UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

FORM	11-K

FOR ANNUAL REPORTS OF EMPLOYEE STOCK REPURCHASE SAVINGS AND SIMILAR PLANS PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

<u> X </u>	ANNUAL REPORT PURSUANT TO SECTION 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the fiscal year ended: December 31, 2009
	OR
	TRANSITION REPORT PURSUANT TO SECTION 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the transition period from to
	Commission file number: 1-8944

(Full Title of the plan and the address of the plan, if different from that of issuer named below)

and SILVER BAY POWER COMPANY RETIREMENT SAVINGS PLAN

10 OUTER DRIVE SILVER BAY, MINNESOTA 55614 (Name of Issuer of the securities held nursuant to

(Name of Issuer of the securities held pursuant to the Plan and the address of its principal executive office)

CLIFFS NATURAL RESOURCES INC., 200 Public Square, Suite 3300, Cleveland, Ohio 44114-2513

NORTHSHORE MINING COMPANY AND SILVER BAY POWER COMPANY RETIREMENT SAVINGS PLAN ("Plan")

Audited financial statements and supplemental schedule for the Plan prepared in accordance with the financial reporting requirements of the Employee Retirement Income Security Act of 1974, as amended, are filed herewith in lieu of an audited statement of financial condition and statement of income and changes in plan equity.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Plan Administrator

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan Cleveland, Ohio

We have audited the accompanying statement of net assets available for benefits of the NORTHSHORE MINING COMPANY AND SILVER BAY POWER COMPANY RETIREMENT SAVINGS PLAN as of December 31, 2009 and 2008, and the related statement of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan as of December 31, 2009 and 2008, and the changes in its net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets held for investment purposes at end of year as of December 31, 2009, is presented for the purposes of additional analysis and is not a required part of the financial statements, but is supplemental information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedule is the responsibility of the Plan's management. The supplemental information has been subjected to the auditing procedures applied in our audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

/s/ MEADEN & MOORE, LTD. Certified Public Accountants

June 22, 2010 Cleveland, Ohio

STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

	Decen	nber 31
LOOPING	2009	2008
ASSETS		
Receivable - Employee contributions	\$ —	\$ 148,132
Receivable - Employer contributions	_	62,220
Receivable - Employer discretionary contribution		7,245,207
Total Receivables		7,455,559
	_	7,433,339
Investments:	20 720 070	10.166.710
Cliffs Natural Resources, Inc. Common Stock	28,730,859	10,166,710
T. Rowe Price Equity Index 500 Fund	5,171,197	4,118,171
T. Rowe Price Equity Spectrum Income Fund	7,248,653	6,678,528
T. Rowe Price New America Growth Fund	4,421,693	2,885,693
T. Rowe Price Capital Appreciation Fund	6,662,767	5,360,055
T. Rowe Price Prime Reserve Fund	5,524,049	3,905,388
T. Rowe Price International Stock Fund	5,342,665	3,466,674
T. Rowe Price Stable Value Fund	5,177,991	4,660,963
T. Rowe Price Mid-Cap Growth Fund	5,965,656	3,638,763
T. Rowe Price Equity Income Fund	2,871,765	1,865,213
T. Rowe Price Boston Co Small Cap Value	378,506	254,476
T. Rowe Price Retirement 2005 Fund	62,789	40,063
T. Rowe Price Retirement 2010 Fund	357,787	205,195
T. Rowe Price Retirement 2015 Fund	845,307	624,849
T. Rowe Price Retirement 2020 Fund	1,206,258	708,031
T. Rowe Price Retirement 2030 Fund	304,477	87,618
T. Rowe Price Retirement 2035 Fund	173,867	40,470
T. Rowe Price Retirement 2025 Fund	799,750	402,689
T. Rowe Price Retirement 2040 Fund	587,466	192,344
T. Rowe Price Retirement 2045 Fund	413,730	140,280
T. Rowe Price Retirement 2050 Fund	88,697	36,136
T. Rowe Price Retirement 2055 Fund	12,876	5,573
T. Rowe Price Retirement Income Fund	180,146	144,628
Participant Loans	1,966,945	1,744,914
Total Investments	84,495,896	51,373,424
Total Assets	84,495,896	58,828,983
LIABILITIES		
Total Liabilities		
Net Assets Available for Benefits (at Fair Value)	84,495,896	58,828,983
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(155,493)	43,692
Net Assets Available for Benefits (at Contract Value)	\$ 84,340,403	\$ 58,872,675

See accompanying notes.

