# Schedule 1 Mine Financial Security Program



## 1 MFSP Asset Calculation

- 1(1) Determine the Annual Netback for the Reporting Year and each of the two calendar years prior to that
  - (a) For each year an Approval Holder has production

Annual Netback = (Gross Revenues - Operating Costs) / annual sales volume

(b) For each year an Approval Holder does not have production

Annual Netback = Deemed Netback (approved in writing by the Director)

(2) Determine the 3-Year Average Netback (N) as

3-Year Average Netback (N) = (sum of Annual Netbacks) / 3

- (3) Determine the Gross Proven plus Probable Reserves (R)
- (4) Determine the Forward Price Ratio
  - (a) For an oil sands Approval, the ratio of the next three-year Nymex WTI price (three year strip on the last trading day of December for the Reporting Year in \$US/bbl) divided by the past three year Nymex WTI average price in \$US/bbl
  - (b) For a coal Approval, the ratio of the weighted average coal price for the Submission Year divided by the weighted average coal price for the Reporting Year
- (5) Determine the Forward Price Factor (F)

F = the lesser of the Forward Price Ratio or 1.00

(6) Calculate the MFSP Assets as

MFSP Assets (\$) = N \* R \* F

# 2 MFSP Liability

- 2(1) Determine ARO Liability
- (2) Determine Other Liability
- (3) Calculate the MFSP Liability as

MFSP Liability (\$) = ARO Liability (\$) + Other Liability (\$)

## 3 Base Security Deposit (BSD)

3(1) The Base Security Deposit (BSD) amount is determined from Table 1:

New Mines Mine Type	Base Security Deposit (BSD)
Mine-mouth Coal Mine	\$2 000 000.00
Export Coal Mine	\$7 000 000.00
Oil Sands Mine with no <i>EPEA</i> Approval as of January 1, 2011	\$30 000 000.00
Oil Sands Mine and Upgrader with no EPEA Approval as of January 1, 2011	\$60 000 000.00
Existing Mines Approval Holder, Project Name, and Approval Number	
Canadian Natural, Horizon, 149968	\$61 200 000.00
Imperial, Kearl, 46586	\$64 655 000.00
Shell Albian, Jackpine, 153125	\$72 361 895.00
Shell Albian, Muskeg River, 20809	\$111 277 441.29
Suncor, Base Mine, 94	\$359 096 654.00
Suncor, Fort Hills, 151469	\$38 958 605.00
Syncrude, Mildred Lake and Aurora, 26	\$205 303 024.00

#### Table 1. Base Security Deposit

## 4 Operating Life Deposit (OLD)

4(1) Calculate the Reserve Life Index (RLI) as

RLI (years) = (Gross Proven plus Probable Reserves) / (3-year average annual sales volume)

- (2) The Operating Life Deposit Initial (OLDI) is calculated as follows:
  - (a) 0% of the MFSP Liability when  $RLI \ge 15.00$
  - (b) 10% of the MFSP Liability when RLI < 15.00
  - (c) 20% of the MFSP Liability when RLI < 14.00
  - (d) 30% of the MFSP Liability when RLI < 13.00
  - (e) 40% of the MFSP Liability when RLI < 12.00
  - (f) 50% of the MFSP Liability when RLI < 11.00
  - (g) 60% of the MFSP Liability when RLI < 10.00

- (h) 70% of the MFSP Liability when RLI < 9.00
- (i) 80% of the MFSP Liability when RLI < 8.00
- (j) 90% of the MFSP Liability when RLI < 7.00
- (k) 100% of the MFSP Liability when RLI < 6.00
- (3) Calculate the Operating Life Deposit (OLD) as
  - (a) \$0 if OLDI is less than or equal to BSD; or
  - (b) OLDI BSD if OLDI is greater than BSD

## 5 Asset Safety Factor Deposit (ASFD)

5(1) Calculate the Adjusted Asset Safety Factor (AASF) as

AASF = MFSP Assets / (MFSP Liability - OLD - BSD)

- (2) If the AASF is greater than or equal to 3.00 then the ASFD is \$0.
- (3) If the AASF is less than 3.00 then calculate the ASFD as

ASFD (\$) = MFSP Liability - OLD - BSD - (MFSP Assets / 3)

6 Outstanding Reclamation Deposit (ORD)

6(1) Determine the Planned Reclamation (ha) and Actual Reclamation (ha) for the Reporting Year.

(2) Calculate the Annual Reclamation Balance (ARB) as

Annual Reclamation Balance (ha) = Planned Reclamation (ha) - Actual Reclamation (ha)

- (3) Calculate the Cumulative Reclamation Balance (CRB) (ha) for the Reporting Year by adding the ARB to the previous year's CRB.
- (4) If the Director has approved an adjustment to the Cumulative Reclamation Balance then substitute the adjusted CRB for the previous year's CRB before calculating the CRB in subsection (3).

(5) Calculate the Outstanding Reclamation Deposit (ORD) (\$) as

Outstanding Reclamation Deposit (\$) = CRB (ha) x Reclamation Cost (\$/ha)

## 7 Financial Security Amount

- 7(1) If an Approval Holder has elected to provide full Financial Security under Section 6 of this Standard then the Financial Security Amount is equal to the MFSP Liability.
- (2) If an Approval Holder has not elected to provide full Financial Security under Section 6 of this Standard then the Approval Holder shall determine the Financial Security Amount as the lesser of
  - (a) Financial Security = BSD + ASFD + OLD + ORD; or
  - (b) Financial Security = MFSP Liability