UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2023

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ______ to ______.

Commission File Number: 1-8944

CLEVELAND-CLIFFS INC.

(Exact Name of Registrant as Specified in Its Charter)

Ohio	34-1464672
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*
200 Public Square, Cleveland, Ohio	44114-2315
(Address of Principal Executive Offices)	*(Zip Code)*

Registrant's telephone number, including area code: (216) 694-5700

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common shares, par value $0.125 per share	CLF	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

The number of shares outstanding of the registrant's common shares, par value $0.125 per share, was 504,861,276 as of October 24, 2023.

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DEFINITIONS

The following abbreviations or acronyms are used in the text. References in this report to the “Company,” “we,” “us,” “our,” "Cleveland-Cliffs" and “Cliffs” are to Cleveland-Cliffs Inc. and subsidiaries, collectively. References to "$" is to United States currency.

Abbreviation or acronym	Term
6.750% 2030 Senior Notes	6.750% Senior Guaranteed Notes due 2030 issued by Cleveland-Cliffs Inc. on April 14, 2023 in an aggregate principal amount of $750 million
ABL Facility	Asset-Based Revolving Credit Agreement, dated as of March 13, 2020, among Cleveland-Cliffs Inc., the lenders party thereto from time to time and Bank of America, N.A., as administrative agent, as amended as of March 27, 2020, December 9, 2020, December 17, 2021, and June 9, 2023, and as may be further amended from time to time
Adjusted EBITDA	EBITDA, excluding certain items such as EBITDA of noncontrolling interests, extinguishment of debt, asset impairment and other, net
AOCI	Accumulated Other Comprehensive Income (Loss)
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
BOF	Basic oxygen furnace
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CHIPS Act	The Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022
CO_2e	Carbon dioxide equivalent
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act
EAF	Electric arc furnace
EBITDA	Earnings before interest, taxes, depreciation and amortization
EPA	U.S. Environmental Protection Agency
EPS	Earnings per share
EV	Electric vehicle
Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
FMSH Act	Federal Mine Safety and Health Act of 1977, as amended
Fourth ABL Amendment	Fourth Amendment to Asset-Based Revolving Credit Agreement, dated as of June 9, 2023, among Cleveland-Cliffs Inc., the lenders party thereto from time to time and Bank of America, N.A., as administrative agent
GAAP	Accounting principles generally accepted in the United States
GHG	Greenhouse gas
GOES	Grain oriented electrical steel
HBI	Hot briquetted iron
HRC	Hot-rolled coil steel
Inflation Reduction Act	Inflation Reduction Act of 2022
LIBOR	London Interbank Offered Rate
Metric ton (mt)	2,205 pounds
MSHA	U.S. Mine Safety and Health Administration
Net ton (nt)	2,000 pounds
NOES	Non-oriented electrical steel
NPDES	National Pollutant Discharge Elimination System, authorized by the Clean Water Act
OPEB	Other postretirement benefits
Platts 62% price	Platts IODEX 62% Fe Fines CFR North China
RCRA	Resource Conservation and Recovery Act
SEC	U.S. Securities and Exchange Commission
Section 232	Section 232 of the Trade Expansion Act of 1962, as amended
Securities Act	Securities Act of 1933, as amended
SOFR	Secured Overnight Financing Rate
SunCoke Middletown	Middletown Coke Company, LLC, a subsidiary of SunCoke Energy, Inc.
U.S.	United States of America
UAW	United Auto Workers
USW	United Steelworkers
VEBA	Voluntary employee benefit association trusts
VIE	Variable interest entity

PART I

ITEM 1. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

STATEMENTS OF UNAUDITED CONDENSED CONSOLIDATED FINANCIAL POSITION

CLEVELAND-CLIFFS INC. AND SUBSIDIARIES

(In millions, except share information)	September 30, 2023	December 31, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 31**	$ 26
Accounts receivable, net	**2,122**	1,960
Inventories	**4,592**	5,130
Other current assets	**196**	306
Total current assets	**6,941**	7,422
Non-current assets:		
Property, plant and equipment, net	**8,837**	9,070
Goodwill	**1,130**	1,130
Pension and OPEB, asset	**392**	356
Other non-current assets	**759**	777
TOTAL ASSETS	**$ 18,059**	$ 18,755
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	**$ 2,076**	$ 2,186
Accrued employment costs	**467**	429
Accrued expenses	**263**	383
Other current liabilities	**488**	551
Total current liabilities	**3,294**	3,549
Non-current liabilities:		
Long-term debt	**3,458**	4,249
Pension liability, non-current	**456**	473
OPEB liability, non-current	**563**	585
Deferred income taxes	**662**	590
Other non-current liabilities	**1,362**	1,267
TOTAL LIABILITIES	**9,795**	10,713
Commitments and contingencies (See Note 17)		
Equity:		
Common shares - par value $0.125 per share		
Authorized - 1,200,000,000 shares (2022 - 1,200,000,000 shares);		
Issued - 531,051,530 shares (2022 - 531,051,530 shares);		
Outstanding - 504,849,719 shares (2022 - 513,340,779 shares)	**66**	66
Capital in excess of par value of shares	**4,850**	4,871
Retained earnings	**1,888**	1,334
Cost of 26,201,811 common shares in treasury (2022 -17,710,751 shares)	**(431)**	(310)
Accumulated other comprehensive income	**1,647**	1,830
Total Cliffs shareholders' equity	**8,020**	7,791
Noncontrolling interest	**244**	251
TOTAL EQUITY	**8,264**	8,042
TOTAL LIABILITIES AND EQUITY	**$ 18,059**	$ 18,755

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

STATEMENTS OF UNAUDITED CONDENSED CONSOLIDATED OPERATIONS
CLEVELAND-CLIFFS INC. AND SUBSIDIARIES

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions, except per share amounts)	**2023**	2022	**2023**	2022
Revenues	**$ 5,605**	$ 5,653	**$ 16,884**	$ 17,945
Operating costs:				
Cost of goods sold	**(5,125)**	(5,305)	**(15,661)**	(15,367)
Selling, general and administrative expenses	**(144)**	(124)	**(420)**	(353)
Miscellaneous – net	**(11)**	(37)	**(26)**	(104)
Total operating costs	**(5,280)**	(5,466)	**(16,107)**	(15,824)
Operating income	**325**	187	**777**	2,121
Other income (expense):				
Interest expense, net	**(70)**	(64)	**(226)**	(205)
Gain (loss) on extinguishment of debt	**—**	4	**—**	(76)
Net periodic benefit credits other than service cost component	**50**	49	**150**	148
Other non-operating income (expense)	**(2)**	(1)	**4**	(6)
Total other expense	**(22)**	(12)	**(72)**	(139)
Income from continuing operations before income taxes	**303**	175	**705**	1,982
Income tax expense	**(29)**	(10)	**(118)**	(404)
Income from continuing operations	**274**	165	**587**	1,578
Income from discontinued operations, net of tax	**1**	—	**2**	2
Net income	**275**	165	**589**	1,580
Income attributable to noncontrolling interest	**(11)**	(13)	**(35)**	(31)
Net income attributable to Cliffs shareholders	**$ 264**	$ 152	**$ 554**	$ 1,549
Earnings per common share attributable to Cliffs shareholders - basic				
Continuing operations	**$ 0.52**	$ 0.30	**$ 1.08**	$ 2.98
Discontinued operations	**—**	—	**—**	—
	$ 0.52	$ 0.30	**$ 1.08**	$ 2.98
Earnings per common share attributable to Cliffs shareholders - diluted				
Continuing operations	**$ 0.52**	$ 0.29	**$ 1.08**	$ 2.95
Discontinued operations	**—**	—	**—**	—
	$ 0.52	$ 0.29	**$ 1.08**	$ 2.95

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

STATEMENTS OF UNAUDITED CONDENSED CONSOLIDATED COMPREHENSIVE INCOME
CLEVELAND-CLIFFS INC. AND SUBSIDIARIES

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Net income	**$ 275**	$ 165	**$ 589**	$ 1,580
Other comprehensive income (loss):				
Changes in pension and OPEB, net of tax	**(27)**	93	**(80)**	94
Changes in derivative financial instruments, net of tax	**31**	61	**(103)**	102
Changes in foreign currency translation	**—**	(2)	**—**	(4)
Total other comprehensive income (loss)	**4**	152	**(183)**	192
Comprehensive income	**279**	317	**406**	1,772
Comprehensive income attributable to noncontrolling interests	**(11)**	(13)	**(35)**	(31)
Comprehensive income attributable to Cliffs shareholders	**$ 268**	$ 304	**$ 371**	$ 1,741

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

STATEMENTS OF UNAUDITED CONDENSED CONSOLIDATED CASH FLOWS
CLEVELAND-CLIFFS INC. AND SUBSIDIARIES

	Nine Months Ended September 30,	
(In millions)	**2023**	2022
OPERATING ACTIVITIES		
Net income	**$ 589**	$ 1,580
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation, depletion and amortization	**738**	788
Deferred income taxes	**132**	210
Pension and OPEB credits	**(119)**	(81)
Loss on extinguishment of debt	**—**	76
Impairment of long-lived assets	**—**	29
Other	**121**	75
Changes in operating assets and liabilities:		
Accounts receivable, net	**(164)**	(145)
Inventories	**538**	(348)
Income taxes	**16**	(109)
Pension and OPEB payments and contributions	**(84)**	(174)
Payables, accrued employment and accrued expenses	**(95)**	66
Other, net	**(57)**	(33)
Net cash provided by operating activities	**1,615**	1,934
INVESTING ACTIVITIES		
Purchase of property, plant and equipment	**(481)**	(716)
Acquisition of FPT, net of cash acquired	**—**	(31)
Other investing activities	**11**	20
Net cash used by investing activities	**(470)**	(727)
FINANCING ACTIVITIES		
Repurchase of common shares	**(152)**	(210)
Proceeds from issuance of senior notes	**750**	—
Repayments of senior notes	**—**	(1,355)
Borrowings under credit facilities	**3,004**	4,650
Repayments under credit facilities	**(4,543)**	(4,169)
Debt issuance costs	**(34)**	—
Other financing activities	**(165)**	(115)
Net cash used by financing activities	**(1,140)**	(1,199)
Net increase in cash and cash equivalents	**5**	8
Cash and cash equivalents at beginning of period	**26**	48
Cash and cash equivalents at end of period	**$ 31**	$ 56

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

STATEMENTS OF UNAUDITED CONDENSED CONSOLIDATED CHANGES IN EQUITY
CLEVELAND-CLIFFS INC. AND SUBSIDIARIES

(In millions)	Number of Common Shares Outstanding	Par Value of Common Shares Issued	Capital in Excess of Par Value of Shares	Retained Earnings	Common Shares in Treasury	AOCI	Non-controlling Interests	Total
December 31, 2022	**513.3**	**$ 66**	**$ 4,871**	**$ 1,334**	**$ (310)**	**$ 1,830**	**$ 251**	**$ 8,042**
Comprehensive income (loss)	**—**	**—**	**—**	**(57)**	**—**	**(179)**	**15**	**(221)**
Stock and other incentive plans	**1.8**	**—**	**(39)**	**—**	**30**	**—**	**—**	**(9)**
Net distributions to noncontrolling interests	**—**	**—**	**—**	**—**	**—**	**—**	**(19)**	**(19)**
March 31, 2023	**515.1**	**$ 66**	**$ 4,832**	**$ 1,277**	**$ (280)**	**$ 1,651**	**$ 247**	**$ 7,793**
Comprehensive income (loss)	**—**	**—**	**—**	**347**	**—**	**(8)**	**9**	**348**
Stock and other incentive plans	**0.1**	**—**	**9**	**—**	**3**	**—**	**—**	**12**
Common stock repurchases, net of excise tax	**(6.5)**	**—**	**—**	**—**	**(95)**	**—**	**—**	**(95)**
Net distributions to noncontrolling interests	**—**	**—**	**—**	**—**	**—**	**—**	**(14)**	**(14)**
June 30, 2023	**508.7**	**$ 66**	**$ 4,841**	**$ 1,624**	**$ (372)**	**$ 1,643**	**$ 242**	**$ 8,044**
Comprehensive income	**—**	**—**	**—**	**264**	**—**	**4**	**11**	**279**
Stock and other incentive plans	**—**	**—**	**9**	**—**	**—**	**—**	**—**	**9**
Common stock repurchases, net of excise tax	**(3.9)**	**—**	**—**	**—**	**(59)**	**—**	**—**	**(59)**
Net distributions to noncontrolling interests	**—**	**—**	**—**	**—**	**—**	**—**	**(9)**	**(9)**
September 30, 2023	**504.8**	**$ 66**	**$ 4,850**	**$ 1,888**	**$ (431)**	**$ 1,647**	**$ 244**	**$ 8,264**

