

MEMORANDUM

STATE OF ALASKA DEPARTMENT OF REVENUE Treasury Division

To: Rick Fredericksen
Natural Resource Manager

Date: June 9, 2009

From: Pamela Green
State Comptroller

Telephone: 907-465-3751

Subject: Recommended 4.3% real rate of return for Red Dog Mine funds

Teck Cominco Alaska Inc. (Teck) is in the process of finalizing discussions with the Department of Natural Resources (DNR) for post-closure water treatment and monitoring costs of the Red Dog Mine site. The Department of Revenue has been asked to provide an estimated real rate of return to determine the amount of money needed to cover total treatment and monitoring costs assuming that all funds are received up front and managed by the portfolio management staff of the Treasury division.

Portfolio management staff relies on capital market assumptions provided by Callan Associates, Treasury's investment advisor, to develop proposed asset allocations and corresponding targeted performance for funds that it manages. In the case of funds where the objective is to invest the proceeds pending drawdown, the strategy is to minimize the probability of investment loss. The scenario you provided contemplates a fund of approximately \$300 million that would require approximate annual draw downs of \$12.96 million in the first 5 years, \$32.77 million in the following 2 years and \$10.21 million thereafter in perpetuity. In order to develop a proposed estimated real rate of return, the asset allocations of similar funds managed by Treasury were reviewed, the proposed fund's risk tolerance was assessed and various analyses were run to identify an asset mix that results in an optimum target rate of return. The outcome is a targeted nominal rate of return of 8%, using an asset allocation of 43% fixed income, 41% domestic equity, 15% international equity and 1% cash equivalents. An 8% nominal rate of return is comparable to targets of other funds managed by Treasury that have similar risk tolerance and is within the range of nominal return rates projected by corporate and public pensions nationally.

In order to determine the 4.3% real rate of return, a long term inflation rate of 3.5% was applied, as recommended by actuaries, Buck Consultants, and estimated management and treasury fees of .2%.

Should DNR determine that a fund should be established, it is recommended that a memorandum of understanding be finalized and an update of this analysis performed. Final asset allocations would require the approval by the Commissioner of Revenue, as the fiduciary of state funds. It is our understanding that once the fund is established, intermittent reviews will be made to ensure the fund's adequacy to meet future cash flow needs and that additional funding would be available, should a shortfall be identified.

cc: Jerry Burnett, Deputy Commissioner
Gary Bader, Chief Investment Officer