provides an interesting example of one that does. In Chile, the Department of Geology and Mining issues partial closure certificates and final closure certificates. Partial closure certificates are implemented once all of the measures toward the closure of one or more facilities have been executed. Final Closing Certificates are issued when the totality of the works comprising the project have been completed. This entitles the company to the return of any surpluses of the closing guarantee. Importantly, the certificate evidences the full and timely compliance by the company with its duties and obligations under the Chilean Mining Law and the Chilean Mining Regulations. Peru's legislation is, in all material respects, very similar to Chile's in respect to certificates issued upon mine closure.

In Brazil, the government approvals for the closure of a mine or abandonment of an oil well do not give the concession holder any form of indemnity in relation to civil liabilities that may have arisen through the closure or during the exploitation of the natural resource. Notably, in Argentina and Colombia, the governments do not issue any form of certificate upon the closure of a mine or abandonment of a well. Generally, it must be said that across all jurisdictions, a certificate is not going to provide indemnification or proof generally, other than to the fact that the mine has been closed. Civil liabilities will continue unimpeded.

Generally, any affected third party is able to instigate proceedings against natural resources companies based on environmental damage. However, in terms of implementing strict compliance with the laws, this is typically left to statutory bodies. In Chile, for instance, the Department of Geology and Mining is exclusively responsible for monitoring and supervising compliance with the Chilean Mining Law<sup>3</sup> and the Chilean Mining Regulations, without

<sup>&</sup>lt;sup>3</sup> Law No. 20,551

prejudice to the legal powers of other organs of state administration within the scope of their powers.

## **CONCLUSION**

Although there are some similarities across each jurisdiction with respect to certain elements of mine closure or the abandonment of wells, no two jurisdictions is the same. Knowledge can certainly be applied from the experience in neighboring jurisdictions, but it is not something that can be applied blindly. As the mining and hydrocarbon industries develop further in each country, there will undoubtedly be changes to the laws that are currently in place. There may also be increasing similarity between jurisdictions as one country sees best practices occurring in another and attempts to implement similarly successful programs in their country. For now though, it is clear that it is an area of law which is developing and what applies in one jurisdiction cannot be said to necessarily apply in another.