(In millions)	Number of Common Shares Outstanding	Par Value of Common Shares Issued	Capital in Excess of Par Value of Shares	Retained Earnings (Deficit)	Common Shares in Treasury	AOCI	Non-controlling Interests	Total
December 31, 2021	500.2	$ 63	$ 4,892	$ (1)	$ (82)	$ 618	$ 284	$ 5,774
Comprehensive income	—	—	—	801	—	97	13	911
Redemption of convertible debt	24.2	3	(28)	—	—	—	—	(25)
Stock and other incentive plans	1.3	—	(16)	—	11	—	—	(5)
Common stock repurchases	(1.0)	—	—	—	(19)	—	—	(19)
Net distributions to noncontrolling interests	—	—	—	—	—	—	(28)	(28)
March 31, 2022	524.7	$ 66	$ 4,848	$ 800	$ (90)	$ 715	$ 269	$ 6,608
Comprehensive income (loss)	—	—	—	596	—	(57)	5	544
Stock and other incentive plans	0.1	—	7	—	1	—	—	8
Common stock repurchases	(7.5)	—	—	—	(157)	—	—	(157)
Net distributions to noncontrolling interests	—	—	—	—	—	—	(9)	(9)
June 30, 2022	517.3	$ 66	$ 4,855	$ 1,396	$ (246)	$ 658	$ 265	$ 6,994
Comprehensive income	—	—	—	152	—	152	13	317
Stock and other incentive plans	—	—	9	—	—	—	—	9
Common stock repurchases	(2.0)	—	—	—	(34)	—	—	(34)
Net distributions to noncontrolling interests	—	—	—	—	—	—	(18)	(18)
September 30, 2022	515.3	$ 66	$ 4,864	$ 1,548	$ (280)	$ 810	$ 260	$ 7,268

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

CLEVELAND-CLIFFS INC. AND SUBSIDIARIES

NOTE 1 - BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

BUSINESS, CONSOLIDATION AND PRESENTATION

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with SEC rules and regulations and, in the opinion of management, include all adjustments (consisting of normal recurring adjustments) necessary to present fairly the financial position, results of operations, comprehensive income, cash flows and changes in equity for the periods presented. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Management bases its estimates on various assumptions and historical experience, which are believed to be reasonable; however, due to the inherent nature of estimates, actual results may differ significantly due to changed conditions or assumptions. The results of operations for the three and nine months ended September 30, 2023 are not necessarily indicative of results to be expected for the year ending December 31, 2023 or any other future period. These unaudited condensed consolidated financial statements should be read in conjunction with the financial statements and notes included in our Annual Report on Form 10-K for the year ended December 31, 2022 and in our Quarterly Reports on Form 10-Q for the quarterly periods ended June 30, 2023 and March 31, 2023.

NATURE OF BUSINESS

We are the largest flat-rolled steel producer in North America. Founded in 1847 as a mine operator, we are also the largest manufacturer of iron ore pellets in North America. We are vertically integrated from mined raw materials, direct reduced iron and ferrous scrap to primary steelmaking and downstream finishing, stamping, tooling and tubing. We are the largest supplier of steel to the automotive industry in North America and serve a diverse range of markets due to our comprehensive offering of flat-rolled steel products. Headquartered in Cleveland, Ohio, we employ approximately 27,000 people across our operations in the United States and Canada.

BUSINESS OPERATIONS

We are organized into four operating segments based on differentiated products, Steelmaking, Tubular, Tooling and Stamping, and European Operations. We primarily operate through one reportable segment – the Steelmaking segment.

BASIS OF CONSOLIDATION

The unaudited condensed consolidated financial statements consolidate our accounts and the accounts of our wholly owned subsidiaries, all subsidiaries in which we have a controlling interest and VIEs for which we are the primary beneficiary. All intercompany transactions and balances are eliminated upon consolidation.

INVESTMENTS IN AFFILIATES

We have investments in several businesses accounted for using the equity method of accounting. These investments are included within our Steelmaking segment. We review an investment for impairment when circumstances indicate that a loss in value below its carrying amount is other than temporary.

Our investment in affiliates of $131 million and $133 million as of September 30, 2023 and December 31, 2022, respectively, was classified in *Other non-current assets.*

SIGNIFICANT ACCOUNTING POLICIES

A detailed description of our significant accounting policies can be found in the audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC. There have been no material changes in our significant accounting policies and estimates from those disclosed therein.

RECENT ACCOUNTING PRONOUNCEMENTS AND LEGISLATION

In August 2022, the U.S. government signed the Inflation Reduction Act into law. The Inflation Reduction Act introduced, among other legislation, a 1% excise tax on the fair market value of stock repurchases net of the fair market value of stock issuances during the tax year. The excise tax is effective on net stock repurchases that occur after December 31, 2022. The tax is recorded in equity as a cost of common shares in treasury.

In September 2022, the FASB issued *ASU No. 2022-04, Liabilities - Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations*. This guidance requires annual and interim disclosure of the key terms of outstanding supplier finance programs and a roll-forward of the related obligations. The new standard does not affect the recognition, measurement or financial statement presentation of the supplier finance program obligations. We have adopted this standard, except for the amendment on roll-forward information, which is effective for fiscal years beginning after December 15, 2023. Refer to NOTE 2 - SUPPLEMENTARY FINANCIAL STATEMENT INFORMATION for further information.

NOTE 2 - SUPPLEMENTARY FINANCIAL STATEMENT INFORMATION

ALLOWANCE FOR CREDIT LOSSES

The following is a roll-forward of our allowance for credit losses associated with *Accounts receivable, net*:

(In millions)	2023	2022
Allowance for credit losses as of January 1	$ (4)	$ (4)
Increase in allowance	(3)	(1)
Allowance for credit losses as of September 30	$ (7)	$ (5)

INVENTORIES

The following table presents the detail of our *Inventories* on the Statements of Unaudited Condensed Consolidated Financial Position:

(In millions)	September 30, 2023	December 31, 2022
Product inventories		
Finished and semi-finished goods	$ 2,616	$ 2,971
Raw materials	1,588	1,794
Total product inventories	4,204	4,765
Manufacturing supplies and critical spares	388	365
Inventories	$ 4,592	$ 5,130

SUPPLY CHAIN FINANCE PROGRAMS

We negotiate payment terms directly with our suppliers for the purchase of goods and services. We currently offer voluntary supply chain finance programs that enable our suppliers to sell their Cliffs receivables to financial intermediaries, at the sole discretion of both the suppliers and financial intermediaries. No guarantees are provided by us or our subsidiaries under the supply chain finance programs. The supply chain finance programs allow our suppliers to be paid by the financial intermediaries earlier than the due date on the applicable invoice. Supply chain finance programs that extend terms or provide us an economic benefit are classified as short-term financings. As of September 30, 2023 and December 31, 2022, we had $21 million and $19 million, respectively, deemed as short-term financings that are classified in *Other current liabilities*. Additionally, as of September 30, 2023 and December 31, 2022, we had $90 million and $112 million, respectively, classified as *Accounts payable*.

CASH FLOW INFORMATION

A reconciliation of capital additions to cash paid for capital expenditures is as follows:

	Nine Months Ended September 30,	
(In millions)	2023	2022
Capital additions	$ 508	$ 736
Less:		
Non-cash accruals	(98)	(10)
Equipment financed with seller	47	—
Right-of-use assets - finance leases	78	30
Cash paid for capital expenditures including deposits	$ 481	$ 716

Cash payments (receipts) for income taxes and interest are as follows:

	Nine Months Ended September 30,	
(In millions)	2023	2022
Income taxes paid	$ 91	$ 306
Income tax refunds	(142)	(3)
Interest paid on debt obligations net of capitalized interest[1]	202	201

[1] Capitalized interest was $8 million and $7 million for the nine months ended September 30, 2023 and 2022, respectively.

NOTE 3 - REVENUES

We generate our revenue through product sales, in which shipping terms indicate when we have fulfilled our performance obligations and transferred control of products to our customer. Our revenue transactions consist of a single performance obligation to transfer promised goods. Our contracts with customers define the mechanism for determining the sales price, which is generally fixed upon transfer of control, but the contracts generally do not impose a specific quantity on either party. Quantities to be delivered to the customer are determined at a point near the date of delivery through purchase orders or other written instructions we receive from the customer. Spot market sales are made through purchase orders or other written instructions. We consider our performance obligation to be complete and recognize revenue when control transfers in accordance with shipping terms.

Revenue is measured as the amount of consideration we expect to receive in exchange for transferring product. We reduce the amount of revenue recognized for estimated returns and other customer credits, such as discounts and volume rebates, based on the expected value to be realized. Payment terms are consistent with terms standard to the markets we serve. Sales taxes collected from customers are excluded from revenues.

The following table represents our *Revenues* by market:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Steelmaking:				
Automotive	**$ 1,958**	$ 1,734	**$ 5,808**	$ 4,985
Infrastructure and manufacturing	**1,427**	1,462	**4,315**	4,619
Distributors and converters	**1,321**	1,468	**4,020**	5,137
Steel producers	**737**	847	**2,234**	2,740
Total Steelmaking	**5,443**	5,511	**16,377**	17,481
Other Businesses:				
Automotive	**133**	113	**415**	359
Infrastructure and manufacturing	**9**	14	**29**	43
Distributors and converters	**20**	15	**63**	62
Total Other Businesses	**162**	142	**507**	464
Total revenues	**$ 5,605**	$ 5,653	**$ 16,884**	$ 17,945

The following tables represent our *Revenues* by product line:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	**2022**	**2023**	2022
Steelmaking:				
Hot-rolled steel	**$ 1,269**	$ 1,050	**$ 3,747**	$ 3,495
Cold-rolled steel	**651**	740	**2,038**	2,593
Coated steel	**1,748**	1,757	**5,154**	5,338
Stainless and electrical steel	**568**	596	**1,757**	1,765
Plate	**382**	432	**1,112**	1,306
Slab and other steel products	**322**	370	**1,015**	1,121
Other	**503**	566	**1,554**	1,863
Total Steelmaking	**5,443**	5,511	**16,377**	17,481
Other Businesses:				
Other	**162**	142	**507**	464
Total revenues	**$ 5,605**	$ 5,653	**$ 16,884**	$ 17,945

NOTE 4 - SEGMENT REPORTING

We are vertically integrated from mined raw materials and direct reduced iron and ferrous scrap to primary steelmaking and downstream finishing, stamping, tooling and tubing. We are organized into four operating segments based on our differentiated products – Steelmaking, Tubular, Tooling and Stamping, and European Operations. We have one reportable segment – Steelmaking. The operating segment results of our Tubular, Tooling and Stamping, and European Operations that do not constitute reportable segments are combined and disclosed in the Other Businesses category. Our Steelmaking segment operates as the largest flat-rolled steel producer supported by being the largest iron ore pellet producer as well as a leading prime scrap processor in North America, primarily serving the automotive, distributors and converters, and infrastructure and manufacturing markets. Our Other Businesses primarily include the operating segments that provide customer solutions with carbon and stainless steel tubing products, advanced-engineered solutions, tool design and build, hot- and cold-stamped steel components, and complex assemblies. All intersegment transactions were eliminated in consolidation.

We evaluate performance on an operating segment basis, as well as a consolidated basis, based on Adjusted EBITDA, which is a non-GAAP measure. This measure is used by management, investors, lenders and other external users of our financial statements to assess our operating performance and to compare operating performance to other companies in the steel industry. In addition, management believes Adjusted EBITDA is a useful measure to assess the earnings power of the business without the impact of capital structure and can be used to assess our ability to service debt and fund future capital expenditures in the business.

Our results by segment are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Revenues:				
Steelmaking	**$ 5,443**	$ 5,511	**$ 16,377**	$ 17,481
Other Businesses	**162**	142	**507**	464
Total revenues	**$ 5,605**	$ 5,653	**$ 16,884**	$ 17,945
Adjusted EBITDA:				
Steelmaking	**$ 603**	$ 447	**$ 1,608**	$ 2,980
Other Businesses	**9**	9	**32**	58
Eliminations	**2**	7	**(8)**	8
Total Adjusted EBITDA	**$ 614**	$ 463	**$ 1,632**	$ 3,046

The following table provides a reconciliation of our consolidated *Net income* to total Adjusted EBITDA:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Net income	**$ 275**	$ 165	**$ 589**	$ 1,580
Less:				
Interest expense, net	**(70)**	(64)	**(226)**	(205)
Income tax expense	**(29)**	(10)	**(118)**	(404)
Depreciation, depletion and amortization	**(249)**	(237)	**(738)**	(788)
	623	476	**1,671**	2,977
Less:				
EBITDA of noncontrolling interests[1]	**20**	22	**60**	57
Gain (loss) on extinguishment of debt	**—**	4	**—**	(76)
Asset impairment	**—**	—	**—**	(29)
Other, net	**(11)**	(13)	**(21)**	(21)
Total Adjusted EBITDA	**$ 614**	$ 463	**$ 1,632**	$ 3,046

[1] EBITDA of noncontrolling interests includes the following:

Net income attributable to noncontrolling interests	**$ 11**	$ 13	**$ 35**	$ 31
Depreciation, depletion and amortization	**9**	9	**25**	26
EBITDA of noncontrolling interests	**$ 20**	$ 22	**$ 60**	$ 57

The following summarizes our assets by segment:

(In millions)	September 30, 2023	December 31, 2022
Assets:		
Steelmaking	**$ 17,481**	$ 18,070
Other Businesses	**819**	836
Intersegment eliminations	**(531)**	(521)
Total segment assets	**17,769**	18,385
Corporate	**290**	370
Total assets	**$ 18,059**	$ 18,755

The following table summarizes our depreciation, depletion and amortization and capital additions by segment:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	2023	2022	2023	2022
Depreciation, depletion and amortization:				
Steelmaking	**$ (241)**	$ (227)	**$ (711)**	$ (758)
Other Businesses	**(8)**	(10)	**(27)**	(30)
Total depreciation, depletion and amortization	**$ (249)**	$ (237)	**$ (738)**	$ (788)
Capital additions[1]:				
Steelmaking	**$ 217**	$ 240	**$ 503**	$ 712
Other Businesses	**—**	6	**3**	21
Corporate	**1**	1	**2**	3
Total capital additions	**$ 218**	$ 247	**$ 508**	$ 736

[1] Refer to NOTE 2 - SUPPLEMENTARY FINANCIAL STATEMENT INFORMATION for additional information.