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

	Year Ended	December 31
	2009	2008
Additions to Net Assets Attributed to:		
Contributions:		
Employer	\$ 757,478	\$ 8,061,466
Employee	3,075,703	3,568,576
Rollover	14,928	189,351
	3,848,109	11,819,393
Interest and dividend income	1,337,825	2,137,921
Net appreciation on investments	26,768,588	
Total Additions	31,954,522	13,957,314
Deductions from Net Assets Attributed to:		
Benefits paid to participants	6,486,770	3,364,881
Net depreciation on investments	_	28,714,984
Administrative expenses	24	6,856
Total Deductions	6,486,794	32,086,721
Net Increase (Decrease)	25,467,728	(18,129,407)
Net Assets Available for Benefits:		
Beginning of Year	58,872,675	77,002,082
End of Year	<u>\$ 84,340,403</u>	\$ 58,872,675

See accompanying notes.

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

1 Description of Plan

The following description of The Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan provides only general information. Participants should refer to the Plan document for a complete description of the Plan's provisions.

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The Plan, which began October 1, 1994, is a defined contribution plan covering all employees of Northshore Mining Company and Silver Bay Power Company who meet the eligibility requirements. It is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The Plan has been restated, effective January 1, 2007. The Plan was last amended in 2009 as described under employer contributions.

Eligibility.

All full-time employees of the Companies are eligible to participate in the Plan.

Contributions:

Employee deferral - Participants may elect a portion of their compensation between 1% to 35%, to be contributed to the Plan by the Company.

Employer Contributions - Effective April 1, 2009 through June 30, 2009 for salary employees and April 1, 2009 through December 31, 2009 for hourly employees, the match was as follows: a matching contribution equal to 100% of participant pre-tax contributions up to 3% of participant's eligible earnings for the Plan year and 50% of the participant's eligible earnings in excess of 3% not to exceed 5%. For the period July 1, 2009 to December 31, 2009, there was no match paid for salary employees. Prior to April 1, 2009, the Company contributed a matching contribution equal to 50% of Participant pre-tax contributions not in excess of 6% of participant's eligible earnings for the Plan year. An additional matching amount may be contributed by the Company based on the excess of 5% of the Company's pre-tax earnings over the minimum matching contribution.

The Company may also contribute for any Plan year additional matching amounts (as limited) as shall be determined by the Board of Directors of the Company.

Contributions are subject to limitations on annual additions and other limitations imposed by the Internal Revenue Code as defined in the Plan agreement.

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

1 Description of Plan, Continued

Participants' Accounts:

401(k) Accounts - Each participant's account is credited with the participant's elective contributions, employer matching contributions, earnings and losses thereon. Plan participants are allocated participation in the fund(s) based on cash value. Under the cash value method, total monthly earnings are divided by the total value of the fund(s) to obtain a ratio, which is then multiplied by each participant's account balance in the fund(s) at the beginning of the month.

Rollover contributions from other Plans are also accepted, providing certain specified conditions are met.

Vesting:

All participants are 100% vested in elective deferrals, rollover contributions and company matching and discretionary contributions made to the Plan.

Participants' Loans:

Loans are permitted under certain circumstances and are subject to limitations. Participants may borrow from their fund accounts, minimum of \$1,000, up to a maximum equal to the lesser of \$50,000 or 50% of their account balance. Loans are repaid over a period not to exceed 5 years with exceptions for the purchase of a primary residence.

The loans are secured by the balance in the participant's account and bear interest at rates commercially reasonable that are published on the first day of the month proceeding the month the loan was granted. Principal and interest are paid ratably through monthly payroll deductions.

Payment of Benefits:

Upon termination of service by reason of retirement, disability, or other reasons, a participant has the option to keep their funds in the Plan without option of contribution until age 70 1/2 or receive a lump sum equal to the value of his or her account. Upon death, a participant's beneficiaries receives a lump sum amount equal to the value of his or her account.

