INFORMATION BULLETIN 2010-23

October 14, 2010

Liability Management Rating Program

TO: Industry Clients

EFFECTIVE DATE: October 28, 2010

Background

The BC Oil and Gas Commission (Commission) has committed to the development of a framework for a Liability Management Rating (LMR) program. The objective of the program is to manage the liability risks of oil and gas activities by ensuring that permit holders carry the financial risks of their operations through to regulatory closure.

The LMR is the calculated ratio of deemed assets to deemed liabilities for permit holders. The intent of the LMR program is to identify permit holders whose liabilities exceed assets (a LMR of less than 1.0) and to require that permit holder to take steps to address or mitigate any financial risks inherent in the calculation. At this time, the LMR program will focus on permit holders with producing assets but will not address permit holders whose assets are solely in the form of processing, transportation and disposal infrastructure.

This LMR program has been developed for use by the Commission for determining required security deposits for permit holders under sections 24 and 30 of the Oil and Gas Activities Act (OGAA). The program is not intended to address security requirements outlined in section 23 of OGAA.

Liability Management Rating Equation

The LMR is calculated for each permit holder using the following generalized formula:

$$\text{LMR} = \frac{\text{Deemed Assets} + \text{Security Deposit}}{\text{Deemed Liabilities}}$$

The LMR is calculated from all wells and facilities registered to a permit holder. Generally speaking, it is the deemed production income for a permit holder divided by the cost to decommission and reclaim their assets. A permit holder's working interest in a particular well or facility is not considered in the LMR calculation.

Permit holders with a calculated LMR less than 1.0 will be deemed higher risk, and will undergo analysis for a potential security deposit upon application for permit transfers or new wells. Applications from permit holders with a calculated LMR above 1.0 will not undergo review for security deposit.

A list of permit holders and their respective LMR will be updated monthly and posted on the Commission's website.

Determination of Assets

Deemed assets are calculated using the following equation:

Assets = Annual Production * Industry Netback * Return Period, where:

- m^3OE: A permit holder's annual volume of oil equivalent production.
  - Gas volume is converted to oil volume through application of:
    - Shrinkage Factor = 0.136; and
    - Oil Equivalency Factor = 1.75
- Industry Netback[1]: Five-year industry rolling average up to 2008.
  - Currently equal to \$285/m^3OE
- Return Period: The estimated minimum reserve life, set at three years.

Production volumes used in the asset determination are as reported to the Ministry of Finance, Mineral, Oil and Gas Revenue Branch.

Determination of Liabilities

Deemed liabilities are calculated using the following equation:

Liabilities = (Abandonment Unit Cost + Reclamation Unit Cost) * Well Equivalent

Abandonment unit costs include the downhole plugging of all required zones as well as the necessary cut and cap work. Reclamation costs include the remediation of contaminated media and revegetation of the site. Liability unit costs and factors are provided in the following table:

Site Type	Abandonment Unit Cost	Reclamation Unit Cost	Well Equivalent
Active Well	\$75,000	\$75,000	1
Suspended Well	\$75,000	\$75,000	1
Abandoned Well	--	\$75,000	1
Gas Plant	\$15,000	\$75,000	20
Battery Site	\$15,000	\$75,000	5
Compressor Station	\$15,000	\$75,000	5
Other facility	\$15,000	\$75,000	2

Facilities with a registered status of "abandoned" will not have the abandonment unit cost included in the liability calculation. Applications that have been cancelled with surface disturbance will have the reclamation unit cost applied. Wells and facilities that have been issued a Certificate of Restoration will not be included in the LMR calculation. Wells that have the status of "drilled", "cased" or "completed" will not be

1 Calculated from Statistical Handbook for Canada's Upstream Petroleum Industry, CAPP, 2009

used in the LMR calculation until the lesser of:

- The well entering into production; or
- Twelve months passing since the rig release date.

Well Equivalents (WEs) have been assigned to a facility to generally reflect the scope and scale of decommissioning and reclamation activities. For the purposes of this LMR program, WEs do not escalate with facility size. Throughput or capacity-based liability costing may be an option in a future program.

Security Deposit Requirements

Upon receipt by the Commission of an application for a new well permit, the applicant will be subject to review of their LMR. When an applicant with a LMR less than 1.0 makes an application for a new well, they will be required to submit a security deposit in the amount of $150,000 (one occurrence). If a security deposit equal to $150,000 is already held for the applicant, no further deposit will be required for new well applications.

Upon receipt of an application for a permit transfer of one or more wells and/or facilities, both the transferor and the transferee will be subject to a LMR review. An applicant involved in the transaction will be required to submit a security deposit if their post-transfer LMR:

- Is below 1.0; and
- Drops further following the permit transfer.

The security deposit will be requested in the amount to bring the applicant's security adjusted LMR to their pre-transfer conditions. For example, if an applicant's LMR drops from 0.5 to 0.3 following a permit transfer, the required security deposit will be equal to the amount required to return their LMR to 0.5.

Applicants involved in permit transfers with a LMR less than 1.0 may be required to hold a minimum security deposit of $150,000. Applicants without assets that apply for their first permit transfer must hold a post-transfer, security adjusted LMR of 1.0.

Applicants will be informed in writing of the amount of their required security deposit and the time within which the security deposit must be received. If the security deposit is not received within the allotted time, the application will not be approved.

Security deposits held on behalf of a permit holder will be added to their deemed assets and used in the calculation of a security adjusted LMR. If the security adjusted LMR is above or equal to 1.0, a permit holder will not be required to provide additional deposits on future transactions.

At the request of a permit holder, the Commission may return all or part of a security if the official is satisfied that all or part of the security is not required to secure the permit holder's obligations under OGAA or the permit holder's permits or authorizations.

Security deposits submitted in cash or as an irrevocable letter of credit in a format that is satisfactory to the Commission will be accepted.

Dispute Process

Permit holders that wish to dispute their required security deposit may do so by submitting a dispute request to the Commission. A dispute request is to be based on a permit holder's self-assessment and must support revised asset and liability calculations. The revised deemed asset calculation must include the permit holder's own netback, calculated as production income minus operating expenses and royalties. The revised deemed liability calculation must include the costs for abandonment, remediation of contaminated media, and surface reclamation (up to and including regulatory closure) for each of the wells and facilities registered to the permit holder.

Dispute requests must be completed by a practicing professional that can provide adequate assurance to the Commission that they are qualified to perform the asset and liability revisions. The appeal application must also be reviewed and signed by the permit holder's chief financial officer (or equivalent level of responsibility).

The permit holder or applicant, in a notice of disputed security, must provide sufficient information and supporting documents to enable the Commission to understand the dispute, arguments and requested remedies.

Dispute requests can be made to:
BC Oil and Gas Commission
Environmental Liability Rating
PO Box 9331 Stn Prov Gov't
Victoria, B.C. V8W 9N3

Additional refinements may be made to the program over coming months, which may be integrated into a program that will replace this LMR program. The future program may incorporate changes to the liability costs used in the LMR calculation, which may be determined through further research and industry outreach. While this LMR program is designed to prevent permit holders' LMRs from decreasing through applications, the future program may be designed to request sufficient security such that financial risks are mitigated for all permit holders with producing, processing, transportation, and disposal assets.

If have any questions regarding this Information Bulletin, please contact:
Mike Janzen
Manager, Environmental Liability Rating
BC Oil and Gas Commission
250-419-4464
mike.janzen@gov.bc.ca