NOTE 5 - PROPERTY, PLANT AND EQUIPMENT

The following table indicates the carrying value of each of the major classes of our depreciable assets:

(In millions)	September 30, 2023	December 31, 2022
Land, land improvements and mineral rights	**$ 1,388**	$ 1,388
Buildings	**934**	921
Equipment	**9,652**	9,289
Other	**253**	238
Construction in progress	**611**	552
Total property, plant and equipment[1]	**12,838**	12,388
Allowance for depreciation and depletion	**(4,001)**	(3,318)
Property, plant and equipment, net	**$ 8,837**	$ 9,070

[1] Includes right-of-use assets related to finance leases of $485 million and $408 million as of September 30, 2023 and December 31, 2022, respectively.

We recorded depreciation and depletion expense of $247 million and $732 million for the three and nine months ended September 30, 2023, respectively, and $235 million and $782 million for the three and nine months ended September 30, 2022, respectively. Depreciation and depletion expense for the nine months ended September 30, 2022 includes $23 million of accelerated depreciation related to the decision to indefinitely idle the coke facility at Middletown Works and $68 million of accelerated depreciation related to the indefinite idle of the Indiana Harbor #4 blast furnace.

NOTE 6 - GOODWILL AND INTANGIBLE ASSETS AND LIABILITIES

GOODWILL

The following is a summary of *Goodwill* by segment:

(In millions)	September 30, 2023	December 31, 2022
Steelmaking	$ 956	$ 956
Other Businesses	174	174
Total goodwill	$ 1,130	$ 1,130

INTANGIBLE ASSETS AND LIABILITIES

The following is a summary of our intangible assets and liabilities:

	September 30, 2023			December 31, 2022		
(In millions)	Gross Amount	Accumulated Amortization	Net Amount	Gross Amount	Accumulated Amortization	Net Amount
Intangible assets[1]:						
Customer relationships	$ 90	$ (17)	$ 73	$ 90	$ (13)	$ 77
Developed technology	60	(13)	47	60	(10)	50
Trade names and trademarks	18	(5)	13	18	(4)	14
Mining permits	72	(28)	44	72	(27)	45
Supplier relationships	29	(2)	27	29	(1)	28
Total intangible assets	$ 269	$ (65)	$ 204	$ 269	$ (55)	$ 214
Intangible liabilities[2]:						
Above-market supply contracts	$ (71)	$ 23	$ (48)	$ (71)	$ 19	$ (52)

[1] Intangible assets are classified as *Other non-current assets.* Amortization related to mining permits is recognized in *Cost of goods sold*. Amortization of all other intangible assets is recognized in *Selling, general and administrative expenses.*

[2] Intangible liabilities are classified as *Other non-current liabilities.* Amortization of all intangible liabilities is recognized in *Cost of goods sold*.

Amortization expense related to intangible assets was $3 million for both the three months ended September 30, 2023 and 2022, and $10 million for both the nine months ended September 30, 2023 and 2022. Estimated future amortization expense is $3 million for the remainder of 2023 and $13 million annually for the years 2024 through 2028.

Income from amortization related to the intangible liabilities was $1 million for both the three months ended September 30, 2023 and 2022, and $4 million for both the nine months ended September 30, 2023 and 2022. Estimated future income from amortization is $1 million for the remainder of 2023 and $5 million annually for the years 2024 through 2028.

NOTE 7 - DEBT AND CREDIT FACILITIES

The following represents a summary of our long-term debt:

(In millions)

Debt Instrument	Issuer[1]	Annual Effective Interest Rate	September 30, 2023	December 31, 2022
Senior Secured Notes:				
6.750% 2026 Senior Secured Notes	Cliffs	6.990%	$ 829	$ 829
Senior Unsecured Notes:				
7.000% 2027 Senior Notes	Cliffs	9.240%	73	73
7.000% 2027 AK Senior Notes	AK Steel	9.240%	56	56
5.875% 2027 Senior Notes	Cliffs	6.490%	556	556
4.625% 2029 Senior Notes	Cliffs	4.625%	368	368
6.750% 2030 Senior Notes	Cliffs	6.750%	750	—
4.875% 2031 Senior Notes	Cliffs	4.875%	325	325
6.250% 2040 Senior Notes	Cliffs	6.340%	235	235
ABL Facility	Cliffs[2]	Variable[3]	325	1,864
Total principal amount			3,517	4,306
Unamortized discounts and issuance costs			(59)	(57)
Total long-term debt			$ 3,458	$ 4,249

[1] Unless otherwise noted, references in this column and throughout this NOTE 7 - DEBT AND CREDIT FACILITIES to "Cliffs" are to Cleveland-Cliffs Inc., and references to "AK Steel" are to AK Steel Corporation (n/k/a Cleveland-Cliffs Steel Corporation).

[2] Refers to Cleveland-Cliffs Inc. as borrower under our ABL Facility.

[3] Our ABL Facility annual effective interest rate was 7.148% and 5.602%, respectively, as of September 30, 2023 and December 31, 2022.

6.750% 2030 Senior Notes - 2023 Offering

On April 14, 2023, we entered into an indenture among Cliffs, the guarantors party thereto and U.S. Bank Trust Company, National Association, as trustee, relating to the issuance of $750 million aggregate principal amount of our 6.750% 2030 Senior Notes, which were issued at par. The 6.750% 2030 Senior Notes were issued in a private placement transaction exempt from the registration requirements of the Securities Act.

The 6.750% 2030 Senior Notes bear interest at a rate of 6.750% per annum, payable semi-annually in arrears on April 15 and October 15 of each year, which commenced on October 15, 2023. The 6.750% 2030 Senior Notes mature on April 15, 2030.

The 6.750% 2030 Senior Notes are unsecured senior obligations and rank equally in right of payment with all of our existing and future unsecured and unsubordinated indebtedness. The 6.750% 2030 Senior Notes are guaranteed on a senior unsecured basis by our material direct and indirect wholly owned domestic subsidiaries. The 6.750% 2030 Senior Notes are structurally subordinated to all existing and future indebtedness and other liabilities of our subsidiaries that do not guarantee the 6.750% 2030 Senior Notes.

The 6.750% 2030 Senior Notes may be redeemed, in whole or in part, at any time at our option not less than 10 days nor more than 60 days after prior notice is sent to the holders of the 6.750% 2030 Senior Notes. The 6.750% 2030 Senior Notes are redeemable prior to April 15, 2026, at a redemption price equal to 100% of the principal amount thereof plus a "make-whole" premium set forth in the indenture. We may also redeem up to 35% of the aggregate principal amount of the 6.750% 2030 Senior Notes prior to April 15, 2026 at a redemption price equal to 106.750% of the principal amount thereof with the net cash proceeds of one or more equity offerings. The 6.750% 2030 Senior Notes are redeemable beginning on April 15, 2026, at a redemption price equal to 103.375% of the principal amount thereof, decreasing to 101.688% on April 15, 2027, and are redeemable at par beginning on April 15, 2028. In each case, we pay the applicable redemption and "make-whole" premiums plus accrued and unpaid interest, if any, to, but not including, the date of redemption.

In addition, if a change in control triggering event, as defined in the indenture, occurs with respect to the 6.750% 2030 Senior Notes, we will be required to offer to repurchase the notes at a purchase price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to, but not including, the date of repurchase.

The terms of the 6.750% 2030 Senior Notes contain certain customary covenants; however, there are no financial covenants.

ABL FACILITY

On June 9, 2023, we entered into the Fourth ABL Amendment to our ABL Facility to, among other things, increase the amount of tranche A revolver commitments available thereunder by an additional $250 million to an aggregate principal amount of $4.75 billion and extend the maturity date of all commitments under the ABL Facility from March 13, 2025 to June 9, 2028. The Fourth ABL Amendment removed the LIBOR option for variable rate loans due to its cessation and replaced it with a SOFR option. Borrowings under the ABL Facility bear interest, at our option, at a base rate or, if certain conditions are met, a SOFR rate, in each case, plus an applicable tiered margin. The base rate is equal to the greater of the federal funds rate plus 0.5% or the term SOFR plus 1.25%.

As of September 30, 2023, we were in compliance with the ABL Facility liquidity requirements and, therefore, the springing financial covenant requiring a minimum fixed charge coverage ratio of 1.0 to 1.0 was not applicable.

The following represents a summary of our borrowing capacity under the ABL Facility:

(In millions)	September 30, 2023
Available borrowing base on ABL Facility[1]	**$ 4,750**
Borrowings	**(325)**
Letter of credit obligations[2]	**(94)**
Borrowing capacity available	**$ 4,331**

[1] As of September 30, 2023, the ABL Facility has a maximum available borrowing base of $4.75 billion. The borrowing base is determined by applying customary advance rates to eligible accounts receivable, inventory and certain mobile equipment.

[2] We issued standby letters of credit with certain financial institutions in order to support business obligations, including, but not limited to, workers' compensation, operating agreements, employee severance, environmental obligations, and insurance.

DEBT MATURITIES

The following represents a summary of our maturities of debt instruments based on the principal amounts outstanding at September 30, 2023 (in millions):

2023	2024	2025	2026	2027	Thereafter	Total
$ —	$ —	$ —	$ 829	$ 685	$ 2,003	$ 3,517

NOTE 8 - PENSIONS AND OTHER POSTRETIREMENT BENEFITS

We offer defined benefit pension plans, defined contribution pension plans and OPEB plans to a significant portion of our employees and retirees. Benefits are also provided through multiemployer plans for certain union members.

The following are the components of defined benefit pension and OPEB costs (credits):

DEFINED BENEFIT PENSION COSTS (CREDITS)

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Service cost	**$ 8**	$ 11	**$ 24**	$ 35
Interest cost	**59**	32	**176**	95
Expected return on plan assets	**(79)**	(93)	**(236)**	(277)
Amortization:				
Prior service costs	**5**	1	**13**	1
Net actuarial loss	**—**	4	**2**	11
Net periodic benefit credits	**$ (7)**	$ (45)	**$ (21)**	$ (135)

OPEB COSTS (CREDITS)

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Service cost	**$ 2**	$ 11	**$ 7**	$ 32
Interest cost	**15**	19	**47**	59
Expected return on plan assets	**(10)**	(10)	**(31)**	(29)
Amortization:				
Prior service costs (credits)	**(4)**	1	**(12)**	1
Net actuarial gain	**(36)**	(3)	**(109)**	(9)
Net periodic benefit costs (credits)	**$ (33)**	$ 18	**$ (98)**	$ 54

Based on funding requirements, we madenominal defined benefit pension contributions for the three and nine months ended September 30, 2023. Based on funding requirements, we made $1 million of defined benefit pension contributions for both the three and nine months ended September 30, 2022. Based on funding requirements, we made no contributions to our VEBA trust plans for the three and nine months ended September 30, 2023. We made contributions of $24 million and $80 million to our VEBA trust plans for the three and nine months ended September 30, 2022, respectively.

NOTE 9 - INCOME TAXES

Our 2023 estimated annual effective tax rate before discrete items as of September 30, 2023 is 19%. The estimated annual effective tax rate is less than the U.S. statutory rate of 21%, as state income tax expense is less than the percentage depletion in excess of cost depletion. The 2022 estimated annual effective tax rate before discrete items as of September 30, 2022 was 20%.

For the nine months ended September 30, 2023, income tax expense includes $18 million of discrete benefit, as compared to $3 million of discrete expense for the nine months ended September 30, 2022.

NOTE 10 - ASSET RETIREMENT OBLIGATIONS

The accrued closure obligation provides for contractual and legal obligations related to our indefinitely idled and closed operations and for the eventual closure of our active operations. The closure date for each of our active mine sites was determined based on the exhaustion date of the remaining mineral reserves, and the amortization of the related asset and accretion of the liability is recognized over the estimated mine lives. The closure date and expected timing of the capital requirements to meet our obligations for our indefinitely idled or closed mines is determined based on the unique circumstances of each property. For indefinitely idled or closed mines, the accretion of the liability is recognized over the anticipated timing of remediation. As the majority of our asset retirement obligations at our steelmaking operations have indeterminate settlement dates, asset retirement obligations have been recorded at present values using estimated ranges of the economic lives of the underlying assets.

The following is a summary of our asset retirement obligations:

(In millions)	September 30, 2023	December 31, 2022
Asset retirement obligations[1]	$ 522	$ 520
Less: current portion	17	21
Long-term asset retirement obligations	$ 505	$ 499

[1] Includes $275 million and $277 million related to our active operations as of September 30, 2023 and December 31, 2022, respectively.

The following is a roll forward of our asset retirement obligation liability:

(In millions)	2023	2022
Asset retirement obligation as of January 1	$ 520	$ 449
Accretion expense	19	21
Reclassification from environmental obligations	—	63
Revision in estimated cash flows	—	22
Remediation payments	(17)	(33)
Asset retirement obligation as of September 30	$ 522	$ 522

NOTE 11 - FAIR VALUE MEASUREMENTS

The carrying values of certain financial instruments (e.g., *Accounts receivable, net*, *Accounts payable* and *Other current liabilities*) approximate fair value and, therefore, have been excluded from the table below. See NOTE 12 - DERIVATIVE INSTRUMENTS AND HEDGING for information on our derivative instruments, which are accounted for at fair value on a recurring basis.