Hardship Withdrawals:

Hardship withdrawals are permitted in accordance with Internal Revenue Service guidelines.

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

1 Description of Plan, Continued

Investment Options:

Upon enrollment in the Plan, a participant may direct his or her contributions in any or all of the investment options offered by the Plan.

2 Summary of Significant Accounting Policies

Basis of Accounting:

The Plan's transactions are reported on the accrual basis of accounting. All investment securities are stated at fair value as measured by quoted prices in active markets. Shares of mutual funds are valued at the net asset value of shares held by the Plan at year end. Investments include participant loans valued at their outstanding balances, which approximates fair value.

As described under current accounting guidance, investment contracts held by a defined-contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. The Statements of Net Assets Available for Benefits presents the fair value of the investment contracts as well as the adjustment of the fully benefit-responsive investment contracts from fair value to contract value. The Statement of Changes in Net Assets Available for Benefits is prepared on a contract value basis.

Purchases and sales of securities are recorded on a trade-date basis. Dividends are recorded on the ex-dividend date.

Use of Estimates:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Subsequent Events:

The Plan evaluates events occurring subsequent to the date of the financial statements in determining the accounting for and disclosure of transactions and events that affect the financial statements.

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

2 Summary of Significant Accounting Policies, Continued

Administrative Fees:

The Plan pays the trustee fees, audit fees and other expenses of the Plan, unless the Company elects to pay all or part of these expenses. For the years ended December 31, 2009 and 2008, the Company paid all such expenses, except for \$24 and \$6,856, respectively. Other administrative expenses of the Plan, such as salaries and use of facilities are paid by the Company.

Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA.

Reclassifications:

Certain prior year amounts have been reclassified to conform with the current year presentation.

3 Tax Status

On March 23, 2009, the Internal Revenue Service stated that the Plan was in compliance with the applicable requirements of the Internal Revenue Code. The Plan has been amended since that date. The Plan sponsor believes that the Plan is being operated in accordance with the requirements of the Internal Revenue Code.

4 Investments

The Plan's funds are invested in Cliffs Natural Resources, Inc. common stock and mutual funds, through T. Rowe Price. Investments which constitute more than 5% of the Plan's net assets are:

	2009	2008
Cliffs Natural Resources, Inc. Common Stock	\$ 28,730,859	\$ 10,166,710
T. Rowe Price Equity Index 500 Fund	\$ 5,171,197	\$ 4,118,171
T. Rowe Price Equity Spectrum Income Fund	\$ 7,248,653	\$ 6,678,528
T. Rowe Price New America Growth Fund	\$ 4,421,693	NA
T. Rowe Price Capital Appreciation Fund	\$ 6,662,767	\$ 5,360,055
T. Rowe Price Prime Reserve Fund	\$ 5,524,049	\$ 3,905,388
T. Rowe Price International Stock Fund	\$ 5,342,665	\$ 3,466,674
T. Rowe Price Stable Value Fund	\$ 5,022,498	\$ 4,704,655
T. Rowe Price Mid-Cap Growth Fund	\$ 5,965,656	\$ 3,638,763

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

4 Investments, Continued

Net realized and unrealized appreciation (depreciation) in the fair value of investments, as determined by quoted market prices, is as follows:

For the Y	For the Year Ended	
Decer	December 31	
2009	2008	
\$14,170,716	\$ (11,788,048)	
12,597,872	(16,926,936)	
\$ 26,768,588	\$ (28,714,984)	
	2009 \$ 14,170,716 12,597,872	

5 Benefit Responsive Contract

Stable value investment contracts are valued at fair value and adjusted to contract value which is cost plus accrued income minus redemptions, because these investments have fully benefit-responsive features. The fair value of the investment contract at December 31, 2009 and 2008, was \$5,177,991 and \$4,660,963, respectively, and the contract value of the investment contract at December 31, 2009 and 2008 was \$5,022,498 and \$4,704,655, respectively.

