

Assessing Corporate Certification as Impetus for Accurate Reporting in Alberta's Mine Financial Security Program

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Oil Sands Research and Information Network

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REPORT SUMMARY

Alberta's Mine Financial Security Program (MFSP) establishes the procedures for determining and administering financial security for reclamation of oil sands and coal mining operations. The program establishes more transparent and consistent methods for determining the financial security amount required to cover the mine's suspension, abandonment, remediation and surface reclamation liabilities should the operator fail financially – while considering the value of the resource as assets against the liabilities. For oil sands mining operations, total MFSP liabilities can run in the hundreds of millions of dollars.

To determine financial security amounts, mine operators self-report estimates of the liabilities and assets in the operation. Accuracy of the asset and liability estimates is important to provide public assurance that the program is providing appropriate levels of financial security. Within the MFSP, certain mechanisms are used to improve regulator and public confidence in the accuracy of these estimates. Under analysis here is the corporate certification requirement: a high-level representative – either the Chief Executive Officer (CEO) or Chief Financial Officer (CFO) of a corporate mine operation or a designated financial representative (DFR) of a joint venture – must certify that appropriate procedures were used to determine the estimate values and that the estimates are reasonable.

By investigating the legal and regulatory setup for the MFSP, this paper assesses the expectation of increased confidence from the certification requirement by describing its legal implications and the impetus it places on corporations to ensure appropriate procedures for generating estimates.

In short, the corporate certification requirement ensures documentary evidence of officer involvement in any misreporting by mining operators. For any misreporting that constitutes an offence under the governing legislation – the *Environmental Protection and Enhancement Act* (EPEA) – this could raise individual officer liability under the Act. EPEA has enforcement provisions to penalize misreporting under the MFSP, which can be applied to companies as well as individuals. The individual penalties, which can include imprisonment or monetary penalties, can be applied to a corporate officer where he or she had some minimum level of involvement in the misreporting.

With respect to some of the most important estimates, there is a link between the MFSP calculations and values reported under disclosure obligations in securities law. This is another mechanism for improving regulator and public confidence in the MFSP estimates and includes a similar certification requirement. While the effectiveness of this mechanism is not within the scope of this analysis, it provides a comparator against which to analyze the effectiveness of the MFSP corporate certification requirements, particularly in terms of the penalties available under each regime.

In light of the relatively small magnitude of the monetary penalties available under EPEA and important barriers to investigation and enforcement of misreporting violations, the extent to which certification requirements incent better estimate procedures is not clear. This is particularly true given the small penalties under EPEA relative to those available under securities

law. Nonetheless, the risk of reputational injury could provide a less formal but still very powerful incentive that certification bolsters by demonstrating officer involvement. Unfortunately, the absence of a role for civil society in the scrutiny of the estimates precludes a potentially stronger role for certification to incent enhanced estimate veracity.

In conclusion, there is some expectation that the inclusion of the MFSP certification requirement provides an incentive for better procedures for asset and liability estimation in the MFSP Annual Report. It is difficult to assess the strength of this incentive, particularly because of uncertainties around the capacity to investigate reporting misconduct with respect to complex internal accounting procedures, on which the enforcement and, in turn, certification requirements rely for effectiveness. A few more conclusions are discussed further.

First, there is a lack of clarity in industry around the potential for liability against the certifying authority arising from certification. This can have two negative consequences. For one, the potential liabilities that do exist are not having their full deterrent effect if they are not properly understood by the actors they are intended to impact. Also, reduced certainty with respect to any business decision, but particularly for potential monetary and imprisonment penalties, can undermine efficient business behaviour and lead to suboptimal policy results. This can be improved by:

- more clearly explaining how individual liability attaches from the certification;
- providing concrete hypothetical examples of misreporting infractions that can lead to individual officer liability; and
- better linking the “effect” (wording) of the certification statement to EPEA’s standards for individual officer/agent liability.

Second, it is not clear what internal capacity or threshold triggers Alberta Environment and Sustainable Resource Development (ESRD) employs to initiate a more concerted governmental audit or third-party audit of an MFSP Annual Report. The effectiveness of these procedures is critical to the mechanism through which certification engages potential legal liabilities or reputational costs for certifying authorities. Uncertainty around ESRD’s capacity or procedures for pursuing more concerted investigations undermines clarity around the certification’s effectiveness. This can be improved by:

- providing more information to stakeholders around ESRD’s review process and where and how ESRD chooses to exercise its audit powers and pursue enforcement measures; and
- establishing clearer presumptions or default values for certain parameters of asset and liability estimation, such as minimum per-hectare reclamation costs, derivation from which requires an explanation from the operator.

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1 INTRODUCTION AND OBJECTIVE

In 2011, Alberta Environment¹ adopted a new Mine Financial Security Program (Alberta Environment 2011a,b), which establishes the procedures for determining and administering financial security for reclamation required from oil sands and coal mining operations². Under this new financial security program, Alberta Environment and Sustainable Resource Development (ESRD) has improved the transparency and consistency around the project-specific³ data inputs and calculations necessary to determine the financial security amount. This is an important determination, as the security, when combined with the resource assets in the project, is intended to cover the mine's suspension, abandonment, remediation and surface reclamation liabilities should the operator fail financially.

The liability and asset estimates that underlie the Mine Financial Security Program (MFSP) security calculation are self-reported by mine operators. Some mine financial security programs in other jurisdictions have assigned assumed values for certain inputs, such as set per-hectare costs for reclamation, which restrict the estimate determinations to more objective parameters. Others give the regulator the lead in generating the estimates. The MFSP requires self-reporting pursuant to the *Conservation and Reclamation Regulation* (CRR⁴; Government of Alberta 1993) under which ESRD has developed and implemented the MFSP – this allows, in theory, for greater specificity for the estimates to reflect each individual operation and place the burden of estimate determination on the operator. However, by depending on self-reported estimates from operators, it creates a need to ensure veracity in the generation of the estimates by the operators, to provide public assurance that the program is providing appropriate levels of financial security. One way that the MFSP seeks to address this need for veracity assurance is by requiring operators to derive their estimates from procedures used to generate similar estimates for financial disclosure under Alberta securities law.

Another way is the core focus of this report: the corporate certification requirement. With this new program, ESRD has adopted a corporate certification requirement for the liability and asset estimates. Under this requirement, a high-level representative – either the Chief Executive Officer (CEO) or Chief Financial Officer (CFO) of a corporate mine operation or a designated financial representative (DFR) of a joint venture – must certify that appropriate procedures were used to determine the estimate values and that the estimates are reasonable. The corporate

¹ Alberta Environment has since been renamed Alberta Environment and Sustainable Resource Development (ESRD). ESRD will be used to identify the department under either name. NOTE: Should the proposed [Responsible Energy Development Act](#) be proclaimed the responsibilities for administering the MFSP will transfer to the Alberta Energy Regulator under the new Act.

² Throughout this document *mining operations* and *mine* means a mine and any associated processing plant.

³ Throughout this document *project* is used to mean the mine and/or plant subject to an *Environmental Protection and Enhancement Act* approval.

⁴ Throughout this document CRR refers to the *Conservation and Reclamation Regulation* (Government of Alberta 1993).

certification requirement is intended to ensure greater regulator and public confidence in the accuracy of the estimates and, in turn, the adequacy of the resulting security.

The purpose of this analysis is to assess this expectation of increased confidence by describing the implications of the certification, the impetus it places on corporations to ensure appropriate procedures for generating estimates, and the practical steps that companies will normally take when obtaining the corporate officer's or DFR's signature on the MFSP Annual Report. While the MFSP is applicable to both oil sands and coal mines, this report will focus on the oil sands mining operations, which are much larger as measured by the liabilities each operation has and the financial security they are required to post.

The report begins with section 2 by providing a broad overview of the MFSP to understand the context within which the certification and certified estimates are relevant. [Section 3](#) then gives an overview of the estimates themselves and how they are derived from financial disclosure under securities regulations, as well as the veracity assurance mechanisms that exist under that regime and from which the accuracy of the MFSP estimates benefits. With this context established, [section 4](#) explains the MFSP certification itself and the effect of that certification according to its own wording. This leads into [section 5](#), which lays out the legal implications of misreporting under the MFSP, as well as the financial disclosure regime. [Section 6](#) brings together these findings about the legal and regulatory setup for the MFSP and assesses the implications of the certification requirements for encouraging better integrity in the procedures used internally to generate and review estimates. Finally, a few brief [conclusions and recommendations](#) are offered.

2 MINE FINANCIAL SECURITY PROGRAM: BACKGROUND AND CONTEXT

The MFSP determines the total financial security that a mine operator must submit to ESRD. It is based on four constituent financial deposits, each with their own calculations based on a variety of parameters. A comprehensive overview of the program is not necessary here⁵. However, a few key features provide context for the adoption of a corporate certification requirement for the asset and liability estimates that underlie the ultimate security calculation. In particular, it is important to review: (1) the legislative structure within which the MFSP operates and which provides enforcement provisions to the MFSP; and (2) the MFSP's basic calculation procedures, demonstrating the relevance of the asset and liability estimates.

2.1 Legislative Authority and Mine Financial Security Background

ESRD designs and administers the MFSP pursuant to enabling authority under the *Environmental Protection and Enhancement Act* (EPEA⁶; Government of Alberta 2000a) and the

⁵ ESRD's *Guide to the Mine Financial Security Program* (2011a) provides a comprehensive overview of the MFSP in a straightforward and plain language manner. Perry and Saloff (2011) also provide an overview analysis and assessment of the MFSP, describing the key points of the program.

⁶ Throughout this document EPEA refers to the *Environmental Protection and Enhancement Act* (Government of Alberta 2000a).

Conservation and Reclamation Regulation (CRR; Government of Alberta 1993). As such, the MFSP operates within the legal and enforcement strictures of these legislative and regulatory instruments. However, ESRD’s authority with respect to designing the MFSP is, at least with respect to its formal legal setting, highly discretionary. This discretion is important for determining the objectives by which to assess any feature of ESRD’s formal policy document, the MFSP Standard⁷, such as the certification requirements under analysis here, and for understanding the legal strictures under which ESRD sets the MFSP Standard and the enforcement provisions available to ensure MFSP compliance.