A summary of the carrying value and fair value of other financial instruments were as follows:

		September 30, 2023		December 31, 2022	
(In millions)	Classification	Carrying Value	Fair Value	Carrying Value	Fair Value
Senior notes	Level 1	$ 3,133	$ 2,983	$ 2,385	$ 2,311
ABL Facility - outstanding balance	Level 2	325	325	1,864	1,864
Total		$ 3,458	$ 3,308	$ 4,249	$ 4,175

The valuation of financial assets classified in Level 2 were determined using a market approach based upon quoted prices for similar assets in active markets or other inputs that were observable.

NOTE 12 - DERIVATIVE INSTRUMENTS AND HEDGING

We are exposed to fluctuations in market prices of raw materials and energy sources. We may use cash-settled commodity swaps to hedge the market risk associated with the purchase of certain of our raw materials and energy requirements. Our hedging strategy is to reduce the effect on earnings from the price volatility of these various commodity exposures, including timing differences between when we incur raw material commodity costs and when we receive sales surcharges from our customers based on those raw materials.

Our commodity contracts are designated as cash flow hedges for accounting purposes, and we record the gains and losses for the derivatives in *Accumulated other comprehensive income* until we reclassify them into *Cost of goods sold* when we recognize the associated underlying operating costs. Refer to NOTE 14 - ACCUMULATED OTHER COMPREHENSIVE INCOME for further information.

Our commodity contracts are classified as Level 2 as values were determined using a market approach based upon quoted prices for similar assets in active markets or other inputs that were observable.

The following table presents the notional amount of our outstanding hedge contracts:

			Notional Amount	
Commodity Contracts	**Unit of Measure**	**Maturity Dates**	**September 30, 2023**	December 31, 2022
Natural Gas	MMBtu	October 2023 - August 2026	**170,485,000**	127,790,000
Electricity	Megawatt hours	October 2023 - October 2026	**3,002,720**	432,043

The following table presents the fair value of our cash flow hedges and the classification in the Statements of Unaudited Condensed Consolidated Financial Position:

Balance Sheet Location (In millions)	**September 30, 2023**	December 31, 2022
Other current assets	**$ 2**	$ 15
Other non-current assets	**4**	30
Other current liabilities	**(79)**	(87)
Other non-current liabilities	**(23)**	(10)

NOTE 13 - CAPITAL STOCK

SHARE REPURCHASE PROGRAM

On February 10, 2022, our Board of Directors authorized a program to repurchase outstanding common shares in the open market or in privately negotiated transactions, which may include purchases pursuant to Rule 10b5-1 plans or accelerated share repurchases, up to a maximum of $1 billion. We are not obligated to make any purchases and the program may be suspended or discontinued at any time. The share repurchase program does not have a specific expiration date. During the three and nine months ended September 30, 2023, we repurchased 3.9 million and 10.4 million common shares, respectively, at a cost of $58 million and $152 million in the aggregate, respectively, excluding excise tax due under the Inflation Reduction Act. During the three and nine months ended September 30, 2022, we repurchased 2.0 million and 10.5 million common shares, respectively, at a cost of $34 million and $210 million in the aggregate, respectively. As of September 30, 2023, there was $608 million remaining under the authorization.

PREFERRED STOCK

We have 3 million shares of Serial Preferred Stock, Class A, without par value, authorized and 4 million shares of Serial Preferred Stock, Class B, without par value, authorized; no preferred shares are issued or outstanding.

NOTE 14 - ACCUMULATED OTHER COMPREHENSIVE INCOME

The following tables reflect the changes in *Accumulated other comprehensive income* related to Cliffs shareholders' equity:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Foreign Currency Translation				
Beginning balance	**$ (1)**	$ (1)	**$ (1)**	$ 1
Other comprehensive loss before reclassifications	**—**	(2)	**—**	(4)
Ending balance	**$ (1)**	$ (3)	**$ (1)**	$ (3)
Derivative Instruments				
Beginning balance	**$ (150)**	$ 109	**$ (16)**	$ 68
Other comprehensive income (loss) before reclassifications	**(21)**	154	**(229)**	292
Income tax	**5**	(38)	**56**	(69)
Other comprehensive income (loss) before reclassifications, net of tax	**(16)**	116	**(173)**	223
Losses (gains) reclassified from AOCI to net income[1]	**63**	(74)	**93**	(158)
Income tax expense (benefit)[2]	**(16)**	19	**(23)**	37
Net losses (gains) reclassified from AOCI to net income	**47**	(55)	**70**	(121)
Ending balance	**$ (119)**	$ 170	**$ (119)**	$ 170
Pension and OPEB				
Beginning balance	**$ 1,794**	$ 550	**$ 1,847**	$ 549
Other comprehensive income before reclassifications	**—**	119	**—**	119
Income tax	**—**	(28)	**—**	(28)
Other comprehensive income before reclassifications, net of tax	**—**	91	**—**	91
Losses (gains) reclassified from AOCI to net income[3]	**(35)**	3	**(106)**	4
Income tax expense (benefit)[2]	**8**	(1)	**26**	(1)
Net losses (gains) reclassified from AOCI to net income	**(27)**	2	**(80)**	3
Ending balance	**$ 1,767**	$ 643	**$ 1,767**	$ 643
Total AOCI Ending Balance	**$ 1,647**	$ 810	**$ 1,647**	$ 810

[1] Amounts recognized in *Cost of goods sold* in the Statements of Unaudited Condensed Consolidated Operations.

[2] Amounts recognized in *Income tax expense* in the Statements of Unaudited Condensed Consolidated Operations.

[3] Amounts recognized in *Net periodic benefit credits other than service cost component* in the Statements of Unaudited Condensed Consolidated Operations.

NOTE 15 - VARIABLE INTEREST ENTITIES

SUNCOKE MIDDLETOWN

We purchase all the coke and electrical power generated from SunCoke Middletown's plant under long-term supply agreements and have committed to purchase all the expected production from the facility through 2032. We consolidate SunCoke Middletown as a VIE because we are the primary beneficiary despite having no ownership interest in SunCoke Middletown. SunCoke Middletown had income before income taxes of $13 million and $40 million for the three and nine months ended September 30, 2023, respectively, compared to $14 million and $36 million for the three and nine months ended September 30, 2022, respectively, that was included in our consolidated income before income taxes. Additionally, SunCoke Middletown had cash used for capital expenditures of $21 million for the nine months ended September 30, 2023, compared to $11 million for the nine months ended September 30, 2022, that was included in our consolidated *Purchase of property, plant and equipment* on the Statements of Unaudited Condensed Consolidated Cash Flows.

The assets of the consolidated VIE can only be used to settle the obligations of the consolidated VIE and not obligations of the Company. The creditors of SunCoke Middletown do not have recourse to the assets or general credit of the Company to satisfy liabilities of the VIE. The Statements of Unaudited Condensed Consolidated Financial Position includes the following amounts for SunCoke Middletown:

(In millions)	September 30, 2023	December 31, 2022
Inventories	$ 30	$ 28
Property, plant and equipment, net	292	288
Accounts payable	(24)	(19)
Other assets (liabilities), net	(33)	(27)
Noncontrolling interests	(265)	(270)

NOTE 16 - EARNINGS PER SHARE

The following table summarizes the computation of basic and diluted EPS:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions, except per share amounts)	2023	2022	2023	2022
Income from continuing operations	$ 274	$ 165	$ 587	$ 1,578
Income from continuing operations attributable to noncontrolling interest	(11)	(13)	(35)	(31)
Net income from continuing operations attributable to Cliffs shareholders	263	152	552	1,547
Income from discontinued operations, net of tax	1	—	2	2
Net income attributable to Cliffs shareholders	$ 264	$ 152	$ 554	$ 1,549
Weighted average number of shares:				
Basic	508	516	512	520
Convertible senior notes	—	—	—	2
Employee stock plans	1	3	1	4
Diluted	509	519	513	526
Earnings per common share attributable to Cliffs shareholders - basic:				
Continuing operations	$ 0.52	$ 0.30	$ 1.08	$ 2.98
Discontinued operations	—	—	—	—
	$ 0.52	$ 0.30	$ 1.08	$ 2.98
Earnings per common share attributable to Cliffs shareholders - diluted:				
Continuing operations	$ 0.52	$ 0.29	$ 1.08	$ 2.95
Discontinued operations	—	—	—	—
	$ 0.52	$ 0.29	$ 1.08	$ 2.95

NOTE 17 - COMMITMENTS AND CONTINGENCIES

PURCHASE COMMITMENTS

We purchase portions of the principal raw materials required for our steel manufacturing operations under annual and multi-year agreements, some of which have minimum quantity requirements. We also use large volumes of natural gas, electricity and industrial gases in our steel manufacturing operations. We negotiate most of our purchases of chrome, industrial gases and a portion of our electricity under multi-year agreements. Our purchases of coke are made under annual or multi-year agreements with periodic price adjustments. We typically purchase coal under annual fixed-price agreements. We also purchase certain transportation services under multi-year contracts with minimum quantity requirements.

CONTINGENCIES

We are currently the subject of, or party to, various claims and legal proceedings incidental to our current and historical operations. These claims and legal proceedings are subject to inherent uncertainties and unfavorable rulings could occur. An unfavorable ruling could include monetary damages, additional funding requirements or an injunction. If an unfavorable ruling were to occur, there exists the possibility of a material adverse effect on our financial position and results of operations for the period in which the ruling occurs or future periods. However, based on currently available information, we do not believe that any pending claims or legal proceedings will result in a material adverse effect in relation to our consolidated financial statements.

ENVIRONMENTAL CONTINGENCIES

Although we believe our operating practices have been consistent with prevailing industry standards, hazardous materials may have been released at operating sites or third-party sites in the past, including operating sites that we no longer own. If we reasonably can, we estimate potential remediation expenditures for those sites where future remediation efforts are probable based on identified conditions, regulatory requirements, or contractual obligations arising from the sale of a business or facility. For sites involving government required investigations, we typically make an estimate of potential remediation expenditures only after the investigation is complete and when we better understand the nature and scope of the remediation. In general, the material factors in these estimates include the costs associated with investigations, delineations, risk assessments, remedial work, governmental response and oversight, site monitoring, and preparation of reports to the appropriate environmental agencies.

The following is a summary of our environmental obligations:

(In millions)	**September 30, 2023**	December 31, 2022
Environmental obligations	**$ 141**	$ 141
Less: current portion	**25**	23
Long-term environmental obligations	**$ 116**	$ 118

We cannot predict the ultimate costs for each site with certainty because of the evolving nature of the investigation and remediation process. Rather, to estimate the probable costs, we must make certain assumptions. The most significant of these assumptions is for the nature and scope of the work that will be necessary to investigate and remediate a particular site and the cost of that work. Other significant assumptions include the cleanup technology that will be used, whether and to what extent any other parties will participate in paying the investigation and remediation costs, reimbursement of past response costs and future oversight costs by governmental agencies, and the reaction of the governing environmental agencies to the proposed work plans. Costs for future investigation and remediation are not discounted to their present value, unless the amount and timing of the cash disbursements are readily known. To the extent that we have been able to reasonably estimate future liabilities, we do not believe that there is a reasonable possibility that we will incur a loss or losses that exceed the amounts we accrued for the environmental matters discussed below that would, either individually or in the aggregate, have a material adverse effect on our consolidated financial condition, results of operations or cash flows. However, since we recognize amounts in the consolidated financial statements in accordance with GAAP that exclude potential losses that are not probable or that may not be currently estimable, the ultimate costs of these environmental matters may be higher than the liabilities we currently have recorded in our consolidated financial statements.

Pursuant to RCRA, which governs the treatment, handling and disposal of hazardous waste, the EPA and authorized state environmental agencies may conduct inspections of RCRA-regulated facilities to identify areas where there have been releases of hazardous waste or hazardous constituents into the environment and may order the facilities to take corrective action to remediate such releases. Likewise, the EPA or the states may require closure or post-closure care of residual, industrial and hazardous waste management units. Environmental regulators have the authority to inspect all of our facilities. While we cannot predict the future actions of these regulators, it is possible that they may identify conditions in future inspections of these facilities that they believe require corrective action.

Pursuant to CERCLA, the EPA and state environmental authorities have conducted site investigations at some of our facilities and other third-party facilities, portions of which previously may have been used for disposal of materials that are currently regulated. The results of these investigations are still pending, and we could be directed to spend funds for remedial activities at the former disposal areas. Because of the uncertain status of these investigations, however, we cannot reasonably predict whether or when such spending might be required or its magnitude.