The Plan holds a stable value investment contract with T. Rowe Price Trust Company, the trustee. The investment contract consists of a portfolio of underlying assets owned by the Plan, and a wrap contract issued by a financially responsible third party, typically a bank, insurance company, or other financial services institution. The issuer of the wrap contract provides for unscheduled withdrawals for the contract at contract value, regardless of the value of the underlying assets, in order to fund permitted participant-initiated withdrawals from the trust.

Investment contracts provide for a variable crediting rate, which typically resets at least quarterly, and the issuer of the wrap contract provides assurance that future adjustments to the crediting rate cannot result in a crediting rate less than zero. The crediting rate is based, in part, on the relationship between the contract value and the market value of the underlying assets, as well as previously realized gains and losses on underlying assets. The crediting rate will generally reflect, over time, movement in prevailing interest rates. However, at times, the crediting rate may be more or less than prevailing rates or the actual income earned on the underlying assets.

As described in Note 2, because the stable value investment contract is fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the stable value investment contract. Contract value, as reported by T. Rowe Price Trust Company, represents cost plus accrued income minus redemptions. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value.

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

5 Benefit Responsive Contract, Continued

The existence of certain conditions can limit the Plan's ability to transact at contract value with the issuers of its investment contracts. Specifically, any event outside the normal operation of the Plan which causes a withdrawal from an investment contract may result in a negative market value adjustments with respect to such withdrawal. Examples of such events include, but are not limited to, partial or complete legal termination of the Plan, tax disqualification of the Plan, and certain Plan amendments if issuers' consent is not obtained. As of December 31, 2009, the occurrence of an event outside normal operation of the trust which would cause a withdrawal from an investment contract is not considered to be probable.

In addition to the limitations noted above, issuers of investment contracts have certain rights to terminate a contract and settle at an amount which differs from contract value. For example, certain breaches by the Plan of its obligations, representations, or warranties under the terms of an investment contract can result in its termination at market value, which may differ from contract value. Investment contracts may also provide for termination with no payment obligation from the issuer if the performance of the contract constitutes a prohibited transaction under ERISA or other applicable law. Investment contracts may also provide issuers with the right to reduce contract value in the event an underlying security suffers a credit event or the right to terminate the contract in the event certain investment guidelines are materially breached and not cured.

		2009	
	·	Adjustment	Investments
	Investments	to Contract	at Contract
	at Fair Value	Value	Value
Benefit Responsive Contracts	\$ 5,177,991	\$ (155,493)	\$ 5,022,498
			-
		2008	
		2008 Adjustment	Investments
	Investments	Adjustment to Contract	Investments at Contract
	Investments at Fair Value	Adjustment	
Benefit Responsive Contracts		Adjustment to Contract	at Contract

The average yield based on actual earnings of the contract was 4.23% and 4.23%, as of December 31, 2009 and 2008, respectively. The crediting interest rate was 4.26% and 4.82% as of December 31, 2009 and 2008, respectively.

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

6 Party-in-Interest Transactions

Certain Plan investments are shares of mutual funds managed by T. Rowe Price, the Trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest. Usual and customary fees were paid by the Plan for the investment management services.

The Plan purchased shares of Cliffs', the Plan Sponsor, common stock for \$10,894,195 and sold shares of Cliffs' common stock for \$6,500,762 in 2009. The Plan purchased shares of Cliffs', the Plan Sponsor, common stock for \$18,894,712 and sold shares of Cliffs' common stock for \$6,854,278 in 2008.

7 Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risk such as interest rate, market and credit risks. Due to the level of risks associated with certain investment securities, it is at least reasonably possible that changes in the values if investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

8 Fair Value of Financial Assets

As defined in current accounting guidance, fair value is the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. In determining fair value, the Plan utilizes certain assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and/or the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated, or generally unobservable firm inputs. The Plan utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. Based on the examination of the inputs used in the valuation techniques, the Plan is required to provide the following information according to the fair value hierarchy. The fair value hierarchy ranks the quality and reliability of the information used to determine fair values. Financial assets and liabilities carried at fair value will be classified and disclosed in one of the following three categories:

- Level 1: Quoted market prices in active markets for identical assets or liabilities
- Level 2: Observable market based inputs or unobservable inputs that are corroborated by market data
- Level 3: Unobservable inputs that are not corroborated by market data

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Following is a description of the valuation methodologies used for instruments measured at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

8 Fair Value of Financial Assets, Continued

Common Stocks and Mutual Funds:

The fair value of the common stocks and mutual funds are based on quoted market prices.