Section 137 of EPEA imposes on mine operators – among other industries – a duty to conserve and to reclaim the land on which they operate. The details of this duty, in terms of the standards that operators must meet in conserving and reclaiming land, are left to regulatory approvals issued pursuant to Part 2, Division 2 of EPEA and through Cabinet’s s. 146 regulatory authority. Cabinet exercises this latter authority with the CRR, which, in turn, authorizes ESRD to promulgate conservation and reclamation standards (CRR, s. 3; see also *Designation and Transfer of Responsibility Regulation*, s. 8(1)(h), Government of Alberta 2012).

The requirement for financial security for these conservation and reclamation obligations has a parallel legal provenance. Sections 135 and 146(g) of EPEA authorize Cabinet to require, by regulation, that operators of mines and coal and oil sands processing plants, “provide financial or other security” in respect of conservation and reclamation obligations for the operator’s activities (EPEA, ss. 134(b), 135, 146(g)). The authority is permissive, allowing Cabinet to set the activities, “classes of operators”, and even lands where companies will have to provide financial security (EPEA, ss. 134(g), 135, 146(g)).

Again through the CRR, Cabinet requires financial security from mine operators and empowers ESRD to set the more detailed requirements for financial security from mining operations and associated activities. The CRR mandates ESRD to require operators to provide security wherever a mine approval is required – including coal mines, oil sands mines, and processing plants associated with either type of mine – before the approval for the mine under EPEA is issued (CRR, ss. 16(b), (d), (e), 17(1)(a)) and periodically thereafter as required by the MFSP Standard (CRR, ss. 20(1)). As such, through regulation, Cabinet mandates provision of financial security from mining operations in some amount and through some process.

Prior to the MFSP, ESRD relied on general security provisions in CRR to determine the financial security amount for all industrial sectors subject to CRR security provisions (CRR 2008-2011). Under that framework, it was not clear how ESRD calculated financial security from the operator’s “estimated costs of conservation and reclamation”, nor the form for submitting those estimates or process by which they were determined. A number of commentators expressed concern about the lack of transparency with how the financial security totals were being calculated and about insufficient security amounts for covering liabilities (Lemphers et al. 2010,

⁷ Throughout this document MFSP Guide refers to Alberta Environment (2011a) and MFSP Standard refers to Alberta Environment (2011b).

pp. 23-24; Watt 2010, pp. 16-18, 67-74). Watt (2010) gives a concise overview of the Auditor General of Alberta's reports to this effect (Watt 2010, pp. 16-17).

However, with the adoption of the MFSP in 2011, the CRR was amended to adopt, by reference, the MFSP Standard and the CRR now simply refers to the MFSP Standard as the method for determining financial security for mining operations (CRR, ss. 16(g), 16.1, 18(1.1)). The legal setting and nature of the MFSP raises two important features of the financial security requirements for mining operations bearing on any assessment of the MFSP's provisions.

First, the MFSP Standard, though not of a formal legal form such as a statute or regulation, comprises the legally enforceable regulatory requirements for the determination and administration of financial security for mining operations. Because the MFSP Standard is adopted by reference by the CRR, it carries the same legal weight and enforceability as the CRR and any other regulation arising under the conservation and reclamation provisions of EPEA. Moreover, EPEA's enforcement provisions, detailed in [section 5.1.1](#), are applicable to the MFSP requirements and available to penalize non-compliance with the MFSP Standard.

Second, while there is greater specificity to the financial security determinations for mining operations through the MFSP, ESRD's discretion to set these parameters is – at least formally – broader for mining operations under the MFSP. While ESRD must follow the vague s. 18(1) strictures noted above for other industrial activities subject to the CRR, even these do not apply to mining operations – instead, the CRR provides only that security amounts for mines “shall be in an amount determined in accordance with the [MFSP] Standard” (CRR, s. 18(1.1)). For the sake of consistency between different industrial activities, it is likely that ESRD has used and will continue to use the s. 18(1) guidelines to instruct its role in making the MFSP Standard. Moreover, Cabinet retains the authority to rescind the adoption of the MFSP or to require that the MFSP include certain requirements and thereby holds indirect oversight authority. But there are presently no transparent legal mandates to prescribe ESRD's process for determining financial security amounts for mining operations and ESRD is authorized to amend or to replace the MFSP Standard at its discretion (CRR, s. 16.1). In this context, it is difficult to assess the MFSP *vis-à-vis* a legislated mandate – we can only use stated and presumed policy objectives. Moreover, ESRD is, at least formally, empowered to make unilateral modifications to the MFSP Standard going forward.

2.2 The MFSP Standard: Overview

Properly assessing the impact of the MFSP certification requirement requires an understanding of what information is subject to certification and of what relevance this information has to the overall security scheme and the subject operations. It is not necessary to comprehensively review the MFSP Standard's formula for determining security amount, which is a relatively complex framework of subsidiary calculations⁸. However, a basic overview of the relevant features provides important context.

⁸ See the *Guide to the Mine Financial Security Program* (Alberta Environment 2011a).

2.2.1 *Determination of the Amount of Financial Security*

Essentially, MFSP seeks to ensure financial security for meeting the reclamation⁹ obligations (liabilities) of the operation, while partially recognizing the resource value associated with the operation as an asset capable of addressing the liabilities of the project. As the MFSP Guide explains rather concisely:

Where an Approval Holder has MFSP Assets at least three times greater than the MFSP Liability, is 15 years or more from the end of its reserves, and is keeping current with its reclamation plans, additional financial security above the base amount is not required (MFSP Guide, p. 6)

Where these conditions do not hold, additional security is required. These parameters are determined through four subordinate calculations, to the overall financial security, known as “deposits”:

1. Base Security Deposit (BSD): a set amount, based on the sector (for example, \$30 Million for a new oil sands mine with no upgrader and \$60 M for one with an upgrader)¹⁰, that is intended to provide immediate funds for the government to “maintain security and safety at the site until a new Approval Holder takes over or the site is closed”, should the existing operator default. Regardless of the calculations for the other deposits, the BSD is required.
2. Operating Life Deposit (OLD): a required amount, offset by the BSD, starting when mines have less than 15 years of expected reserves left that increases gradually so that all outstanding liabilities are fully secured once the mine has less than six years of expected reserves left. In practice, this decreases the extent to which the operation can rely on reserve assets when the mine is nearing end of life.
3. Asset Safety Factor Deposit (ASFD): a required deposit, in addition to the BSD and OLD, to ensure that the resource value assets in the operation are always at least three times the amount of the unsecured MFSP Liabilities (a ratio known as the asset safety factor), so that, in effect, one third of the resource assets qualify as security against the liabilities.
4. Outstanding Reclamation Deposit (ORD): financial security over-and-above the other deposits that ESRD requires where the operator is not keeping up with the ESRD-approved reclamation plan (MFSP Guide, p. 6).

⁹ Throughout this document *reclamation* means suspension, abandonment, remediation and surface reclamation as described in the MFSP Guide.

¹⁰ The BSD is not particularly relevant to this analysis because it does not incorporate any of the estimates that are subject to corporate certification. Coal mining operations require substantially lower BSD amounts: \$2 M for a mine-mouth coal mine and \$7 M for an export coal mine or coal processing plant. However, for oil sands mines with an EPEA approval in effect as of December 31, 2010, the BSD is the amount of security then held by the government (MFSP Guide, p. 6).

Based on these four subordinate deposits, the total financial security is calculated and that amount must be submitted to the government and held in ESRD's Environmental Protection Security Fund (EPEA, s. 32(3)) in the form determined by ESRD. Financial security is adjusted on an annual basis; increasing with additional liabilities and decreasing as the liabilities are retired¹¹.

With these deposits and their calculations laid out, the MFSP provides more specificity and transparency about how the security amounts are actually calculated than the pre-MFSP regime (Lemphers 2011). However, as the next section explains, the actual estimates that operators input into these calculations are still not publicly available.

2.2.2 Public Transparency and Confidentiality Provisions

Under the MFSP, there is more transparency around the process for determining financial security amounts, as well as those resulting amounts, relative to the previous financial security procedures. However, the asset and liability estimates that underlie the financial security calculation are still kept confidential under the MFSP. This remaining confidentiality provision has repercussions for assessing the efficacy of enforcement provisions relating to accurate estimate reporting.

As noted by ESRD and recent contributions from commentators on the topic, the 2011 MFSP is more transparent than previous financial security programs (MFSP Guide, p. 5; Perry and Saloff 2011, para. 60), which were criticized for their lack of openness and limited opportunity for scrutiny (Lemphers et al. 2010, p. 23; Perry and Saloff 2011, para. 36; Watt 2010, p. 87). In particular, on the procedural side, the MFSP adopts more consistent and transparent methodologies both for calculating the financial security and for estimating the assets and liabilities that underlie the financial security calculations (MFSP Guide, pp. 5, 8, Appendix 3; Lemphers 2011; Perry and Saloff 2011). MFSP also requires, under ESRD's authority to disclose any information in its possession under s. 35(3) of EPEA, public disclosure¹² of certain substantive information about each project:

- the amount of each type of financial security deposit provided;
- the asset safety factor, which is the ratio of MFSP Assets to MFSP Liability; and
- the state of outstanding reclamation obligations and progress in managing reclamation under the mine reclamation plans (MFSP Guide, pp. 5, 47).

This publicly disclosed information shows the results of the calculations and gives a sense of “the magnitude of the potential risks associated with the developments”, as well as “how financial deposits are offsetting liabilities” (MFSP Guide, p. 47).

¹¹ Note that the operator does not require a reclamation certificate from ESRD for the liabilities to be considered retired and for the security to be reduced.

¹² See <http://www.environment.alberta.ca/03388.html> for 2011 MFSP oil sands data.

However, ESRD has decided not to use its discretion over public reporting to report assets and liability estimates self-reported by operators. As ESRD notes, these numbers “will not be disclosed as [they] reflect confidential financial information” (MFSP Guide, p. 47). Indeed, ESRD indicates to operators that they should “clearly mark the data that are to be deemed confidential by the regulator to trigger the confidentiality provisions under the *Freedom of Information and Protection of Privacy Act* (Government of Alberta 2000b; MFSP Guide, p. 44), essentially insulating the self-reported MFSP Annual Report estimates and calculations that are not reported by ESRD from public disclosure. As these are the figures that are subject to corporate certification with the objective of bolstering accuracy, there is no direct overlap between the certified estimates and the data published for public scrutiny. The ramifications of this disconnect are discussed in [section 6.4](#).