BURNS HARBOR WATER ISSUES

In August 2019, ArcelorMittal Burns Harbor LLC (n/k/a Cleveland-Cliffs Burns Harbor LLC) suffered a loss of the blast furnace cooling water recycle system, which led to the discharge of cyanide and ammonia in excess of the Burns Harbor plant's NPDES permit limits. Since that time, the facility has taken numerous steps to prevent recurrence and maintain compliance with its NPDES permit. We engaged in settlement discussions with the U.S. Department of Justice, the EPA and the State of Indiana to resolve any alleged violations of environmental laws or regulations arising out of the August 2019 event. Later stages of the settlement discussions included the Environmental Law and Policy Center (ELPC) and Hoosier Environmental Council (HEC), which had filed a lawsuit on December 20, 2019 in the U.S. District Court for the Northern District of Indiana alleging violations resulting from the August 2019 event and other Clean Water Act claims. On February 14, 2022, the United States and the State of Indiana filed a complaint and a proposed consent decree, and on April 21, 2022, the United States, with the consent of all of the parties, filed a motion seeking final approval of the consent decree from the court. The consent decree was approved by the court with an effective date of May 6, 2022. The consent decree requires specified enhancements to the mill's wastewater treatment systems and required us to pay a $3 million civil penalty, along with other terms and conditions. Other parties to the consent decree include the United States, the State of Indiana, ELPC and HEC. The ELPC/HEC civil litigation was dismissed with prejudice on May 12, 2022. In addition, ArcelorMittal Burns Harbor LLC was served with a subpoena on December 5, 2019, from the United States District Court for the Northern District of Indiana, relating to the August 2019 event and has responded to the subpoena requests, including follow-up requests. With the resolution of monetary sanctions and injunctive relief requirements under the consent decree, we do not believe that the costs to resolve any other third-party claims, including potential natural resource damages claims, that may arise out of the August 2019 event are likely to have, individually or in the aggregate, a material adverse effect on our consolidated financial condition, results of operations or cash flows.

In addition to the foregoing matters, we are or may be involved in proceedings with various regulatory authorities that may require us to pay fines, comply with more rigorous standards or other requirements or incur capital and operating expenses for environmental compliance. We believe that the ultimate disposition of any such proceedings will not have, individually or in the aggregate, a material adverse effect on our consolidated financial condition, results of operations or cash flows.

TAX MATTERS

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes will be due. If we ultimately determine that payment of these amounts is unnecessary, we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We also recognize tax benefits to the extent that it is more likely than not that our positions will be sustained when challenged by the taxing authorities. To the extent we prevail in matters for which liabilities have been established, or are required to pay amounts in excess of our liabilities, our effective tax rate in a given period could be materially affected. An unfavorable tax settlement would require use of our cash and result in an increase in our effective tax rate in the year of resolution. A favorable tax settlement would be recognized as a reduction in our effective tax rate in the year of resolution.

OTHER CONTINGENCIES

In addition to the matters discussed above, there are various pending and potential claims against us and our subsidiaries involving product liability, personal injury, commercial, employee benefits and other matters arising in the ordinary course of business. Because of the considerable uncertainties that exist for any claim, it is difficult to reliably or accurately estimate what the amount of a loss would be if a claimant prevails. If material assumptions or factual understandings we rely on to evaluate exposure for these contingencies prove to be inaccurate or otherwise change, we may be required to record a liability for an adverse outcome. If, however, we have reasonably evaluated potential future liabilities for all of these contingencies, including those described more specifically above, it is our opinion, unless we otherwise noted, that the ultimate liability from these contingencies, individually or in the aggregate, should not have a material adverse effect on our consolidated financial position, results of operations or cash flows.

NOTE 18 - SUBSEQUENT EVENTS

On October 6, 2023, we entered into a membership interest purchase agreement for the sale of the legal entities owning, among other things, our closed coal mines in Pennsylvania. As a result of the sale, we anticipate a gain of approximately $60 million to be recorded during the fourth quarter of 2023.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

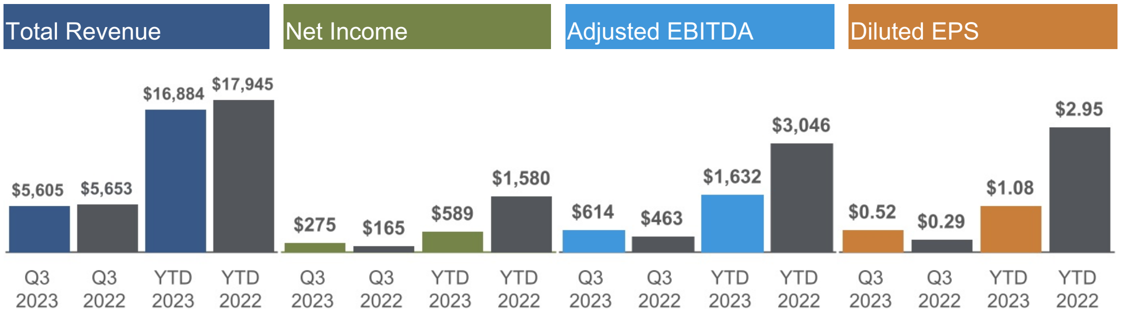
Management's Discussion and Analysis of Financial Condition and Results of Operations is designed to provide a reader of our financial statements with a narrative from the perspective of management on our financial condition, results of operations, liquidity and other factors that may affect our future results. We believe it is important to read our Management's Discussion and Analysis of Financial Condition and Results of Operations in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2022, as well as other publicly available information.

OVERVIEW

We are the largest flat-rolled steel producer in North America. Founded in 1847 as a mine operator, we are also the largest manufacturer of iron ore pellets in North America. We are vertically integrated from mined raw materials, direct reduced iron and ferrous scrap to primary steelmaking and downstream finishing, stamping, tooling and tubing. We are the largest supplier of steel to the automotive industry in North America and serve a diverse range of other markets due to our comprehensive offering of flat-rolled steel products. Headquartered in Cleveland, Ohio, we employ approximately 27,000 people across our operations in the United States and Canada.

FINANCIAL SUMMARY

The following is a summary of our consolidated results for the three and nine months ended September 30, 2023 and 2022 (in millions, except for diluted EPS):



See "— Non-GAAP Financial Measures" below for a reconciliation of our *Net income* to Adjusted EBITDA.

ECONOMIC OVERVIEW

STEEL MARKET OVERVIEW

Steel market conditions in 2023 have been marked by notable volatility, driven by both improved light vehicle production but also inconsistent service center buying behavior. The price for domestic HRC, the most significant index impacting our revenues and profitability, averaged $792 per net ton for the third quarter of 2023, 5% lower than the third quarter of 2022, but above the prior annual ten-year average of approximately $750 per net ton. Demand for steel from automotive manufacturers has improved in 2023 as supply chain issues continued to ease and light vehicles sales have increased. In 2023, the automotive industry had the highest light vehicle production through the first nine months of a year since 2019. Demand for steel from service centers was adversely impacted during the third quarter of 2023 due to the anticipation of and ultimate UAW strike at certain domestic automotive producers. During the third quarter of 2023, service center inventories were as low as 1.6 months of inventory on hand, significantly lower than the prior ten-year average of 2.2 months of inventory on hand. These low inventory levels should generate significant demand for steel throughout the remainder of 2023 and beyond as service centers will need to meet the continued healthy demand from their end-use customers. Additionally, steel imports have remained unattractive for the majority of the first nine months of 2023 due to low pricing spreads between the U.S. and other regions. Looking forward, we expect domestic steel demand to remain healthy as an eventual resolution of the UAW strike should provide meaningful support for steel demand.

The CHIPS Act and Inflation Reduction Act should provide meaningful support for overall domestic steel demand through the remainder of 2023 and beyond. Our extensive portfolio of products should result in increased steel demand from some of our end markets. The CHIPS Act promotes semiconductor manufacturing in the U.S., which should help support non-residential construction as well as machinery and equipment. Additionally, the on-shoring of manufacturing in the U.S. should reduce risk of supply chain issues in the future. The Inflation Reduction Act provides a tax credit for consumers who buy new EVs, which further incentivizes consumers to purchase vehicles in an environment where pent-up demand is still very strong from a low unemployment rate, recent supply chain issues and lower than historical dealer inventory levels. The Inflation Reduction Act also provides incentives for the use of domestic steel for investments in clean energy projects, including wind and solar projects, which consume a substantial amount of steel. We expect to benefit from the spending related to this recently passed legislation for years to come.

KEY DRIVERS

The largest market for our steel products is the automotive industry in North America, which makes light vehicle production a key driver of demand. During the third quarter of 2023, North American light vehicle production was approximately 4.0 million units, down from 4.1 million units in the second quarter of 2023, but higher than any quarterly production volume in 2021 or 2022. Full-year 2023 North American light vehicle production is estimated to exceed 15 million units, which would also be the highest level since 2019. North American light vehicle production in 2024 is estimated to exceed 16 million units, implying that any negative impact to production due to the UAW strike is a deferral of demand rather than lost production. During the first nine months of 2023, light vehicle sales in the U.S. saw an average seasonally adjusted annualized rate of 15.5 million units sold, representing a 14% increase compared to the same period for 2022. Additionally, the average age of light vehicles on the road in the U.S. is at an all-time high of 12.5 years, which should support demand as older vehicles need to be replaced. As the leading supplier of automotive-grade steel in the U.S., we expect to benefit from increased vehicle production over the coming years.

The price for busheling scrap, a necessary input for flat-rolled steel production in EAFs in the U.S., has continued to average well above the prior annual ten-year average of $380 per long ton since 2021. The busheling price averaged $446 per long ton during the third quarter of 2023 and $491 per long ton through the first nine months of 2023. We expect the supply of busheling scrap to further tighten due to decreasing prime scrap generation from original equipment manufacturers and the growth of EAF capacity in the U.S., reduced metallics import availability, and a push for expanded scrap use globally. As we are fully integrated and have primarily a blast furnace footprint, increased prices for busheling scrap in the U.S. bolster our competitive advantage, as we source the majority of our iron feedstock from our stable-cost mining and pelletizing operations in Minnesota and Michigan.

As for iron ore, the Platts 62% price averaged $114 per metric ton in the third quarter of 2023, which is 18% higher than the prior annual ten-year average. While higher iron ore prices play a role in increased steel prices, we also directly benefit from higher iron ore prices for the portion of iron ore pellets we sell to third parties.

OTHER FACTORS

On September 14, 2023, the UAW announced a simultaneous labor strike against three domestic automotive manufacturers, as each of the individual companies have been unable to come to terms on a new labor agreement. The strike originally impacted one assembly plant at each company and was further expanded to additional facilities, including certain parts-distribution centers for each company. Steel demand has remained strong from the automotive industry as the strike has been limited to certain facilities, allowing the automotive manufacturers to continue production at other facilities within their footprint. While we have not yet experienced a meaningful impact from the UAW strike, an expanded or prolonged strike could have negative impacts on demand for automotive steel or domestic automotive production.

In January 2023, we announced that we partnered with the USW and filed antidumping and countervailing duty petitions against eight countries related to unfairly traded tin and chromium coated sheet steel products. Tin mill products are used primarily for packaging applications, particularly canned food. We produce tin mill products at our Weirton, West Virginia operating facility and sell approximately 300,000 net tons per year, representing approximately two percent of total Company steel sales volumes. On June 21, 2023, the U.S. Department of Commerce announced its preliminary affirmative determination in the countervailing duty investigation of tin mill products from China and imposed subsidy rates ranging from 89.02% to 542.55%, based on the exporter. On August 17, 2023, the U.S. Commerce Department announced that it had set preliminary antidumping duties on imports of tin and chromium-coated sheet steel products from Canada, China and Germany. The department determined that imports of these tin mill products were sold to the United States at less than normal value. The department set preliminary antidumping tariffs ranging from 5.29% to 111.98%.

During 2022, we experienced higher costs than the prior year due to inflationary pressures on input and energy costs, as well as lower production volume and higher repair and maintenance spending. We started to benefit from lower costs during the first nine months of 2023 and expect that to continue through the rest of 2023 and through 2024, as many inflationary pressures have started to ease, production volume has improved, and repair and maintenance expenses have begun to normalize.

COMPETITIVE STRENGTHS

As the leading flat-rolled steel producer in North America, we benefit from having the size and scale necessary in a competitive, capital intensive business. Our sizeable operating footprint provides us with the operational leverage and flexibility to achieve competitive margins throughout the business cycle. We also have a unique vertically integrated profile from mined raw materials, direct reduced iron, and ferrous scrap to primary steelmaking and downstream finishing, stamping, tooling and tubing. This positioning gives us more predictable costs throughout our supply chain and more control over both our manufacturing inputs and our end-product destination.

Our primary competitive strength lies within our automotive steel business. We are a leading supplier of automotive-grade steel in the U.S. Compared to other steel end markets, automotive steel is generally higher quality, more operationally and technologically intensive to produce, and requires significantly more devotion to customer service than other steel end markets. This dedication to service and the infrastructure in place to meet our automotive customers' demanding needs took decades to develop. We have continued to invest capital and resources to meet the requirements needed to serve the automotive industry and intend to maintain our position as an industry leader going forward.

Due to its demanding nature, the automotive steel business typically generates higher through-the-cycle margins, making it a desirable end market. Demand for our automotive-grade steel is expected to remain strong in the coming years as a result of low unemployment, pent-up automotive demand arising out of supply chain issues and the replacement of older vehicles.

Our footprint provides us with a competitive advantage in supplying automotive and other highly demanding end markets, as we are able to produce a wide range of high-quality products. Our integrated facilities utilize domestic internally sourced iron ore as the primary feedstock, which allows us to produce a high quality product with low residual content. We also possess the breadth and depth related to customer service, technical support, and research and development, which are necessary to supply the demanding needs of the automotive industry.

Since the acquisition of our steelmaking assets, we have dedicated significant resources to maintain and upgrade our facilities and equipment. The quality of our assets gives us a unique advantage in product offerings and operational efficiencies. In 2022, we brought our facilities and equipment up to the standard required to maintain and improve the quality and reliability of our supply to the automotive industry, as well as other end markets. The necessary resources that we have invested in our footprint are expected to keep our assets at an automotive-grade quality and reliability for years to come.