Stable Value Investment Contract:

The fair value of the stable value investment contract is determined by discounting the scheduled future payments required under the contract using an interpolated market rate for contracts with maturities comparable to the average remaining life of the contract being valued. Fair value reflects interest accrued on the contract, assuming the contract is held to maturity and, therefore, not subject to any adjustments that could be assessed by the issuer for certain types of withdrawals or early surrender by the trust. The fair value of wrap contracts reflects the discounted present value of the difference between the current wrap contract cost and its replacement cost, based on issuer quotes. The contract is classified in the Level 2 category of the valuation hierarchy.

Loans to Plan Participants:

Loans to Plan participants are valued at cost plus accrued interest, which approximates fair value and are classified within Level 3 of the valuation hierarchy.

The following table presents the financial assets of the Plan measured at fair value on a recurring basis at December 31, 2009:

	Ā	noted Prices in etive Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Mutual Funds:	_		_	_	
Money Market Funds	\$	5,524,049	\$	\$ —	\$ 5,524,049
Fixed Income Funds		7,248,653	_	_	7,248,653
Equity Funds					
Index		5,171,197	_	_	5,171,197
Domestic		20,300,387	_	_	20,300,387
International		5,342,665	_	_	5,342,665
Target Date		5,033,150	_	_	5,033,150
Common Stocks		28,730,859	_	_	28,730,859
Stable Value Investment Contracts		_	5,177,991	_	5,177,991
Participant Loans		_	_	1,966,945	1,966,945
	-				
Total	\$	77,350,960	\$ 5,177,991	\$ 1,966,945	\$ 84,495,896

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

8 Fair Value of Financial Assets, Continued

The following table presents the financial assets of the Plan measured at fair value on a recurring basis at December 31, 2008:

	Ā	uoted Prices in active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Mutual Funds:					
Money Market Funds	\$	3,905,388	\$ —	\$ —	\$ 3,905,388
Fixed Income Funds		6,678,528	_	_	6,678,528
Equity Funds					
Index		4,118,171	_	_	4,118,171
Domestic		14,004,200	_	_	14,004,200
International		3,466,674	_	_	3,466,674
Target Date		2,627,876	_	_	2,627,876
Common Stocks		10,166,710	_	_	10,166,710
Stable Value Investment Contracts		_	4,660,963	_	4,660,963
Participant Loans		_	_	1,744,914	1,744,914
	_				
Total	\$	44,967,547	\$ 4,660,963	\$ 1,744,914	\$ 51,373,424

The following represents a reconciliation of the changes in fair value of financial assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3):

	2009	2008
	Participant	Participant
	Loans	Loans
Balance, Beginning of Year	\$1,744,914	\$ 1,934,459
Initiation and repayment of participant loans, net	222,031	(189,545)
Balance, End of Year	<u>\$1,966,945</u>	\$1,744,914

NOTES TO FINANCIAL STATEMENTS

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

9 Subsequent Events

Effective January 1, 2010, for all participants, the Company shall make matching contributions of 100% for the participants deferral not in excess of three percent and 50% of all participants deferrals between 3% and 5% of compensation.

10 Subsequent Accounting Pronouncements

In January 2010, the FASB issued Accounting Standard Update 2010-06, which will require additional disclosures related to fair value measurements. The additional disclosures will include a separate disclosure of the amount of significant transfers in and out of Level 1 and 2, including a description of the reason for the transfer. In addition, for the reconciliation of activity in Level 3 measurements, information about purchases, sales, issuances and settlements will need to be reported on a gross basis, rather than as one net number. The new disclosures and clarifications of existing disclosures are effective for interim and annual reporting periods beginning after December 15, 2009, except for the disclosures about purchases, sales, issuances, and settlements in the roll forward of activity in Level 3 fair value measurements. Those disclosures are effective for fiscal years beginning after December 15, 2010, and for interim periods within those fiscal years. The guidance will only affect footnote disclosures, and will not have an impact on the financial statements.