3 THE ESTIMATES AND CALCULATION PROCEDURES

Self-reported estimates of the liabilities and assets in a mining project are the central variable inputs that determine the overall financial security amount required from a mine operator. These are the estimates that are subject to corporate certification, with the objective of enhancing their veracity and increasing the regulator’s and public’s confidence in their accuracy. To understand the importance of this accuracy and the relevance of these estimates, as well as the general procedures used to generate them, it is important to review briefly: (1) the nature of the estimates and how they fit into the financial security determination; (2) the derivation of liability and asset estimates from accounting procedures and data found under financial disclosure obligations under securities regulations; and (3) the veracity assurance mechanisms under securities law that are analogous to the MFSP certification and therefore support MFSP estimate veracity and, to the extent that they overlap, duplicate the MFSP certification requirements.

3.1 Self-reported Estimates Subject to Corporate Certification

The financial security calculations in the MFSP involve running a set of data inputs through a number of operational formulae, which define the four deposit types that constitute the overall financial security amount, described in [section 2.2.1](#). Among the inputs are self-reported estimates relating to resource assets in the project and end-of-life liabilities for the project, which are subject to corporate certification.

As ESRD straightforwardly describes, financial security “increase[es] with higher MFSP Liability or lower MFSP Assets or less reclamation than the Planned Reclamation amount, and decrease[es] with lower MFSP Liability or higher MFSP Assets or reclamation in excess of Planned Reclamation amounts” (MFSP Guide, p. 34). Operators determine values for these inputs and report them in the MFSP Annual Report, in the form provided in Schedule 2 of the MFSP Standard, which operators must submit to ESRD, along with their financial security, no later than June 30 each year (MFSP Standard, ss. 5(1), 8(1))¹³.

The information reported in the MFSP Annual Report includes the following self-reported estimates and values:

1. the **MFSP Assets** for the project, which is a product of
 - a. the **gross proven plus probable reserves** in the project,
 - b. the **three-year average netback** for the project, determined from the annual netbacks for the reporting year and the two prior calendar years¹⁴, and
 - c. the forward price factor for the resource type, which is set by ESRD¹⁵;
2. the **MFSP Liability** for the project, which is a sum of the
 - a. project’s asset retirement obligation (ARO) liability, and
 - b. other end-of-life liabilities for the project; and
3. the outstanding reclamation balance, which is based on
 - a. the area (in hectares) actually reclaimed for the year,
 - b. the area (in hectares) planned for reclamation for the year in the operation’s ESRD-approved reclamation plan,
 - c. the cumulative reclamation balance based on the difference between planned and actual reclamation in prior years, and

¹³ Alternatively, if the mine operator elects to provide full financial security, they submit the form in Schedule 3 and provide financial security based on the full amount of the MFSP Liability (MFSP Standard, s. 6). In practice, the entire coal sector has elected to provide full financial security; only oil sands operators with new mines have elected to provide full financial security (Alberta Environment and Sustainable Resource Development 2012).

¹⁴ The netback is simply the factor by which the asset value in the project is multiplied to convert the expected revenue from the resource asset in the project to expected profit, based on the operation’s history of net profit per resource unit. For years where the operator did not have any production, a deemed netback must be approved by ESRD based, in the first instance, on sector standards, but with a view to other factors like differences in technology (MFSP Guide, p. 15).

¹⁵ To determine the MFSP Assets, the expected netted resource is multiplied by the forward price factor to account for any expected decreases in the market value of the resource in the future (MFSP Guide, p. 15). ESRD succinctly explains the MFSP Assets calculation as follows:

“MFSP Assets are determined by multiplying the Project’s gross proven plus probable reserves by the three-year average netback and are reduced if the future commodity price is expected to be lower. Netback is the Approval Holder’s gross revenues minus operating costs divided by the annual sales volume for the project.” (MFSP Guide, p. 6).

- d. the reclamation cost in \$/ha, which ESRD set for the purpose of outstanding reclamation deposit calculations for oil sands mines at \$75,000/ha for the 2012 to 2014 reporting years (MFSP Guide, pp. 31-32). ESRD will review this value in its 3-year program review in light of empirical cost data available as well as recent changes in regulatory requirements or technology and research available.

Each item in this list is included in the MFSP Annual Report and is subject to corporate certification. Some items require only that the operator reiterate information already included in existing documents reported to ESRD or set by ESRD. While accuracy with respect to these values is important, as they are involved in the calculation of the overall security amount, veracity in procedures for reporting these values is not as important given that they are simply transcribed or transparently calculated from other values. They are very easily reviewed or audited and little process is necessary to find them and include them in the MFSP Annual Report. On the other hand, the bolded items are self-reported values or estimates that are derived from the operator's internal procedures.

The focus, therefore, of this analysis is on the bolded numbered and lettered inputs, because these are the values whose accuracy depend on some veracity around the procedures used internally to generate them. An option for ensuring accuracy and consistency in financial security calculation inputs is for the regulator to set more of the parameters, such as required per hectare reclamation costs for all operations in a sector or regulator assessments to determine estimates (Watt 2010, pp. 50-52)¹⁶. Where policy-makers have decided to use self-reporting, as the Alberta Government requires under the CRR, to provide some specificity on an operation-by-operation basis without independently undertaking cost estimation, there is concern about ensuring accuracy in the self-reported estimates and commentators have noted the incentive to reduce costs to decrease security amounts (Boyd 2001, p. 41; Kuipers 2003, p. 16; Watt 2010, pp. 55-56).

3.2 Derivation of MFSP Estimates from Disclosed Values under Securities Law

While the MFSP defines the formulae for the high-level self-reported estimates – the MFSP Assets, MFSP Liability, and outstanding reclamation balance – it does not define the engineering, accounting, or finance procedures used to estimate the base-level data inputs. Instead, the MFSP relies on the procedures established in parallel or supportive policies – legal requirements, regulatory policies, or professional practices¹⁷ – as the mechanisms for calculating the underlying estimates to the self-reported information in the MFSP Annual Report. In particular, the MFSP points to accounting procedures for financial disclosure under securities

¹⁶ It should be noted that this approach implies the regulator has the technical and financial knowledge to set appropriate values or that they will use very conservative values to ensure all potential outcomes are incorporated into the value.

¹⁷ To the extent that the corporate certification officer relies on documents signed (and stamped where applicable) by a member of a professional organization (for example an accountant, engineer, agrologist, biologist or forester), the Code of Conduct obligations placed on that professional provide additional confidence in the certification.

law as the basis from which MFSP Assets and MFSP Liability estimates are generated. These are important connections for understanding what operators do internally to generate their MFSP estimates and what procedures are already in place to enhance the estimates' accuracy. There are, however, important ways in which the MFSP estimates diverge from the values reported under financial disclosure, so some independent procedures must also be in place.

3.2.1 MFSP Assets Estimates

ESRD explains that:

“The MFSP does not establish or modify the financial accounting standards and engineering standards that form the basis of the asset calculations.... These are described in the various Acts, regulations and policy documents of the regulators and professional organizations” (MFSP Guide, p. 14)

For greater specificity, ESRD expects that operators use the resource reserve asset estimates determined for corporate financial reporting under securities law: “The MFSP Asset amounts would be derived from each Approval Holder’s publicly filed annual financial reports (or the supporting working papers) and reserve evaluation reports.” (MFSP Guide, p. 14).

For calculating both the gross proven and probable reserves for petroleum resources in an oil sands mine project and the operational revenues and expenses values necessary to calculate netback, ESRD expects operators to employ the procedures prescribed under securities law. In particular, it expects that, for petroleum reserves, these estimates be “derived in accordance with National Instrument 51-101 of the security regulations” or analogous U.S. securities law provisions (MFSP Guide, p. 16)¹⁸.

Pursuant to continuous disclosure requirements under Alberta securities law, oil and gas companies must report their reserves data in accordance with the strictures of NI 51-101. This includes reporting proven and probable reserves, as well as the values that determine netback under the MFSP (gross revenue and operating costs) (Form NI 51-101F1, Items 2.1, 6.9). These values relate directly to enumerated items 1(a) and (b) in the self-reported estimates list in [section 3.1](#).

3.2.2 MFSP Liability Estimates

Similar to MFSP Assets determination, ESRD looks to financial reporting under securities law as the basis for MFSP Liability calculation: “The MFSP accepts the financial reporting standards used in audited, publicly reported statements as the starting point for liability calculations” (MFSP Guide, p. 11). More specifically, “the MFSP Liability amounts should be derived from each Approval Holder’s publicly filed and audited annual financial statements (or the supporting working papers)” (MFSP Guide, p. 20).

¹⁸ Similarly, ESRD points to the financial reporting requirements for coal reserves, which are derived in accordance with NI 43-101 (MFSP Guide, p. 16).

ESRD requires that the MFSP Liability “represent the third party costs to suspend, abandon, remediate and surface reclaim the site”, as well as any monitoring necessary after operations cease but before reclamation certification is granted. These end-of-life obligations must be based on the reclamation and closure plans submitted to and approved by ESRD (MFSP Guide, p. 20).

As with MFSP Assets determination, NI 51-101 requires companies to report the “abandonment and reclamation costs” for their operations and how the company estimated these costs (NI 51-101, Items 2.1(3)(b), 6.4). In this way, important linkages exist between continuous disclosure obligations under securities law and the ARO Liability component of MFSP Liability estimation, which is enumerated item 2(a) in the self-reported estimates list in [section 3.1](#).

3.2.3 Divergence between MFSP and Financial Disclosure

However, despite these important expectations of dependence on and consistency with estimates reported under securities rules, some data reported under the MFSP are not identical to any subset of the NI 51-101 data. For example: (1) there are estimates under MFSP reporting that are not included in financial disclosure or for which the MFSP does not reference reported values in financial disclosure as the basis; and (2) there are variations in the form or type of reported data. In this way, while there is substantial accord between the estimates underlying the certified MFSP values, there are some self-reported values either in the MFSP Annual Report or underlying those reported values that cannot directly be gleaned from the financial disclosure forms.