Our industry leading portfolio of fixed price contracts provides us a competitive advantage, as the steel industry is often viewed as volatile and subject to the market price of steel. Our fixed price contracts mitigate pricing volatility and support us in achieving healthy margins through the cycle.

Our ability to source our primary feedstock domestically and internally is a competitive strength. This model reduces our exposure to volatile pricing and unreliable global sourcing. The ongoing conflict between Russia and Ukraine has displayed the importance of our U.S.-centric footprint, as our competitors who primarily operate EAF facilities rely on imported pig iron to produce flat-rolled steel, the supply of which has been disrupted by that conflict. The best example is our legacy business of producing iron ore pellets. By controlling our iron ore pellet supply, our primary steelmaking raw material feedstock can be secured at a stable and predictable cost and not be subject to as many factors outside of our control.

We believe we offer the most comprehensive flat-rolled steel product selection in the industry, along with several complementary products and services. A sampling of our offering includes advanced high-strength steel, hot-dipped galvanized, aluminized, galvalume, electrogalvanized, galvanneal, HRC, cold-rolled coil, plate, tinplate, GOES, NOES, stainless steels, tool and die, stamped components, rail, slab and cast ingot. Across the quality spectrum and the supply chain, our customers can frequently find the solutions they need from our product selection.

We are currently a leading producer of electrical steels referred to as GOES and NOES in the U.S. In November 2021, the Infrastructure and Jobs Act was passed in the U.S., which provides funding to be used for the modernization of the electrical grid and the infrastructure needed to allow for increased EV adoption, both of which require electrical steels. As a result, we expect to benefit from this position in what we forecast as a rapidly growing market. Our electrical steel business is expected to achieve strong profitability throughout the remainder of 2023 and in the coming years. We also recently commissioned our NOES expansion at our Zanesville facility, which will ultimately increase our annual capacity by approximately 70,000 net tons.

We are the first and the only producer of HBI in the Great Lakes region. Construction of our Toledo direct reduction plant was completed in the fourth quarter of 2020 and reached full run-rate nameplate annual capacity of 1.9 million metric tons during the middle of 2021. From this modern plant, we produce a high-quality, low-cost and low-carbon intensive HBI product that can be used in our blast furnaces as a productivity enhancer, or in our BOFs and EAFs as a premium scrap alternative. We use HBI to stretch our hot metal production, lowering carbon intensity and reliance on coke. With increasing tightness in the scrap and metallics markets combined with our own internal needs, we expect our Toledo direct reduction plant to support healthy margins for us going forward.

STRATEGY

MAXIMIZE OUR COMMERCIAL STRENGTHS

We offer a full suite of flat steel products encompassing all steps of the steel manufacturing process. We are a leading supplier to the automotive sector, where our portfolio of high-end products delivers a broad range of differentiated solutions for this highly sought after customer base.

As a result of our exposure to these high-end markets, we have the highest fixed price contractual volumes in our industry. Approximately 45% of our volumes are sold under these contracts. These contracts reduce volatility and allow for more predictable through-the-cycle margins. Our fixed-price contract values significantly improved throughout 2023 compared to 2022. In addition to our fixed price contracts, we also sell significant volumes under index-linked contracts, which reduces our reliance on spot sales and allows us to improve our efficiency with increased volumes.

Our unique capabilities, driven by our portfolio of assets and technical expertise, give us an advantage in our flat-rolled product offering. We offer products that have superior formability, surface quality, strength and corrosion resistance for the automotive industry. In addition, our state-of-the-art Research and Innovation Center in Middletown, Ohio gives us the ability to collaborate with our customers and create new products and develop new and efficient steel manufacturing processes. During 2022, we introduced our MOTOR-MAX™ product line of NOES for high frequency motors and generators. We also recently introduced our C-STAR™ protection steel, which was developed for the purpose of providing battery support in EVs, but can be used in any type of light vehicle. These unique product offerings and customer service capabilities enable us to remain a leading steel supplier to the automotive industry.

TAKE ADVANTAGE OF OUR U.S.-CENTRIC, INTERNALLY SOURCED SUPPLY CHAIN

The ongoing conflict between Russia and Ukraine has reinforced the unique advantage of our vertically integrated business model. Two-thirds of U.S. imports of pig iron, a critical raw material for flat-rolled EAFs, had historically been sourced from Russia and Ukraine. This supply remains largely disrupted, driving volatility in input costs and reducing availability for our competitors' ferrous inputs. We, on the other hand, produce our pig iron and liquid steel entirely in the U.S., supported by internally sourced iron ore and HBI and supplemented with internally sourced scrap. In addition, our internally produced pig iron is more environmentally friendly than imported pig iron, which is often made from sintered iron ore fines and with higher coke rates, for example. While competitors are forced to rely on suppliers who are subject to unpredictable disruptions in their ability to supply materials, we are able to take advantage of our vertically integrated footprint.

We began construction of our Toledo direct reduction plant in 2017, in part because of the uncertainty of the industry sourcing metallics from Russia and Ukraine. Russia had previously invaded the Crimea peninsula in 2014, and we saw a need for more on-shore metallics capacity in the U.S. HBI, which is a lower-carbon alternative to imported pig iron, has now become a critical component of our decarbonization strategy.

OPTIMIZE OUR FULLY-INTEGRATED STEELMAKING FOOTPRINT

We are a fully-integrated steel enterprise with the size and scale to achieve margins above industry averages for flat-rolled steel. Our focus remains on realizing our inherent cost advantage in flat-rolled steel while also lowering carbon emissions. The combination of our ferrous raw materials, including iron ore, scrap and HBI, allows us to do so relative to peers who must rely on more unpredictable and unreliable raw material sourcing strategies.

We have ample access to scrap along with internally sourced iron ore pellets and HBI. Our ability to optimize use of these raw materials in our blast furnaces and BOFs ultimately boosts liquid steel output, reduces coke needs and lowers carbon emissions from our operations. As a result of successful operational improvements, we announced the indefinite idle of the Indiana Harbor #4 blast furnace in the first quarter of 2022. The indefinite idle reduced our operational blast furnaces from eight to seven. Our strategic use of HBI in our blast furnaces and maximizing scrap usage in our BOFs has allowed us to achieve the same steel production with one less blast furnace in our footprint.

During the second quarter of 2023, it was announced that we entered into long-term state mineral leases for more than 2,600 acres of iron ore at the Nashwauk mine site in Itasca County, Minnesota. The award of these leases resolved years of uncertainty regarding Hibbing Taconite's mine life. This ore body is intended to serve as an extension of Hibbing Taconite, as the state's mineral leases, combined with our own private mineral holdings at Nashwauk, are expected to provide more than two decades of additional ore reserves.

We used 2022 as an opportunity to optimize our steelmaking footprint by dedicating significant resources to bring our facilities and equipment up to the standard required to maintain and improve our supply to the automotive industry. The necessary resources that we have invested in our footprint are expected to keep our assets at automotive-grade quality and reliability for years to come. With our facilities and equipment in the best shape since the acquisition of our steelmaking assets and no major investments expected until at least 2026, we are well positioned to benefit from operating efficiencies and improved capabilities in the coming years.

ADVANCE OUR PARTICIPATION IN THE GREEN ECONOMY

We are seeking to expand our customer base with the rapidly growing and desirable EV market. At this time, we believe the North American automotive industry is at a structural inflection point, with the adoption of electrical motors in passenger vehicles. As this market grows, it will require more advanced steel applications to meet the needs of EV producers and consumers. These features include the already existing sophisticated steel supply for internal combustion engine vehicle parts, along with the added need for steel-based battery enclosures in EVs. With our unique technical capabilities and leadership in the automotive industry, we believe we are positioned better than any other North American steelmaker to supply the steel and parts necessary to fill these needs.

We also have the right products to meet the growing demand for renewable energy as well as for the modernization of the U.S. electrical grid. We offer plate products that can be used in windmills, which we estimate contain 130 tons of steel per megawatt of electricity. In addition, panels for solar power are heavy consumers of galvanized steel, where we are a leading producer. We estimate solar panels consume 40 tons of steel per megawatt of electricity.

We are currently a leading producer of electrical steel in the U.S., which can facilitate the modernization of the U.S. electrical grid. Along with charging networks, electrical steels are also needed in the motors of EVs.

ENHANCE OUR ENVIRONMENTAL SUSTAINABILITY

Our commitment to operating our business in a more environmentally responsible manner remains constant. One of the most important issues impacting our industry, our stakeholders and our planet is climate change. In early 2021, we announced our commitment to reduce GHG emissions 25% from 2017 levels by 2030. This goal represents combined Scope 1 (direct emissions) and Scope 2 (indirect emissions from purchased electricity or other forms of energy) GHG emission reductions across all of our operations. Our 2022 absolute Scope 1 and Scope 2 GHG emissions were below our reduction goal well ahead of our 2030 target year. Since 2017, we have reduced our absolute emissions by 32% from 44 million metric tons to 30 million metric tons of CO_2e in 2022.

We plan to further our efforts towards our GHG emissions reduction goal by focusing on actionable, commercially viable technologies and solutions while supporting research for breakthrough technologies for the primary iron and steel sector. In an effort to build on our GHG emissions reduction progress, we have continued our partnership with the U.S. Department of Energy as part of the Better Climate Challenge initiative, which was established in December 2021. We have continued to pursue opportunities such as carbon capture and the use of hydrogen within our facilities. With the U.S. government funding toward the development of regional hydrogen hubs throughout the country, we expect to dramatically increase our use of hydrogen gas as both a reducing agent and energy source as the clean hydrogen production facilities come online.

In May 2023, we completed a successful blast furnace hydrogen injection trial at Middletown Works. During the trial, hydrogen gas was injected in all 20 tuyeres at the Middletown #3 blast furnace, facilitating the production of clean pig iron. In this trial, hydrogen served as a partial substitute for the fossil fuels necessary for iron reduction, ultimately replacing the release of CO_2 with the release of H_2O (water vapor) with no impact to product quality or operating efficiency.

In October 2023, the U.S. Department of Energy announced the intention to award funding under the Bipartisan Infrastructure Law for seven regional hydrogen hubs, including the Midwest Alliance for Clean Hydrogen. This hub covering Illinois, Indiana and Michigan was selected for $1 billion in funding and is near our two largest steel plants, Indiana Harbor and Burns Harbor. We are currently constructing a pipeline to bring hydrogen to our Indiana Harbor blast furnace #7. The use of hydrogen within our blast furnace is expected to partially displace the release of CO2 with H2O, reducing our overall emissions.

Our future GHG emissions reductions are expected to be driven by the use of direct reduced iron in blast furnaces, the stretching of hot metal with additional scrap, driving more productivity out of fewer blast furnaces, implementing hydrogen use where possible, utilizing carbon capture, procuring more clean energy and operating with higher energy efficiency.

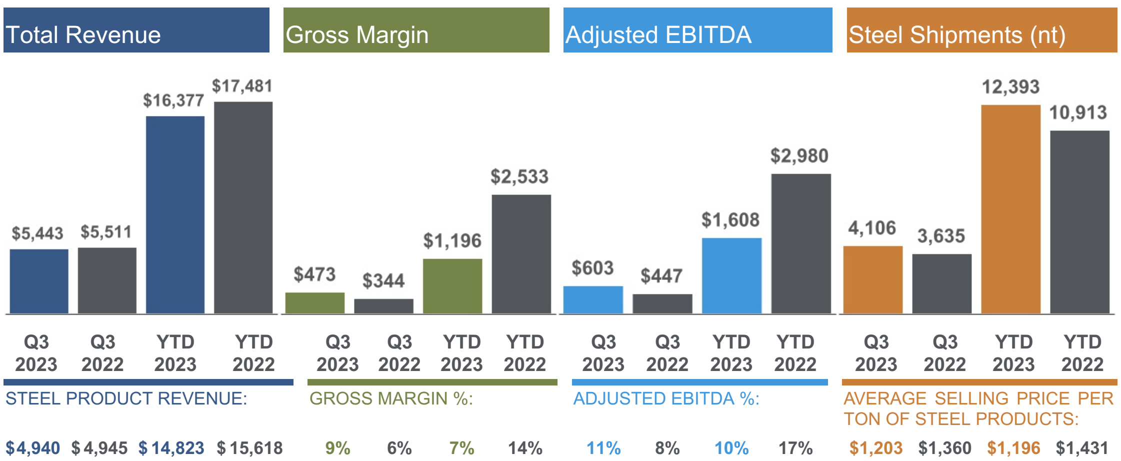
IMPROVE FINANCIAL FLEXIBILITY

Given the cyclicality of our business, it is important to us to be in the financial position to easily withstand economic cycles. Since the acquisition of our steelmaking assets, we have demonstrated our ability to generate healthy free cash flow and use it to reduce substantial amounts of debt, return capital to shareholders through our share repurchase program and make investments to both improve and grow our business. During the third quarter of 2023, we reduced the principal amount of outstanding debt by $508 million while returning $58 million in capital to shareholders via share repurchases. We have also historically shown our ability to take advantage of volatility in the debt markets and repurchase notes at a discount. During 2022, we repurchased $351 million aggregate principal amount of assorted series of notes at an average price of 92% of par.