SCHEDULE OF ASSETS HELD FOR INVESTMENT PURPOSES AT END OF YEAR Form 5500, Schedule H, Part IV, Line 4i

Northshore Mining Company and Silver Bay Power Company Retirement Savings Plan

> EIN 84-1116857 Plan Number 001

December 31, 2009

	(b) Identity of Issue,	(c) Description of Investment Including		
	Borrower, Lessor,	Maturity Date, Rate of Interest,	(d)	(e)
(a)	or Similar Party	Collateral, Par or Maturity Value	Cost	Current Value
T.	Cliffs Natural Resources, Inc. Common Stock	Stock		\$ 28,730,859
~	T. Rowe Price Equity Index 500 Fund	Mutual Fund	N/A	5,171,197
•	T. Rowe Price Equity Spectrum Income Fund	Mutual Fund	N/A	7,248,653
*	T. Rowe Price New America Growth Fund	Mutual Fund	N/A	4,421,693
*	T. Rowe Price Capital Appreciation Fund	Mutual Fund	N/A	6,662,767
*	T. Rowe Price Prime Reserve Fund	Mutual Fund	N/A	5,524,049
*	T. Rowe Price International Stock Fund	Mutual Fund	N/A	5,342,665
*	T. Rowe Price Stable Value Fund	Stable Value Investment Contract	N/A	5,022,498
*	T. Rowe Price Mid-Cap Growth Fund	Mutual Fund	N/A	5,965,656
*	T. Rowe Price Equity Income Fund	Mutual Fund	N/A	2,871,765
*	T. Rowe Price Boston Co Small Cap Value	Mutual Fund	N/A	378,506
*	T. Rowe Price Retirement 2005 Fund	Mutual Fund	N/A	62,789
*	T. Rowe Price Retirement 2010 Fund	Mutual Fund	N/A	357,787
*		Mutual Fund	N/A	845,307
	T. Rowe Price Retirement 2015 Fund			
*	T. Rowe Price Retirement 2020 Fund	Mutual Fund	N/A	1,206,258
*	T. Rowe Price Retirement 2030 Fund	Mutual Fund	N/A	304,477
*	T. Rowe Price Retirement 2035 Fund	Mutual Fund	N/A	173,867
*	T. Rowe Price Retirement 2025 Fund	Mutual Fund	N/A	799,750
*	T. Rowe Price Retirement 2040 Fund	Mutual Fund	N/A	587,466
*	T. Rowe Price Retirement 2045 Fund	Mutual Fund	N/A	413,730
*	T. Rowe Price Retirement 2050 Fund	Mutual Fund	N/A	88,697
*	T. Rowe Price Retirement 2055 Fund	Mutual Fund	N/A	12,876
*	T. Rowe Price Retirement Income Fund	Mutual Fund	N/A	180,146
*	Participant Loans	Notes receivable (4.25% to 9.25%)	N/A	1,966,945
				\$ 84,340,403

^{*} Party-in-interest to the Plan.

Date: June 23, 2010

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on their behalf by the undersigned hereunto duly authorized.

NORTHSHORE MINING COMPANY and SILVER BAY POWER COMPANY RETIREMENT SAVINGS PLAN

By: Pension Committee, Plan Administrator

By: /s/ Donald J. Gallagher

Chairman

EXHIBIT INDEX

Exhibit		
Number	Description of Exhibit	Page
23	Consent of Independent Registered Public Accounting Firm	Filed Herewith

We consent to the incorporation by reference to the Registration Statement (Form S-8 No. 033-56661) pertaining to the Northshore Mining Company & Silver Bay Power Company Retirement Savings Plan of our report dated June 22, 2010, with respect to the financial statements and related schedule(s) of the Northshore Mining Company & Silver Bay Power Company Retirement Savings Plan included in this Annual Report (Form 11-K) for the years ended December 31, 2009 and 2008.

/s/ Meaden & Moore, Ltd

Cleveland, Ohio June 22, 2010