First, for some estimates required for MFSP reporting, the MFSP does not reference financial reporting values as the basis for calculation; indeed, these values might not be subject to reporting under securities law. This is the case for item 3(a) in the self-reported estimates list in [section 3.1](#): the area of actual land reclaimed in the reporting year. Instead of according with financial reporting, this value will align with numbers reported to ESRD under reclamation reporting.

With respect to the assets and liability values, the scope of reported values is different under NI 51-101 from MFSP Annual Reports. Under NI 51-101, the breakdown for reported values is generally only by country for each product type, with some exceptions. As such, while information reported in the MFSP Annual Report should rely on estimates used in financial reporting, the reported information will not be identical. However, requiring reporting by product type means that companies will report separately for their bitumen operations, which brings reporting much closer to the project level for the few very large oil sands mining operations. And, certainly, project-specific values would be necessary for the companies to calculate, internally, the aggregate countrywide data for each “product type”. So, the MFSP’s self-reported estimates relating to assets and liability should be based on the same underlying data as the financial reporting data, but the actual reported values, themselves, are not identical.

3.3 Veracity Assurance under Financial Disclosure

Because these estimates are the inputs into the deposit calculations for the overall MFSP financial security amount, accuracy with respect to these estimates is important. It is impossible

for estimates to be exactly accurate as there are too many variables involved – but better procedures to improve accuracy are critical to obtaining sufficient financial security overall (Morton et al. 2011; Watt 2010, p. 39). That is the goal of the certification requirement as a veracity assurance mechanism under MFSP. The reliance of MFSP estimates on financial disclosure also links their accuracy to similar veracity assurance approaches under securities law. Where there is a direct linkage between estimate reporting under MFSP and the financial disclosure required under securities law, these measures bolster the MFSP certification requirement’s objective of promoting confidence in the self-reported estimates.

Information reported under NI 51-101, including the information reported above relating to assets and liabilities, must be reviewed by an independent qualified reserves evaluator or auditor, including an evaluation or audit of at least 75% of the total future net revenue in the project (NI 51-101, s. 2.1(2)). Moreover, and in direct parallel with MFSP’s corporate certification requirement, NI 51-101 also requires that two senior officers (including the CEO) as well as two directors of the company sign a form that “confirms the responsibility of management of the [company] for the content and filing of the statement” that includes the assets and liability estimates noted above and that the board of directors has approved the content and filing of that information (NI 51-101, s. 2.1(3); Form NI 51-101F3).

In addition, both the CEO and CFO, as “certifying officers”, for each publicly traded corporation must certify their quarterly and annual filings under securities law (NI 52-109, ss. 2.1)¹⁹. Under NI 52-109, both the CEO and CFO must certify the following statements, among others, about the “annual filings”, which include the required reserves and liability data reported under NI 51-101 by oil and gas operations²⁰:

- that they have “reviewed” the annual filings;
- that, based on their knowledge and “having exercised reasonable diligence”,
 - “the annual filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a

¹⁹ An exception is for companies listed in the United States that comply with the *Sarbanes-Oxley Act 2002* requirement that CEOs and CFOs prepare a statement to certify the “appropriateness of the financial statements and disclosures” and that they “fairly represent, in all material respects, the operations and financial condition of the issuer” (NI 52-109, ss. 8.1, 8.2; MFSP Guide to the MFSP, p. 11).

²⁰ Because the required reserves and liability data required by NI 51-101 for oil and gas operations must be disclosed under the “annual filings” required by the NI 51-102 general continuous disclosure obligations, that information is subject to the NI 52-109 certification (NI 52-109, s. 2.1; NI 52-109F1, s. 1; NI 51-102F2, Item 5.5(1)). While ESRD includes NI 52-109’s certification requirement as one of the “programs supporting the [MFSP]” (Guide to the MFSP, pp. 10-11), the regulatory route through which MFSP data are subject to NI 52-109 is not explained – ultimately, though, the assertion is correct. To simplify the somewhat circuitous route by which the NI 51-101 data are subject to NI 52-109, basically: the NI 52-109 certification is for the annual filings, which includes the Annual Information Form (AIF) (NI 52-109, s. 2.1; NI 52-109F1); the AIF contains some of the most important disclosure obligations under securities law in NI 51-102F2 (NI 52-109, s. 1.1; NI 51-102, s. 1.1(1)); and NI 51-102F2 incorporates among its disclosure requirements the information reported under NI 51-101 as NI 51-101F1 (NI 51-102F2, Item 5.5(1)).

statement not misleading in light of the circumstances under which it was made” and

- “the annual financial statements together with the other financial information included in the annual filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer”; and
- that they are responsible for establishing and maintaining disclosure controls and procedures and internal control over financial reporting and have had these controls designed such that the material information is “made known” to them and that they provide “reasonable assurance regarding the reliability of financial reporting” and that they have evaluated these controls (NI 52-109F1).

Through these three mechanisms – the NI 51-101 reserves audit requirement and the certification requirements under both NI 51-101F3 and NI 52-109 – the reserves and liabilities information reported under NI 51-101 and NI 51-102 are subject to procedural veracity assurances for the process and substance of the reported data. As such, confidence in the asset and liability reporting under the MFSP is already supported by these financial reporting procedures under securities law.

However, the securities law regime, from which some MFSP estimates are derived, is not immune from concerns about accuracy in reported data. Several environmental and investor groups have expressed concern in recent years about oil sands environmental liabilities and, in particular, “whether environmental liabilities are being adequately captured in the financial statements of firms operating in this sector” (Schneider 2011, p. 1). As a result, studies have shown that “there is a great deal of diversity as to how environmental liabilities are accounted for”, in part because “[t]hey are subject to a certain degree of management discretion with regards to both the amount and the timing, which leaves a great deal of flexibility in calculating the final number that shows up on the balance sheet.” (Schneider 2011, p. 13; see also Watt 2010, pp. 45-47). Schneider further notes that while recent changes in accounting standards to align Canadian Generally Accepted Accounting Principles with International Financial Reporting Standards will mean that more environmental liabilities are recognized in oil sands mining financial statements, there is nevertheless legitimate concern about the accuracy of the resulting reported numbers: “accounting for environmental liabilities is less than straight-forward. The timelines can be very long, the actual timing of the obligations can be very uncertain and changes in technology can impact the final costs” (Schneider 2011, p. 1).

This can be particularly true with respect to oil sands operations. For example, the industry estimates for oil sands reclamation costs range from \$45,000 to \$75,000 per hectare (MFSP Guide, pp. 31-32). Other analysis indicates that actual costs can be as high as \$114,000 per hectare, excluding tailings reclamation, which carry the greatest uncertainty (Grant et al. 2008), suggesting a very wide possible range and substantial uncertainty. Tailings costs are largely unknown because of lack of experience with tailings reclamation, as well as evolving reclamation standards and technological advances (Grant et al. 2008; Reuter et al. 2010, pp. 58,

70, 88)²¹. It has been reported that, even among accounting experts, there is a lack of a “well-established and consistent basis for calculating [asset retirement obligations, which include reclamation costs,] in oil sands mining, when compared to practice among peers in the mining industry” (The Ethical Funds Company 2008).

Some MFSP estimates, therefore, are derived from financial disclosure and benefit from the accounting practices under that regime that ensure veracity in liability and asset estimation. However, because of the complexity of financial accounting for relatively new and very long-term industrial operations like oil sands mining, it is difficult to determine empirically whether calculations under financial disclosure have proven accurate in this context. This is an important realization with respect to assessing the MFSP certification, which is in place to ensure veracity in procedures for deriving MFSP estimates from financial disclosure data.

4 MFSP CERTIFICATION PROCEDURES AND EFFECT

Because the estimates that feed into MFSP calculations are self-reported, veracity assurances in the calculation methods are necessary to ensure reasonable accuracy in the estimates. As discussed in the previous part, MFSP seeks to address this by tying MFSP estimates to financial reporting. Another mechanism within the MFSP is corporate certification requirements for the estimates in the MFSP Annual Report. The MFSP Standard requires certification from either the CEO or CFO or, in the case of joint ventures, the designated financial representative. The certification is a verification of both the substance of and procedure used for the three categories of estimates discussed above, in [section 3.1](#), but with an important limitation on the certification’s effect with respect to the MFSP Assets and MFSP Liability calculations – namely, that the certification attests only to appropriate calculation procedures and the resulting estimates are “reasonable”.

4.1 Designated Certifying Authorities

The MFSP Standard requires *either* the CEO or CFO to certify the MFSP Annual Report under its Corporate Certification section, by printing their name, indicating their title, and signing and dating the certification. This requires either the highest-ranking corporate officer in charge of day-to-day executive decision-making or the top executive-level corporate officer primarily responsible for managing financial risks, financial planning and financial reporting to certify directly the financial and other information subject to certification in the MFSP Annual Report. Alternatively, for a joint venture operator that does not have a CEO or CFO, the certification must be signed by the “designated financial representative” (DFR) (MFSP Standard, Schedule 2; MFSP Guide, pp. 19, 23). The DFR is the joint venture’s “senior designated financial or accounting representative”, which ESRD further explains is “equivalent to a [CFO]” (MFSP Guide, p. 53). For a couple of reasons, the relevance of the distinction between a JV’s DFR and a corporation’s CEO or CFO is not clear and probably warrants more study.

²¹ As noted in section 3.1, the \$75,000/hectare value will be re-assessed at the 3-year MFSP review.

First, for joint ventures without a CEO or CFO, it is not clear who is acting as the DFR. Unfortunately, the certification section of the MFSP Annual Report is not subject to public reporting under the MFSP (MFSP Guide, p. 47). It is hard to assess the comparative confidence derived from a DFR versus an executive officer certification without being able to assess the DFR's executive authority and position *vis-à-vis* other management for the operation.

Second, there is a difference between types of joint venture entities. On the one hand, the only joint venture operation without a single joint venture partner with over 50% of the equity in the joint venture is Syncrude, which has both a CEO and a CFO. Other joint ventures, which involve a majority partner, such as Shell in the Albion Sands Joint Venture's Muskeg River Mine, seem to run their operations out of the controlling partners' business and do not have independent corporate executives. It could be that in these circumstances, the DFR signing the MFSP certification is from the controlling partners' executive offices, in line with ESRD's explanatory statement that the DFR is "equivalent" to a CFO.

For these reasons, it is not clear that the distinction between a CEO or CFO and a DFR for a JV will have significant effect on the MFSP corporate certification requirements. It could be that the corporate certification requirement fills a gap in individual corporate leadership liability where the certifying authority for the JV is not subject to financial reporting under securities law, as discussed in [section 6.2.2](#). However, because liability for individuals under EPEA, discussed in [section 6.1](#), applies equally to officers as to "agents" of the corporation that commit a violation under EPEA, it does not immediately appear that the MFSP certification provisions would prove less effective for a JV's DFR.

4.2 Effect of Corporate Certification

The effect of the corporate certification is evident from the language of the certification itself. While it purports, initially, to certify the substantive accuracy of the relevant MFSP estimates, a limitation on its effect, within the certification itself, makes it a certification of estimate procedure and weakens the certification to reasonableness on substance.

When signing the MFSP Annual Report certification section, the certifying authority certifies that, based on his or her knowledge, the estimates subject to certification, listed in [section 3.1](#), "are true and accurate representations of the [MFSP] requirements as described in the [MFSP] Standard" (MFSP Standard, Schedule 2). In this way, the certification is to the substantive accuracy of the estimates, though the phrase "representations of the [MFSP] requirements" alludes to the calculation procedures involved. It is not clear how the term "representations" might weaken the strength of the certification effect.

In any case, the certification paragraph then limits the effect of the certification for estimates that underlie the MFSP Assets and MFSP Liability calculations, as certification with respect to these estimates "only attests that appropriate procedures were used to determine their value and the resulting estimate is reasonable." (MFSP Standard, Schedule 2). This limitation more clearly emphasizes the estimation procedures, requiring that they are appropriate, while limiting the attestation on substantive accuracy of the estimates to reasonableness, a somewhat vaguer standard permitting a broader range of ultimate values.

In this way, the certification for the outstanding reclamation estimates has a stronger effect than for the other certified estimates. It attests to the truth and accuracy of the estimates as representative of the required MFSP calculations, without limitation. The assets and liabilities estimates, more relevant to ensuring sufficient financial security to cover the prospective end-of-life reclamation obligations of the mine, are subject instead to certification based on a reasonableness substantive standard for the estimate accuracy and “appropriate procedures”, which presumably requires the accounting standards of financial reporting, where they overlap.

5 LEGAL IMPLICATIONS OF MISREPORTING UNDER THE MFSP AND THE ASSOCIATED FINANCIAL REPORTING REGIME

EPEA has enforcement provisions to penalize misreporting under the MFSP, which can be applied to companies as well as individuals. The individual penalties, which can include imprisonment, can be applied to a corporate officer where he or she had some minimum level of involvement in the misreporting. At the same time, securities law also wields enforcement provisions against misreporting and carries substantially higher penalties than under EPEA.

5.1 MFSP Enforcement, Penalties and Audit

There are no enforcement provisions directly under the MFSP. However, MFSP benefits from the enforcement provisions of EPEA, which render the provision of false or misleading information in the MFSP Annual Report an offence under provincial law and subject to penalty. Officer and director liability is broadly applicable under EPEA even where these corporate leaders only acquiesce to the commission of the offence. Along with an audit procedure under the MFSP that ESRD can wield to initiate investigations that could uncover these misreporting contraventions, these provisions provide a mechanism for penalizing officer involvement in misreporting information in the MFSP Annual Report.

5.1.1 *Enforcement and Penalties under EPEA*

Arising under its legislative authority, as described in [section 2.1](#), EPEA’s enforcement mechanisms are applicable to the MFSP (MFSP Guide, s. 8)²². Of particular relevance to the accuracy of self-reported asset and liability estimates, EPEA makes it an offence to “provide[] false or misleading information pursuant to requirement under this Act to provide information” and differentiates the penalty based on whether that conduct is done knowingly (EPEA, s. 227):

- for knowingly providing false or misleading information,
 - individuals can be fined up to \$100,000 and/or receive imprisonment for up to 2 years, and

²² In addition to the enforcement provisions described here, section 24.2 of the CRR provides the ESRD Director with the ability to require additional security or the full amount of security if the operator fails to comply with the Standard, fails an audit, or is required to post an Outstanding Reclamation Deposit under the Standard to such an extent that the Director considers that the operator has failed to comply with the Standard.

- corporations can be fined up to \$1,000,000 (EPEA, s. 228(1));
- where it is not proven that the conduct was done knowingly,
 - individuals can be fined up to \$50,000 (with no provision for imprisonment), and
 - corporations can be fined up to \$500,000 (EPEA, s. 228(2)).

With respect to the unknowing offence, if the individual or corporation can show, on a balance of probabilities, that he, she or it took all reasonable steps to prevent the commission of the offence, there is no liability and no penalty applied (EPEA, s. 229). In addition to these penalties, s. 230 of EPEA allows the court to order an individual or corporate offender to pay a fine equal to any monetary benefits accrued to the offender as a result of the offence.

For the offence that does not require proof of the “knowingly” mental state, ESRD can administratively determine the commission of the offence and impose an administrative penalty instead of pursuing the action as a provincial offence through criminal procedural measures. In the case of the criminal penalties, ESRD would have to refer the case to formal criminal prosecution and submit to the more onerous and lengthy requirements of criminal procedure, including the burden proof beyond a reasonable doubt for the prosecutor. In contrast, ESRD can unilaterally impose administrative penalties where it is “of the opinion that” the relevant individual or corporation has contravened the Act, which is an administrative route as an alternative to (and not in addition to) pursuing the charge as a provincial offence (EPEA, s. 237). However, this administrative determination can only be used for the lesser of the misreporting offences, the one where the “knowing” mental element is not proven (*Administrative Penalty Regulation*, Schedule, s. 1; Government of Alberta 2003²³). Moreover, under the administrative route, the penalties are much smaller: the maximum fine is \$5,000 per offence (*Administrative Penalty Regulation*, s. 3).

EPEA also provides that corporate directors and officers or agents of a corporation are liable for the offences of that corporation, under the same penalties as noted above, where that individual “directed, authorized, assented to, acquiesced in or participated in the commission of the offence” (EPEA, s. 232), here the provision of false or misleading information. This is so regardless of whether the corporation was prosecuted for or convicted of the offence.

5.1.2 MFSP Audit Provisions

The MFSP Standard provides that ESRD can audit the operator’s MFSP Annual Report, upon 60 days’ notification to the operator (MFSP Standard, s. 9). Under this process, the operator is obligated to provide ESRD with “reasonable access to any data or reports [ESRD] deems necessary to conduct an audit”, as well as “reasonable access to any staff or consultants responsible for the calculations in the MFSP Annual Report” (MFSP Standard, ss. 9(2), (3))²⁴.

²³ Throughout this report *Administrative Penalties Regulation* refers to Government of Alberta (2003).

²⁴ See Dixon, R.J., J. Kenney and A.C. Sandilya, 2012. [Audit Protocol for the Mine Financial Security Program](#). OSRIN Report No. TR-27. 27 pp. for more information on the audit process.

The audit provisions directly provide that the operator must correct its Annual Report and provide new financial security in accord with the audit's results (MFSP Standard, s. 9(5)). However, ESRD notes that the "enforcement actions" authorized under EPEA, CRR and the *Administrative Penalty Regulation* "may also arise depending on the findings of the audit" (MFSP Guide, s. 7.4). The audit, then, is the tool through which ESRD can undertake an initial review and initiate enforcement and penalty provisions under EPEA for misreporting. In respect of these audits and recognizing that the asset and liability estimates are linked to financial reporting under securities law, ESRD can coordinate audits for verifying these estimates with an interdepartmental committee (MFSP Guide, s. 7.6.1).

5.2 Implications of Misreporting Under Financial Disclosure Obligations

Securities law also has its own regime for enforcing compliance and penalizing misreporting. Different companies can be subject to different provincial securities legislation or legislation outside Canada. To get a sense of the enforcement provisions available under securities law, we look here at Alberta securities law, under which several oil sands operators are financial statement reporting issuers. The potential penalties may be many times more severe under this regime than under EPEA's provisions and, similar to EPEA, apply additional penalties to corporate officers who acquiesce in the company's offence. To the extent, therefore, that estimates align directly with information reported under financial disclosure obligations and are based on the same standards for the misreporting offence, as discussed in [section 3.2](#), the MFSP procedures and EPEA enforcement provisions add to the much larger potential legal implications of securities law.

Alberta's *Securities Act* (Government of Alberta 2000c)²⁵ precludes anyone from making a statement in its continuous disclosure filings to the Securities Commission, including its NI 51-101 and NI 51-102 submissions, that, "in a material respect and at the time and in light of the circumstances under which it is made, is misleading or untrue" (*Securities Act*, s. 221.1(2))²⁶. A contravention of this provision rises to an offence, unless the person or company "did not know, and in the exercise of reasonable diligence would not have known, that the statement ... was misleading or untrue" (*Securities Act*, s. 194(2)). Where the offence is proven, the person or company is liable to a fine of up to \$5,000,000 and up to five years less a day imprisonment (*Securities Act*, s. 194(1)). With very similar language to EPEA, personal liability additionally attaches to any corporate director or officer who "authorizes, permits or acquiesces in the commission" of the misreporting offence with the same fine and imprisonment liability (*Securities Act*, s. 194(3)).

²⁵ Throughout this report *Securities Act* refers to Government of Alberta (2000b).

²⁶ The financial discussion on materiality, material effect, material adverse effect (MAE) and pervasive effect is extensive. Generally, the effect of misstatement is material when financial information as a whole, in part or in aggregate could reasonably be expected to influence the economic decisions of users. There is no hard and fast percentage of what constitutes material effect. See [Materiality \(auditing\)](#) from Wikipedia.

Similar to ESRD’s power under EPEA, the Securities Commission can also pursue administrative penalties for these contraventions outside of the criminal procedural requirements of offence prosecution. If the Commission, after holding a hearing, determines that a contravention has occurred, it can impose a penalty of up to \$1,000,000 per breach of the Act (*Securities Act*, s. 199(1)). This can apply both against the company or a corporate officer if the Securities Commission determines that he or she authorized, permitted or acquiesced in the company’s contravention (*Securities Act*, s. 199(1)(a)(ii)). Corporate officers can also be banned from holding such office with a reporting issuer if their actions are considered to have brought the capital markets into disrepute.

The point here is not that these penalties apply to misreporting under the MFSP. Rather, this review demonstrates the penalties that exist under the securities legal regime, a regime that generates estimates on which the MFSP estimates that are subject to corporate certification are derived or directly linked. Recognizing the enforcement mechanisms of this alternative regime helps to assess the practical import of MFSP certification and enforcement.

6 ASSESSMENT OF IMPLICATIONS OF MFSP CERTIFICATION

ESRD does not explicitly explain the mechanism through which the MFSP certification incents accurate reporting on the MFSP Annual Report. Input from experts in industry subject to the MFSP indicates that at least some in industry are confused as to whether and how certifying officers could be subject to liability as a result of signing the MFSP Annual Report certification paragraph. As this section’s assessment finds, the key formal mechanism for liability seems to be that the certification provides documentary evidence of the involvement necessary to bring “acquiescing officer liability” against the certifying authority ([section 6.1](#)). How these incentives via formal enforcement provisions would work, in practice, in light of the magnitude of penalties and certain barriers to investigation and enforcement, however, is not precisely clear, though informal reputational incentives might be just as powerful ([section 6.2](#)). In light of this mechanism, companies may be engaging in certain specific controls and practices to improve the veracity of their MFSP estimates ([section 6.3](#)). Finally, the absence of a role for civil society in the scrutiny of the estimates precludes a potentially stronger role for certification to incent enhanced estimate veracity ([section 6.4](#)).

6.1 Certification as Evidence of Certifying Officer Involvement in Misreporting

Where misreporting in the MFSP Annual Report is discovered, the certification by a corporate officer might provide documentary evidence sufficient to prove that the certifying authority acquiesced in the misreporting contravention. The certification would then raise individual liability provisions under EPEA enforcement.

Where the government, either through prosecution or administrative action, establishes a reporting violation under EPEA (“provid[ing] false or misleading information”) with respect to its MFSP Annual Report, certification could supply the evidence necessary to attach corporate officer or agent liability by acquiescence. As detailed in [section 4.2](#), signing the certification section attests that appropriate procedures were used to determine the asset and liability estimate

values and that they are reasonable. This attestation demonstrates some minimal involvement in reviewing the procedures and reasonableness of the estimate.

Where the case against the corporation proves either inappropriate calculation procedures or that the estimates are clearly unreasonable, under the criminal or administrative standard of proof applicable²⁷, this minimum involvement by the certifying authority, proven documentarily by the certification, probably satisfies the standard that the certifying authority “authorized, assented to, acquiesced in or participated in” the commission of the misreporting offence. Attesting to the appropriateness of the procedures and reasonableness of the estimates would seem, on a plain language reading, to constitute, at least, assenting to or acquiescing in – both relatively low standards of involvement – those procedures and estimate results. This would make the certifying authority individually liable for the corporation’s offence, in addition to the corporation’s own liability, under s. 229 of EPEA, as described in [section 5.1.1](#).

In this way, the certification provisions could add to the prospect for individual liability under EPEA’s enforcement provisions. Where other documentary or testimonial evidence is available to prove the certifying authority’s direct involvement in the misreporting infraction, the certification evidence would be superfluous. But evidence such as this could be difficult to obtain, depending on procedures for internal communications and their discoverability through criminal or administrative action. Moreover, to reduce the risk of individual liability for corporate officers, there might be an incentive to institute procedures either to insulate, in fact, the officers from information about the estimate calculations or to obscure the evidence of officer knowledge and involvement as has previously been observed in financial reporting (Geiger and Taylor 2003, pp. 357-358). The certification would help to overcome this evidentiary burden of proving involvement by the certifying authority and, if effective, would reduce or even eliminate the incentive to undertake these internal insulation or obfuscation policies.

This is the mechanism through which the certification requirements would seem to incent improved veracity and procedural integrity for calculating MFSP Asset and Liability estimates. The strength of this incentive, however, depends on a number of factors.

6.2 Efficacy of Incentives for Improved Reporting

The incentive that this evidentiary mechanism creates depends on:

- the capacity to investigate and penalize substantive misreporting and procedural failings in estimate calculation;
- the strength of penalties, particularly relative to existing associated penalty regimes;

²⁷ See discussion in [section 5.1.1](#). Note that because the “inappropriate procedures” and “reasonable estimate” limitations on the effect of certification do not apply to the reclamation obligation information, as explained in [section 4.2](#), certification for these estimates could bring individual liability for the certifying authority anywhere that the corporation’s numbers are proven substantively false, regardless of the appropriateness of the procedures or the broad “reasonableness” of the resulting data.

- the prevailing practice of using corporate officer indemnification and liability insurance; and
- the more informal reputational incentives that can encourage better reporting integrity.

6.2.1 *Obstacles to Effective Enforcement*

In general, the systems and calculations underlying reporting are complex and involve, in some instances, substantial discretionary judgment. It can therefore be difficult both to meet the standards of malfeasance required under the law and to prove the offending conduct in evidence.

Evidence that conduct within the company rose to the standard necessary to constitute “false or misleading” information in the first place could be very difficult to obtain. Both asset calculations and liability estimates involve a complex set of underlying calculations. For example, resource assets in a project are not simple resource-in-the-ground determinations – they have to take forecast “proven and probable” reserves, taking account of what is economically feasible to obtain, based on forward market outlooks for the resource value and extraction costs (Stockman 2011, p. 8). Even more important, liability estimates require determination of highly technical reclamation costs, which are subject to substantial variation depending on a case-by-case assessment of the area topography, hydrology, ecology and contamination, among other factors ([section 3.3](#)). It is this variation that dissuades regulators from mandating, for example, a universal or presumed per-hectare cost coefficient to asset retirement obligation costs, including reclamation costs, under financial reporting and financial security calculations. Instead, reporting systems often establish case-specific liability assessments to account for differences between projects.

However, it is also this same variability that complicates regulatory reviews of self-reported values. Where companies are self-reporting end results of complex calculation procedures, in systems that purposely take account of asset and liability variability, it is not a simple matter for regulators to identify potential misreporting and where to investigate further. Nor is it easy to find, upon investigation, errors in underlying estimates and premise inputs. Moreover, given the lack of precise consistency for procedures to determine asset and liability values at a technical level (see [section 3.3](#)), it is also difficult to identify what underlying estimates were derived with inappropriate engineering, scientific, or accounting procedures.

Indeed, difficulties in accurately deriving this type of data have been reported (Repetto 2004, p. 6), as well as the high inconsistency in liability costs across different operations within a sector. This is particularly true for a sector like the oil sands where some reclamation costs are largely unknown and are in substantial flux given the regular advent of new reclamation technology, notably, for instance, with tailings management (see [section 3.3](#)).

A comprehensive assessment of the technical procedures used to determine resources in a project or costs of reclamation and other end-of-life obligations is beyond the scope of this report. However, in assessing the efficacy of the corporate certification’s mechanism as evidence of officer involvement in potential misreporting by corporate operators, it is important to recognize

the difficulty of obtaining the proof of the reporting misconduct on which the certification mechanism relies.

In other words, because of the complexity and permissible variability in calculating the self-reported estimates, the underlying offences – to which the certification can attach officer liability for the certifying authority – can be difficult to prove. As any defendant can raise the defence of having used appropriate procedures or even argue that the resulting estimates were within some undefined range of “reasonableness”²⁸, it is not sufficient for a regulator or prosecutor to show, with hindsight, that the liability estimates were too low or the asset estimates were too high at the completion of the project. This is an important and reasonable protection for the company and the certifying authority: given that these estimates are susceptible to some inherent inaccuracy, it is important that defendants be able to defend against liability on the ground that the estimates were justifiably “off” within a “reasonable” range, so long as the procedures were appropriate. However, it complicates the task of proving that reported information was, simply, “false”, particularly under the burden of proof of criminal law – and while administrative actions have an easier evidentiary burden, the penalties they carry are much lower and exclude imprisonment (see [section 5.1.1](#)).

Moreover, even where misconduct rising to an offence is provable, identifying, investigating, and uncovering that misconduct with respect to complex technical estimation and accounting procedures can require substantial resources and expertise. Commentators have noted concerns around the capacity for effective audits and oversight with respect to financial security reporting (Kuipers 2003, p. 16; Watt 2010, p. 56). ESRD benefits from broad audit powers under the MFSP that can investigate the internal reporting procedures and can further coordinate with other government departments to arrange audits and take advantage of the respective in-house expertise in each department (see [section 5.1.2](#)). Moreover, ESRD can engage a third-party auditor to audit, in detail, the documentation and procedures supporting the MFSP Annual Report estimates (MFSP Guide, p. 42). This raises confidence that procedural misconduct in MFSP estimate reporting can be uncovered. However, triggering these resource-intensive measures could still be difficult from the initial surface-level review of the information in the MFSP Annual Report itself. It is not clear what practices ESRD will take or what standards they will use for triggering the more active and incisive audit probes.

Having said that, proof of gross misconduct, like evident defiance of very clear accounting principles or documentary or testimonial showing intent to undervalue liabilities or overvalue assets would render it fairly easy to prove the offence through prosecution or administrative investigation. And in these circumstances, certification will demonstrably prove the certifying authority’s complicity for prosecution. But in the more precise details of calculating the underlying precursor estimates for reported values, where discretion is sometimes inherently

²⁸ By, for example, showing, on a balance of probabilities, that the defendant “took all reasonable steps to prevent the commission of the offence”, or by the certifying authority showing that “appropriate procedures” were used and that the resulting estimates are “reasonable”, as this is all that is certified by signing the certification (see [section 5.1.1](#) and [section 4.2](#)).

necessary in the reporting system, misconduct in the exercise of that discretion could be very difficult to prove on the standards of the offences. Without proving the underlying offence by the corporate accounting or estimation process, the certification cannot independently prove misconduct and raise the spectre of penalties.

The certification authority, while effective for attaching officer liability to the corporate offence, is only as strong as the underlying investigative and enforcement measures for the offences themselves. Uncertainty around regulatory capacity to undertake these measures effectively with respect to complicated accounting practices within corporations, which are themselves subject to management discretion and are not conducive to objective review (see [section 3.3](#)), makes it difficult to assess the efficacy of the certification requirement for incentivizing improved practices.

6.2.2 *Magnitude of Penalties Involved*

Another factor in assessing the efficacy of the certification requirement is the extent to which it adds to alternative enforcement mechanisms. By a direct comparison with the penalties available for misreporting infractions under the financial disclosure regime that supports MFSP estimates, the potential liability raised by certification is only a small addition. However, there are aspects of the MFSP estimate reporting that rely on procedures beyond simply transcribing financial disclosure data, so that the MFSP provisions could provide the only route for enforcement with respect to some possible misconduct.

The financial security amounts posted by the oil sands mining operations are very large. While total security amounts vary between mines, for some mines they are in the hundreds of millions of dollars (Alberta Environment and Sustainable Resource Development 2012) and in some cases may exceed one billion dollars when full security is required. The incentive to reduce the amount of security by underestimating liabilities and/or overestimating assets could be very strong when managing year-over-year balance sheets and seeking investment capital in the short-term (Boyd 2001, p. 41; Kuipers 2003, p. 16; Watt 2010, pp. 55-56). Importantly, EPEA enforcement provisions also provide for fines in the amount of monetary benefits obtained via a misreporting offence, scaling the size of a potential penalty to meet the magnitude of the monetary benefit that might be an incentive for the offence (see [section 5.1.1](#)). By comparison, EPEA's base penalties for misreporting offences are comparatively small. It is very difficult to determine whether these amounts provide sufficient deterrence, given the obstacles to enforcement noted above.

Moreover, the relevant offences for “misreporting” under the MFSP and under securities law capture very similar conduct on very similar standards, and the certification provisions also overlap substantially. Both penalize “misleading” and either “false” or “untrue” reporting, both preclude liability where appropriate procedures were followed (though under slightly different standards), and both include officer liability for complicity in – including “acquiescence to” – an offence by the corporation (see [section 5.1.1](#) and [section 5.2](#)). Both also include certification provisions that could similarly raise the individual officer liability for misreporting. In this way,

where the data reported under MFSP derive from the data disclosed under securities law, a misreporting offence might be prosecuted under either or both regimes.

In this circumstance, the penalties under securities law are much stronger. EPEA's provisions, applicable to MFSP reporting, provide for penalties of up to \$100,000 or two years' imprisonment for a "knowing" infraction and up to \$50,000 where the "knowing" mental element is not proven for individuals (see [section 5.1.1](#)). In contrast, an individual can be penalized for an offence under the *Securities Act* up to \$5,000,000 or almost five years' imprisonment where the individual knew or should have known (a lower objective standard than subjectively "knowing"). Penalties for actions pursued administratively by the respective regulators are \$5,000 and \$1,000,000.

Clearly, where the same misreporting offence can raise officer liability under either or both enforcement regimes, EPEA enforcement engaged by the MFSP certification adds relatively little in the magnitude of penalty. These generally involve the more detailed and complex accounting determinations under MFSP reporting and those that involve the most variability. In these instances, the MFSP certification and EPEA offences provide another enforcement regime under which to bring much smaller penalties.

However, some of the calculations in MFSP reporting would not be captured by the financial disclosure regime, so the enforcement provisions directly applicable to MFSP would be the only penalties available. First, the estimates in the MFSP Annual Report do not all come directly from financial disclosure obligations. While the MFSP estimates depend to a great extent on the accounting data of financial disclosure, there are nevertheless divergences, as explained in [section 3.2.3](#). In particular, as ESRD describes, the MFSP estimates are "derived" from disclosed data, but they are not identical. For example, whereas financial disclosure obligations permit discounting with respect to future liabilities, the reported MFSP Liability is undiscounted. As such, there are calculations that are made only to generate the MFSP estimates, so that errors in these procedures would lead to misreporting only under the MFSP regime, meaning it would engage only the enforcement provisions and certification under MFSP.

Similarly, the reclamation obligation data reported under the MFSP are not based on financial disclosure obligations; instead they come from reporting for reclamation plans under EPEA. The certification provisions of MFSP uniquely raise the prospects of individual officer liability for misreporting of these data.

Second, there is particular divergence for joint venture operations. Regardless of whether a joint venture has its own corporate officers or uses a DFR as certifying authority, they do not submit financial reporting under securities law because they are not publicly traded corporations. Moreover, even for Syncrude, which has the strongest corporate presence of the joint venture operations, the liabilities and obligations of the project are "carried directly by each joint venture participant" and therefore each reports these liabilities according to "their proportionate share" (Lachambre 2006). Similarly, the joint venture partners also receive the revenue from the recovery of the resource assets and report those assets. In this way, while the CEO or CFO of Syncrude must act as the certifying authority for the MFSP Annual Report, that same person is

not subject to the reporting and enforcement rules of public reporting under securities law. Where Syncrude's calculations of assets and liabilities are used by the JV partners to calculate their respective proportionate shares, these data, which would also be used to generate the relevant MFSP estimates, would ultimately be subject to the veracity controls under the financial disclosure regime. However, the individuals involved in certifying information in each regime are distinct and the MFSP certification ensures coverage of senior JV managers that act with some independence from the JV partner corporations that disclose under securities law.

Accounting procedures for other JV operations might operate similarly or might depend more on the processes of the controlling partner, such as Shell with respect to Albian Sands. In those cases, where ultimate responsibility for MFSP reporting is on the approval holder, which is the JV, this process ensures that the DFR acting on behalf of the JV is subject at least to the MFSP veracity provisions. As such, the corporate certification provisions could have more important function for JV operations than non-JV, individual corporate operations, though, again, the MFSP penalties are much less than the securities law penalties.

6.2.3 *Corporate Indemnification and Liability Insurance*

Another factor impacting on the efficacy of the MFSP certification requirements is the standard corporate practice of providing corporate indemnification to corporate officers and/or officer's liability insurance. In either case, the certifying officer could be covered, either by the corporation or an insurer, for potential liabilities relating to their work for the company. Such provisions for officers are common practice among corporations today. In this way, a certifying officer would be less concerned about becoming personally liable for pecuniary penalties under EPEA enforcement provisions.

These protective measures for corporate officers generally include an exception where the officer engages in some high standard of malfeasance with, for example, intent, recklessness or gross negligence. However, it is unlikely that the certification, as described in [section 6.1](#), would suffice to prove this level of malicious or reckless involvement by the officer. Remember that the certification has a limited effect: that the certifying authority attests to the appropriate procedures and reasonableness of the estimates. This would probably not meet the standard for the exception to the liability protection without additional evidence of officer malfeasance – evidence that could independently render the officer culpable without the assistance of the certification.

Therefore, in some circumstances at least, the corporation would subsume the relatively small penalties of individual officer fines, which are a tenth as much as the underlying corporate penalties. In this way, the individual officer liability facilitated by the certification would not provide much further incentive among either the certifying authority or the overall corporation to ensure accurate information in reporting.

However, there is an important exception to this weakness. In addition to the fines applicable to officers as individuals, there is also provision for imprisonment where the misleading or false reporting is done knowingly. For obvious reasons, a corporation cannot indemnify or insure an officer against imprisonment. The likelihood of imprisonment is uncertain, however. First, the

“knowing” standard could be very difficult to prove, requiring strong evidence that people acting on behalf of the corporation knew that the accounting and calculation procedures were improper and would lead to misleading or false statements. Moreover, it is not clear that the certification, in this case, could ever provide sufficient independent evidence for the certifying authority to be charged with the knowing offence²⁹.

6.2.4 Informal Incentives for Improving Procedures and Estimate Accuracy

In addition to these formal routes involving EPEA enforcement measures, the MFSP certification also raises informal, but still important, repercussions that might be effective in motivating better accounting controls and procedures.

As already noted, certification can provide documentary evidence of the certifying authority’s involvement in the reporting procedures. Where those procedures prove to be inappropriate and lead to misreporting, the repercussions need not only be through formal enforcement under EPEA. The evidence of the certifying authority’s proximity to the improperly reported numbers could also prove to be a reputational liability for the certifying authority, which, because of his or her stature in the organization’s management, could also reflect badly on the corporation itself³⁰. Given the important public image of some of the operators, for both social licence and attracting investment, this could provide powerful impetus to ensure appropriate estimation procedures. As one respondent from the coal mining industry indicated, in the absence of certainty around the possible individual criminal or administrative liability for certifiers, “[t]he biggest incentive to undertake these procedures is to avoid the embarrassment of having public information that an officer has certified as correct, be factually incorrect.”

However, it is not clear in what context this information would become public – either the (hypothetically incorrect) estimates or the identity of the certifying authority. As described in [section 2.2.2](#), only certain information is published by ESRD, allowing other information to be deemed confidential by the reporting operator and precluding public release. The published information does not include the main estimates reported under the assets and liability sections of the MFSP Annual Report, nor does it include the identity of the certifying authority. If the document becomes evidence in a public prosecution or administrative action, the information would then become part of the public record and carry the public reputational risk noted. Therefore, as an impetus for better integrity in estimation procedures, this reputational risk applies where enforcement measures are taken against misreporting. It is not clear where else

²⁹ There is an unclear payoff between two provisions of EPEA on this account. First, officer liability provisions require only that an officer, for example, “acquiesce to” the corporate offence to be held individually liable, a standard that is very likely proven by the certification, as discussed in [section 6.1](#). However, it is not clear that the certification would also apply the “knowingly” mental state (required for imprisonment to be available as a penalty) to the corporate officer, even where it was shown that the corporation knowingly engaged in the misreporting conduct. It is not clear that certification, along with the officer “acquiescence” liability provision, could impart a heightened *mens rea* on the officer. If not, then the corporate certification alone (without further evidence going to the officer’s *mens rea*) could never raise imprisonment as a potential penalty.

³⁰ See <http://www.environment.alberta.ca/0942.html> for ESRD’s public announcements of compliance actions.

the reputational risk could independently come into play, though it is certainly an important addition to EPEA liability provisions.

6.3 Actual Controls and Practices Incented by Certification Requirement

Based on input from operators subject to the MFSP, the certification requirement can lead to at least two direct practices that bolster the veracity of MFSP estimation procedures.

First, the certification requirement leads the certifying authority, one of the two corporate officers who is probably better placed than anyone to survey the overall financial condition of an organization (or an analogous DFR for a JV), to review first-hand the estimation procedure as informed by both the internal information and experts and third-party audit information required under securities law disclosure obligations. The certifying authority will also be able to cross-reference the final estimates against other financial information in the organization, including the underlying data for securities disclosure, from which the MFSP estimates are derived. Directing the attention of top-level management to the estimates and the accounting and calculation on which they are derived is a laudable potential result of the MFSP certification procedures. This would help to preclude the scenario where the relevant officer might tacitly pressure internal staff to skew the reporting to the corporation's advantage, but retain "plausible deniability", which has been observed with respect to financial reporting in the United States before certification requirements (Geiger and Taylor 2003, pp. 357-358).

Second, the certifying authority is, at least in some cases, requiring those responsible for the information at each level of the estimation procedures – including accountants, engineers, mine-site general managers, environmental managers, and senior financial analysts – to feel sufficiently comfortable with the information to signoff on the information internally. This process is known as sub-certification and, at least in theory, spreads the certification accountability down to the individual staff that actually conducts the estimation, accounting, and calculations. However, recent analysis from accounting experts questions the efficacy of sub-certification in the analogous context of financial reporting, assessing the possibility that this sub-certification expectation breeds feelings of lack of trust and of poor vertical relationships among corporate staff, ultimately undermining the veracity of the estimates (Vance 2010).

It is very difficult to assess the empirical efficacy of processes instituted for greater integrity in the estimation procedures. It is probably a positive sign that the certification requirements are incenting certifying authorities to undertake additional procedures for estimate veracity within their internal processes. It is very difficult to link this, however, to actual accuracy in MFSP estimates.

6.4 The Role for Civil Society Participation in Improving Public Confidence

In assessing the improvement of public confidence in MFSP estimates under certification requirements, it is important to consider the public's perspective on the estimate procedures. The MFSP's provisions are, in many ways, a step forward in the consistency, regulatory oversight, and even public transparency of financial security for mining operations. However, the MFSP

does not permit public review of the MFSP estimates subject to certification or take advantage of the prospects for civil society to improve MFSP oversight.

As described in [section 2.2.2](#), ESRD publishes only certain data from the MFSP Annual Report. These data do not facilitate public scrutiny of MFSP estimates. Although the Asset Safety Factor can help to understand the “magnitude of the potential risks associated with the developments” (MFSP Guide, p. 47), it does not provide enough information about the underlying self-reported asset and liability data to permit questions and scrutiny about these certified estimates. That information is not subject to ESRD publication and is protected by the operator’s power to have ESRD deem them confidential under Alberta privacy legislation (MFSP Guide, p. 44; [section 2.2.2](#)). Indeed, ESRD is clear: “Individual asset and liability numbers will not be disclosed as these numbers reflect confidential financial information.” (MFSP Guide, p. 47).

It is not within the scope of this report to assess the propriety of confidentiality for this information or to weigh the policy rationales for confidentiality against those for greater transparency and public scrutiny. However, absence of transparent public access to these data is relevant to the efficacy of the certification provisions in that it precludes the veracity mechanisms under the MFSP from taking advantage of investigative and review powers in third-party civil society and academia.

This weakness is not only important for the lost opportunity of more eyes and more expertise reviewing the self-reported estimates, which might lead to effective application of the enforcement provisions including the certification’s role in facilitating enforcement. To be sure, this could be an important weakness, depending on the regulator’s in-house capacity and expertise for comprehensively reviewing MFSP Annual Reports and identifying misreporting in the data. But it also speaks to the prospect for greater public confidence more profoundly. Greater overall transparency around the determination of the financial security amount has improved under MFSP, leading to improved public confidence that these numbers are not subject to closed-door negotiations and unjustifiable inconsistency between projects ([section 2.1](#)). The same confidence in estimate accuracy and regulatory enforcement of proper procedures for reporting self-reported estimates would arise from public scrutiny of these estimates. Without publicly available estimates, the broader public cannot be certain that investigative and enforcement measures are properly taken against misreporting.

The certification requirement’s potential to improve public confidence in the self-reported numbers depends on public confidence that the certification will incent certifying authorities to implement better veracity controls with respect to their estimation procedures. This, in turn, depends, at least in part, on public confidence that misreporting will be discovered and penalized and that certifying authorities recognize this threat. In the absence of publicly available data for third-party scrutiny from civil society, this confidence depends on the public’s perception of the regulator’s capacity and willingness to investigate and institute enforcement measures with respect to confidential data.

There is no evidence that regulators, working with the operators’ MFSP Annual Reports behind closed doors, have been “captured by industry” so as to fail to enforce appropriately the

misreporting it identifies. However, Watt (2010, pp. 10, 67-74) raises the potential for agency capture in the context of lack of transparency with respect to financial security for oil sands reclamation and notes the heightened need for public process where regulators rely on operators for reclamation estimates. Nevertheless, the lack of opportunity for civil society review of reported assets and liabilities in the MFSP reporting restricts transparency and accountability that regulators are properly reviewing and pursuing non-compliance through administrative hearings or referrals for full prosecution. In this way, the certification requirements and, indeed, the veracity and enforcement provisions of the MFSP as a whole, remain unable to completely ensure public confidence.

7 CONCLUSIONS AND RECOMMENDATIONS

In conclusion, there is some expectation that the inclusion of the certification requirement in the MFSP provides an incentive for better procedures for asset and liability estimation in the MFSP Annual Report. At least, a mechanism exists whereby the certification could provide documentary evidence of the certifying authorities' direct involvement in the estimations, sufficient to bring formal penalties against an authority under EPEA enforcement mechanisms where the company has engaged in misreporting practice. Particularly in instances of especially egregious conduct, the potential penalties could be sufficient to provide impetus to the certifying authorities to apply their knowledge and expertise with respect to the entire corporate operation to review the estimates and to implement stronger estimation and control procedures. This same impetus might, alternatively or in addition, come from the important threat of reputational risk. It is difficult to assess the strength of this incentive, particularly because of uncertainties around the capacity to investigate reporting misconduct with respect to complex internal accounting procedures, on which the enforcement and, in turn, certification requirements rely for effectiveness.

Nevertheless, a few more specific conclusions and recommendations are possible. These take account of the fact that ESRD has been directed to base financial security determination on self-reported estimates, so it accepts as a given, for ESRD's purposes, that self-reporting is required, as opposed to regulator-established estimates. While certification certainly depends on some aspects of the larger MFSP reporting regime, the conclusions and recommendations are intended to apply fairly narrowly to the certification requirement itself and how its efficacy could be heightened.

Conclusion 1: First, there is a lack of clarity in industry around the potential for liability against the certifying authority arising from certification. Because the mechanism through which certification engages the enforcement provisions of EPEA is relatively complex, and it is not clear how the wording of the certified statement aligns with the standards for the offences listed under EPEA, it is understandable that industry is not sure of the potential liabilities raised by certification. This can have two negative consequences. First, the potential liabilities that do exist are not having their full deterrent effect if they are not properly understood by the actors they are intended to impact. Second, reduced certainty with respect to any business decision, but

particularly for potential monetary and imprisonment penalties, can undermine efficient business behaviour and lead to suboptimal policy results.

Recommendation 1a: More clearly and expressly explain the mechanism through which individual liability could attach via the certification, as was attempted in this report. ESRD could describe, perhaps diagrammatically, how the certification can engage enforcement provisions of EPEA and what the relevant penalties are.

Recommendation 1b: Provide hypothetical examples of misreporting infractions that could or would lead to individual liability for certifying authorities if it is discovered that the certifier's company has engaged in the misreporting. Such examples could better clarify what sort of conduct should be deterred by the certification and how, exactly, the certification should be viewed as an incentive for avoiding inappropriate conduct.

Recommendation 1c: Better link the effect of the certification (the statement that is certified under the certification section of the MFSP Annual Report) to the standards for individual officer/agent liability under EPEA. This will improve the connection between certification and potential liability and more clearly and effectively raise the threat of liability from certification.

Conclusion 2: It is not clear what internal capacity or threshold triggers ESRD employs to initiate a more concerted governmental audit or third-party audit of an MFSP Annual Report. The effectiveness of these procedures is critical to the mechanism through which certification engages potential legal liabilities or reputational risks for certifying authorities. Uncertainty around ESRD's capacity or procedures for pursuing more concerted investigations undermines clarity around the certification's effectiveness.

Recommendation 2a: Provide more information to stakeholders around the review processes ESRD uses to trigger further investigation into MFSP estimation procedures and where and how ESRD will choose to exercise its audit powers and, perhaps, pursue enforcement measures. This greater public transparency will also help to overcome the confidentiality of self-reported estimates, which precludes a role for civil society in scrutinizing the MFSP Annual Report information.

Recommendation 2b: Establish clear presumptions for certain parameters of asset and liability estimation, such as minimum per-hectare reclamation costs, deviation from which requires an explanation from the operator. This will provide greater clarity around the triggers that cause ESRD to suspect reporting errors and provide greater public confidence that operators are being required to explain unexpected data and providing reasonable justification for its data and assumptions.

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9 GLOSSARY

9.1 Terms

Designated Financial Representative (DFR)

A joint venture Approval Holder's senior designated financial or accounting representative (equivalent to a Chief Financial Officer).

Joint Venture (JV)

A joint venture is a business agreement in which two or more parties agree to develop, for a finite time, a new entity and new assets by contributing equity. They exercise control over the enterprise and consequently share revenues, expenses and assets.

9.2 Acronyms

AIF	Annual Information Form
ARO	Asset Retirement Obligation
ASFD	Asset Safety Factor Deposit

BSD	Base Security Deposit
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CRR	<i>Conservation and Reclamation Regulation</i>
DFR	Designated Financial Representative
EPEA	<i>Environmental Protection and Enhancement Act</i>
ESRD	Alberta Environment and Sustainable Resource Development
JV	Joint Venture
MFSP	Mine Financial Security Program
NI	National Instrument
OLD	Operating Life Deposit
ORD	Outstanding Reclamation Deposit
OSRIN	Oil Sands Research and Information Network
SEE	School of Energy and the Environment

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