We expect to have ample opportunities to reduce our debt with our own free cash flow generation through the remainder of 2023 and in the coming years. It is also important for us to maintain sufficient liquidity. Pursuant to the Fourth ABL Amendment, certain assets of Ferrous Processing and Trading Company were pledged as collateral to secure borrowings under the ABL Facility during the third quarter of 2023. Our liquidity as of September 30, 2023 is the highest in our Company's history.

STEELMAKING RESULTS

The following is a summary of our Steelmaking segment operating results for the three and nine months ended September 30, 2023 and 2022 (dollars in millions, except for average selling price and shipments in thousands of net tons):



REVENUES

The following tables represent our steel shipments by product and total revenues by market:

	Three Months Ended September 30,			Nine Months Ended September 30,		
(In thousands of net tons)	**2023**	2022	**% Change**	**2023**	2022	**% Change**
Steel shipments by product:						
Hot-rolled steel	**1,475**	1,055	40 %	**4,427**	2,996	48 %
Cold-rolled steel	**564**	530	6 %	**1,806**	1,771	2 %
Coated steel	**1,239**	1,203	3 %	**3,651**	3,636	— %
Stainless and electrical steel	**169**	196	(14) %	**524**	579	(9) %
Plate	**234**	228	3 %	**686**	687	— %
Slab and other steel products	**425**	423	— %	**1,299**	1,244	4 %
Total steel shipments by product	**4,106**	3,635	13 %	**12,393**	10,913	14 %

	Three Months Ended September 30,			Nine Months Ended September 30,		
(In millions)	**2023**	2022	**% Change**	**2023**	2022	**% Change**
Steelmaking revenues by market:						
Direct automotive	**$ 1,958**	$ 1,734	13 %	**$ 5,808**	$ 4,985	17 %
Infrastructure and manufacturing	**1,427**	1,462	(2) %	**4,315**	4,619	(7) %
Distributors and converters	**1,321**	1,468	(10) %	**4,020**	5,137	(22) %
Steel producers	**737**	847	(13) %	**2,234**	2,740	(18) %
Total Steelmaking revenues by market	**$ 5,443**	$ 5,511	(1) %	**$ 16,377**	$ 17,481	(6) %

Revenues decreased by 1% during the three months ended September 30, 2023, as compared to the prior-year period, primarily due to:

- A decrease of $147 million, or 10%, in revenues from the distributors and converters market, predominantly due to the average HRC price declining, which was partially offset by increased hot-rolled steel shipments; and
- A decrease of $110 million, or 13%, in revenues from the steel producers markets, predominantly due to the decrease in pricing indices for slabs and busheling scrap.
- These decreases were partially offset by an increase in the direct automotive market of $224 million, or 13%, primarily due to increases in selling prices as a result of favorable renewals of annual fixed-price contracts and an increase in shipments.

Revenues decreased by 6% during the nine months ended September 30, 2023, as compared to the prior-year period, primarily due to:

- A decrease of $1,117 million, or 22%, in revenues from the distributors and converters market, predominantly due to the average HRC price declining, which was partially offset by increased hot-rolled steel shipments; and
- A decrease of $506 million, or 18%, in revenues from the steel producers markets, predominantly due to the decrease in pricing indices for slabs and busheling scrap.
- These decreases were partially offset by an increase in revenues from the direct automotive market of $823 million, or 17%, predominantly due to increases in selling prices as a result of favorable renewals of annual fixed-price contracts and an increase in shipments.

GROSS MARGIN

Gross margin increased by $129 million, or 38%, during the three months ended September 30, 2023, as compared to the prior-year period, primarily due to:

- A decrease in costs of production (approximately $500 million) driven by lower raw materials and utilities costs, including natural gas, coal, coke, alloys and scrap, coupled with decreased maintenance costs; and
- An increase in sales volume (approximately $100 million impact).
- These increases in gross margin were partially offset by a decrease in selling prices (approximately $400 million impact), predominantly due to lower spot prices, which was partially offset by favorable renewals of annual fixed price contracts.

Gross margin decreased by $1,337 million, or 53%, during the nine months ended September 30, 2023, as compared to the prior-year period, primarily due to:

- A decrease in selling prices (approximately $2.4 billion impact) predominantly due to lower spot prices, which was partially offset by favorable renewals of annual fixed price contracts.
- This decrease was partially offset by an increase in sales volume (approximately $600 million impact); and
- A decrease in costs of production (approximately $400 million) driven by lower raw materials and utilities costs, including natural gas, coal, coke, alloys and scrap, coupled with decreased maintenance costs.

ADJUSTED EBITDA

Adjusted EBITDA from our Steelmaking segment for the three months ended September 30, 2023, increased by $156 million, as compared to the three months ended September 30, 2022, primarily due to the increased gross margin from our operations. Additionally, our Steelmaking Adjusted EBITDA included $138 million and $117 million of *Selling, general and administrative expenses* for the three months ended September 30, 2023 and 2022, respectively.

Adjusted EBITDA from our Steelmaking segment for the nine months ended September 30, 2023, decreased by $1,372 million, as compared to the nine months ended September 30, 2022, primarily due to the decreased gross margin from our operations. Additionally, our Steelmaking Adjusted EBITDA included $398 million and $331 million of *Selling, general and administrative expenses* for the nine months ended September 30, 2023 and 2022, respectively.

RESULTS OF OPERATIONS

REVENUES & GROSS MARGIN

During the three and nine months ended September 30, 2023, our consolidated *Revenues* decreased by $48 million and $1,061 million, respectively, compared to the prior-year periods. The decrease for the three months ended September 30, 2023, was primarily due to the decrease in the average steel product selling price of $157 per net ton, partially offset by the increase of 0.5 million net tons of steel shipments from our Steelmaking segment. The decrease for the nine months ended September 30, 2023, was primarily due to the decrease in the average steel product selling price of $235 per net ton, partially offset by the increase of 1.5 million net tons of steel shipments from our Steelmaking segment.

During the three and nine months ended September 30, 2023, our consolidated gross margin increased by $132 million and decreased by $1,355 million, respectively, as compared to the prior-year periods. See "— Steelmaking Results" above for further detail on our operating results.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

During the three and nine months ended September 30, 2023, *Selling, general and administrative expenses* increased by $20 million and $67 million, respectively, as compared to the prior-year periods. The increases were primarily related to higher employment-related costs and outside legal fees.

MISCELLANEOUS - NET

During the three and nine months ended September 30, 2023, miscellaneous expense decreased by $26 million and $78 million, respectively, as compared to the prior-year periods. The decrease in miscellaneous expense for the three months ended September 30, 2023, was primarily related to lower idle expenses and loss on disposal of assets as compared to the prior-year period. The decrease in miscellaneous expense for the nine months ended September 30, 2023, was also impacted by the higher expenses in 2022 related to our asset retirement obligation, which was caused by rising electricity costs associated with water management systems at closed coal mines in Pennsylvania and an impairment expense, both of which were not repeated during 2023.

INCOME TAXES

Our effective tax rate is impacted by state income tax expense and permanent items, primarily depletion. It also is affected by discrete items that may occur in any given period but are not consistent from period to period. The following represents a summary of our tax provision and corresponding effective rates:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Income tax expense	**$ (29)**	$ (10)	**$ (118)**	$ (404)
Effective tax rate	**10 %**	6 %	**17 %**	20 %

The changes in income tax expense and the effective tax rate for the three and nine months ended September 30, 2023, as compared to the prior-year periods, are primarily related to the changes in pre-tax income. Additionally, for the nine months ended September 30, 2023, we had $18 million of discrete benefit, as compared to $3 million of discrete expense for the nine months ended September 30, 2022.

Our 2023 estimated annual effective tax rate before discrete items at September 30, 2023 is 19%. This estimated annual effective tax rate is less than the U.S. statutory rate of 21%, as state income tax expense is less than the percentage depletion in excess of cost depletion. The 2022 estimated annual effective tax rate before discrete items at September 30, 2022 was 20%.

LIQUIDITY, CASH FLOWS AND CAPITAL RESOURCES

OVERVIEW

Our capital allocation decision-making process is focused on preserving healthy liquidity levels while maintaining the strength of our balance sheet and creating financial flexibility to manage through the cyclical demand for our products and volatility in commodity prices. We are focused on maximizing the cash generation of our operations, reducing debt, returning capital to shareholders and aligning capital investments with our strategic priorities and the requirements of our business plan, including regulatory and permission-to-operate related projects.

The following table provides a summary of our cash flow:

	Nine Months Ended September 30,	
(In millions)	**2023**	2022
Cash flows provided by (used in):		
Operating activities	**$ 1,615**	$ 1,934
Investing activities	**(470)**	(727)
Financing activities	**(1,140)**	(1,199)
Net increase in cash and cash equivalents	**$ 5**	$ 8
Free cash flow[1]	**$ 1,134**	$ 1,218

[1]See "— Non-GAAP Financial Measures" for a reconciliation of our free cash flow.

The recent market environment has provided us opportunities to reduce our debt and return capital to shareholders with our free cash flow generation. We also continue to look at the composition of our debt, as we are interested in both extending our average maturity length and increasing our ratio of unsecured debt to secured debt, which can be accomplished with cash provided by operating activities. During the first nine months of 2023, we took action in alignment with our capital allocation priorities, as follows:

- We issued $750 million aggregate principal amount of our 6.750% 2030 Senior Notes. The net proceeds from the 6.750% 2030 Senior Notes issuance were used to repay a portion of the borrowings under our ABL Facility. The transaction increased our financial flexibility and liquidity, extended our debt maturity profile, and was effectively leverage and interest expense neutral.
- We entered into the Fourth ABL Amendment, which, among other things, extended the maturity date of our ABL Facility to June 9, 2028, and increased the overall size of our ABL Facility to $4.75 billion, which added $250 million of liquidity.
- We used our free cash flow to reduce the total principal of our long-term debt by $789 million. This includes a reduction of borrowings under the ABL Facility of $508 million during the third quarter of 2023.
- Additionally, we returned capital to shareholders through our share repurchase program, repurchasing 10.4 million common shares at a cost of $152 million in the aggregate. This includes repurchasing 3.9 million common shares at a cost of $58 million during the third quarter of 2023.

These actions with respect to our debt give us additional financial flexibility and liquidity, along with extending our average maturity date, which will better prepare us to navigate more easily through potentially volatile industry conditions in the future.

Additionally, we expect to have opportunities to continue to reduce our debt and return capital to shareholders with our free cash flow generation during the remainder of 2023. As of September 30, 2023, we maintained in excess of $300 million in pre-payable debt under our ABL Facility and another $1.5 billion in callable notes. As of September 30, 2023, there was $608 million remaining under the authorization of our share repurchase program.

CASH FLOWS

OPERATING ACTIVITIES

(In millions)	Nine Months Ended September 30, 2023	2022	Variance
Net income	**$ 589**	$ 1,580	$ (991)
Non-cash adjustments to net income	**872**	1,097	(225)
Working capital:			
Accounts receivable, net	**(164)**	(145)	(19)
Inventories	**538**	(348)	886
Income taxes	**16**	(109)	125
Pension and OPEB payments and contributions	**(84)**	(174)	90
Payables, accrued employment and accrued expenses	**(95)**	66	(161)
Other, net	**(57)**	(33)	(24)
Total working capital	**154**	(743)	897
Net cash provided by operating activities	**$ 1,615**	$ 1,934	$ (319)

The variance was driven by:

- A $1,216 million decrease in net income after adjustments for non-cash items primarily due to lower gross margins resulting from a decrease in selling prices for our steel products, which was partially offset by an increase in sales volumes and a decrease in costs of production. See "— Steelmaking Results" above for further detail on our operating results.
- A $897 million decrease in cash used for working capital. This was primarily due to a decrease in inventories, as a result of higher sales volumes and lower production costs during the nine months ended September 30, 2023, as compared to the prior-year period. Cash used for OPEB payments and contributions decreased as well due to reductions in retiree healthcare costs and the pause on the VEBA trust plans funding requirements as part of the 2022 USW labor negotiations. Additionally, working capital was impacted by a decrease in repair and maintenance costs during the nine months ended September 30, 2023.

INVESTING ACTIVITIES

(In millions)	Nine Months Ended September 30, 2023	2022	Variance
Purchase of property, plant and equipment	**$ (481)**	$ (716)	$ 235
Acquisitions, net of cash acquired	**—**	(31)	31
Other	**11**	20	(9)
Net cash used by investing activities	**$ (470)**	$ (727)	$ 257

Cash used for capital expenditures decreased $235 million due to the completion of our major maintenance cycle in 2022. Included within cash used for capital expenditures was $21 million for the nine months ended September 30, 2023, compared to $11 million for the nine months ended September 30, 2022, related to our non-owned SunCoke Middletown VIE. Our capital expenditures primarily relate to sustaining capital spend, which includes infrastructure, mobile equipment, fixed equipment, product quality, environmental, and health and safety.

We anticipate total cash used for capital expenditures during the next 12 months to be between $675 and $725 million, which primarily consists of sustaining capital spend. With our facilities and equipment in the best shape since the acquisition of our steelmaking assets, we do not expect any major investments until at least 2026.

FINANCING ACTIVITIES

(In millions)	Nine Months Ended September 30, 2023	2022	Variance
Proceeds (repayments) of senior notes	**$ 750**	$ (1,355)	$ 2,105
Net borrowings (repayments) under credit facilities	**(1,539)**	481	(2,020)
Repurchase of common shares	**(152)**	(210)	58
Other	**(199)**	(115)	(84)
Net cash used by financing activities	**$ (1,140)**	$ (1,199)	$ 59

The variance was driven by:

- A $59 million decrease in cash used during the nine months ended September 30, 2023, primarily resulting from lower net repayments of senior notes, partially offset by increased repayments on our ABL Facility, as compared to the prior-year period.

LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of liquidity are *Cash and cash equivalents,* cash generated from our operations, availability under our ABL Facility and access to capital markets. We generally maintain minimal cash balances and utilize our access to our ABL Facility to cover fluctuations in our cash requirements. Cash and cash equivalents, which totaled $31 million as of September 30, 2023, include cash on hand and on deposit. The combination of cash and availability under our ABL Facility gives us $4.36 billion in liquidity as of September 30, 2023. During the second quarter of 2023, we issued $750 million in aggregate principal amount of our 6.750% 2030 Senior Notes. We used the net proceeds from the offering to repay a portion of the borrowings under our ABL Facility, increasing our liquidity. Additionally, during the second quarter of 2023, we entered into the Fourth ABL Amendment to our ABL Facility, increasing our liquidity by $250 million. We believe our liquidity and access to capital markets will be adequate to fund our cash requirements for the next 12 months and for the foreseeable future.

Our ABL Facility, which now matures in June 2028, has a maximum borrowing base of $4.75 billion, determined by applying customary advance rates to eligible accounts receivable, inventory and certain mobile equipment. Our ABL Facility includes a $555 million sublimit for the issuance of letters of credit and a $200 million sublimit for swingline loans. As of September 30, 2023, outstanding letters of credit totaled $94 million, which reduced availability. We issue standby letters of credit with certain financial institutions in order to support business obligations, including, but not limited to, workers' compensation, operating agreements, employee severance, environmental obligations and insurance. Our ABL Facility agreement contains various financial and other covenants. As of September 30, 2023, we were in compliance with all of our ABL Facility covenants.

We have the capability to issue additional unsecured notes and, subject to the limitations set forth in our existing senior notes indentures and ABL Facility, additional secured notes, if we elect to access the debt capital markets. However, our ability to issue additional notes could be limited by market conditions. We intend from time to time to seek to redeem or repurchase our outstanding senior notes with cash on hand, borrowings from existing credit sources or new debt financings and/or exchanges for debt or equity securities, in open market purchases, privately negotiated transactions or otherwise. Such redemptions or repurchases, if any, will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors, and the amounts involved may be material.

Refer to NOTE 7 - DEBT AND CREDIT FACILITIES for more information on our ABL Facility and debt.

NON-GAAP FINANCIAL MEASURES

ADJUSTED EBITDA

We evaluate performance on an operating segment basis, as well as a consolidated basis, based on Adjusted EBITDA, which is a non-GAAP measure. This measure is used by management, investors, lenders and other external users of our financial statements to assess our operating performance and to compare operating performance to other companies in the steel industry. In addition, management believes Adjusted EBITDA is a useful measure to assess the earnings power of the business without the impact of capital structure and can be used to assess our ability to service debt and fund future capital expenditures in the business.

The following table provides a reconciliation of our *Net income* to Adjusted EBITDA:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Net income	**$ 275**	$ 165	**$ 589**	$ 1,580
Less:				
Interest expense, net	**(70)**	(64)	**(226)**	(205)
Income tax expense	**(29)**	(10)	**(118)**	(404)
Depreciation, depletion and amortization	**(249)**	(237)	**(738)**	(788)
Total EBITDA	**$ 623**	$ 476	**$ 1,671**	$ 2,977
Less:				
EBITDA of noncontrolling interests[1]	**$ 20**	$ 22	**$ 60**	$ 57
Gain (loss) on extinguishment of debt	**—**	4	**—**	(76)
Asset impairment	**—**	—	**—**	(29)
Other, net	**(11)**	(13)	**(21)**	(21)
Total Adjusted EBITDA	**$ 614**	$ 463	**$ 1,632**	$ 3,046
[1] EBITDA of noncontrolling interests includes the following:				
Net income attributable to noncontrolling interests	**$ 11**	$ 13	**$ 35**	$ 31
Depreciation, depletion and amortization	**9**	9	**25**	26
EBITDA of noncontrolling interests	**$ 20**	$ 22	**$ 60**	$ 57

The following table provides a summary of our Adjusted EBITDA by segment:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In millions)	**2023**	2022	**2023**	2022
Adjusted EBITDA:				
Steelmaking	**$ 603**	$ 447	**$ 1,608**	$ 2,980
Other Businesses	**9**	9	**32**	58
Corporate and eliminations	**2**	7	**(8)**	8
Total Adjusted EBITDA	**$ 614**	$ 463	**$ 1,632**	$ 3,046

FREE CASH FLOW

Free cash flow is a non-GAAP financial measure defined as operating cash flow less purchase of property, plant and equipment. Management believes it is an important measure to assess the cash generation available to service debt, strategic initiatives or other financing activities.

The following table provides a reconciliation of our operating cash flows to free cash flow:

	Nine Months Ended September 30,	
(In millions)	**2023**	2022
Net cash provided by operating activities	**$ 1,615**	$ 1,934
Purchase of property, plant and equipment	**(481)**	(716)
Free cash flow	**$ 1,134**	$ 1,218

INFORMATION ABOUT OUR GUARANTORS AND THE ISSUER OF OUR GUARANTEED SECURITIES

The accompanying summarized financial information has been prepared and presented pursuant to SEC Regulation S-X, Rule 3-10, “Financial Statements of Guarantors and Issuers of Guaranteed Securities Registered or Being Registered,” and Rule 13-01 "Financial Disclosures about Guarantors and Issuers of Guaranteed Securities and Affiliates Whose Securities Collateralized a Registrant's Securities." Certain of our subsidiaries (the "Guarantor subsidiaries") as of September 30, 2023 have fully and unconditionally, and jointly and severally, guaranteed the obligations under (a) the 5.875% 2027 Senior Notes, the 7.000% 2027 Senior Notes, the 4.625% 2029 Senior Notes, the 6.750% 2030 Senior Notes, and the 4.875% 2031 Senior Notes issued by Cleveland-Cliffs Inc. on a senior unsecured basis and (b) the 6.750% 2026 Senior Secured Notes issued by Cleveland-Cliffs Inc. on a senior secured basis. See NOTE 7 - DEBT AND CREDIT FACILITIES for further information.

The following presents the summarized financial information on a combined basis for Cleveland-Cliffs Inc. (parent company and issuer of the guaranteed obligations) and the Guarantor subsidiaries, collectively referred to as the obligated group. Transactions between the obligated group have been eliminated. Information for the non-Guarantor subsidiaries was excluded from the combined summarized financial information of the obligated group.

Each Guarantor subsidiary is consolidated by Cleveland-Cliffs Inc. as of September 30, 2023. Refer to Exhibit 22, incorporated herein by reference, for the detailed list of entities included within the obligated group as of September 30, 2023.

As of September 30, 2023, the guarantee of a Guarantor subsidiary with respect to Cliffs' 6.750% 2026 Senior Secured Notes, the 5.875% 2027 Senior Notes, the 7.000% 2027 Senior Notes, the 4.625% 2029 Senior Notes, the 6.750% 2030 Senior Notes and the 4.875% 2031 Senior Notes will be automatically and unconditionally released and discharged, and such Guarantor subsidiary's obligations under the guarantee and the related indentures (the "Indentures") will be automatically and unconditionally released and discharged, upon the occurrence of any of the following, along with the delivery to the trustee of an officer's certificate and an opinion of counsel, each stating that all conditions precedent provided for in the applicable Indenture relating to the release and discharge of such Guarantor subsidiary's guarantee have been complied with:

(a) any sale, exchange, transfer or disposition of such Guarantor subsidiary (by merger, consolidation, or the sale of) or the capital stock of such Guarantor subsidiary after which the applicable Guarantor subsidiary is no longer a subsidiary of the Company or the sale of all or substantially all of such Guarantor subsidiary's assets (other than by lease), whether or not such Guarantor subsidiary is the surviving entity in such transaction, to a person which is not the Company or a subsidiary of the Company; provided that (i) such sale, exchange, transfer or disposition is made in compliance with the applicable Indenture, including the covenants regarding consolidation, merger and sale of assets and, as applicable, dispositions of assets that constitute notes collateral, and (ii) all the obligations of such Guarantor subsidiary under all debt of the Company or its subsidiaries terminate upon consummation of such transaction;

(b) designation of any Guarantor subsidiary as an "excluded subsidiary" (as defined in the Indentures); or

(c) defeasance or satisfaction and discharge of the Indentures.

Each entity in the summarized combined financial information follows the same accounting policies as described in the consolidated financial statements. The accompanying summarized combined financial information does not reflect investments of the obligated group in non-Guarantor subsidiaries. The financial information of the obligated group is presented on a combined basis; intercompany balances and transactions within the obligated group have been eliminated. The obligated group's amounts due from, amounts due to, and transactions with, non-Guarantor subsidiaries and related parties have been presented in separate line items.

SUMMARIZED COMBINED FINANCIAL INFORMATION OF THE ISSUER AND GUARANTOR SUBSIDIARIES:

The following table is summarized combined financial information from the Statements of Unaudited Condensed Consolidated Financial Position of the obligated group:

(In millions)	**September 30, 2023**	December 31, 2022
Current assets	**$ 6,867**	$ 7,063
Non-current assets	**10,306**	9,935
Current liabilities	**(3,603)**	(3,866)
Non-current liabilities	**(6,046)**	(6,630)

The following table is summarized combined financial information from the Statements of Unaudited Condensed Consolidated Operations of the obligated group:

(In millions)	**Nine Months Ended September 30, 2023**
Revenues	**$ 16,679**
Cost of goods sold	**(15,561)**
Income from continuing operations	**483**
Net income	**484**
Net income attributable to Cliffs shareholders	**484**

The obligated group had the following balances with non-Guarantor subsidiaries and other related parties:

(In millions)	**September 30, 2023**	December 31, 2022
Balances with non-Guarantor subsidiaries:		
Accounts receivable, net	**$ 188**	$ 163
Accounts payable	**(532)**	(527)
Balances with other related parties:		
Accounts receivable, net	**$ 2**	$ 8
Accounts payable	**(12)**	(13)

Additionally, for the nine months ended September 30, 2023, the obligated group had *Revenues* of $95 million and *Cost of goods sold* of $70 million, in each case, with other related parties.

MARKET RISKS

We are subject to a variety of risks, including those caused by changes in commodity prices and interest rates. We have established policies and procedures to manage such risks; however, certain risks are beyond our control.

PRICING RISKS

In the ordinary course of business, we are exposed to market risk and price fluctuations related to the sale of our products, which are impacted primarily by market prices for HRC and other related spot pricing indices, and the purchase of energy and raw materials used in our operations, which are impacted by market prices for natural gas, electricity, ferrous and stainless steel scrap, chrome, metallurgical coal, coke, zinc and nickel. Our strategy to address market risk has generally been to obtain competitive prices for our products and services and allow operating results to reflect market price movements dictated by supply and demand; however, we make forward physical purchases and enter into hedge contracts to manage exposure to price risk related to the purchases of certain raw materials and energy used in the production process.

Our financial results can vary for our operations as a result of fluctuations in market prices. We attempt to mitigate these risks by aligning fixed and variable components in our customer pricing contracts, supplier purchasing agreements and derivative financial instruments.

Some customer contracts have fixed-pricing terms, which increase our exposure to fluctuations in raw material and energy costs. To reduce our exposure, we enter into annual, fixed-price agreements for certain raw materials. Some of our existing multi-year raw material supply agreements have required minimum purchase quantities. Under adverse economic conditions, those minimums may exceed our needs. Absent exceptions for force majeure and other circumstances affecting the legal enforceability of the agreements, these minimum purchase requirements may compel us to purchase quantities of raw materials that could significantly exceed our anticipated needs or pay damages to the supplier for shortfalls. In these circumstances, we would attempt to negotiate agreements for new purchase quantities. There is a risk, however, that we would not be successful in reducing purchase quantities, either through negotiation or litigation. If that occurred, we would likely be required to purchase more of a particular raw material in a particular year than we need, negatively affecting our results of operations and cash flows.

Certain of our customer contracts include variable-pricing mechanisms that adjust selling prices in response to changes in the costs of certain raw materials and energy, while other of our customer contracts exclude such mechanisms. We may enter into multi-year purchase agreements for certain raw materials with similar variable-price mechanisms, allowing us to achieve natural hedges between the customer contracts and supplier purchase agreements. Therefore, in some cases, price fluctuations for energy (particularly natural gas and electricity), raw materials (such as scrap, chrome, zinc and nickel) or other commodities may be, in part, passed on to customers rather than absorbed solely by us. There is a risk, however, that the variable-price mechanisms in the sales contracts may not necessarily change in tandem with the variable-price mechanisms in our purchase agreements, negatively affecting our results of operations and cash flows.

Our strategy to address volatile natural gas rates and electricity rates includes improving efficiency in energy usage, identifying alternative providers and utilizing the lowest cost alternative fuels. If we are unable to align fixed and variable components between customer contracts and supplier purchase agreements, we use cash-settled commodity price swaps to hedge the market risk associated with the purchase of certain of our raw materials and energy requirements. Additionally, we routinely evaluate the use of these derivative instruments to hedge a portion of our natural gas, electricity, tin and zinc requirements. Our hedging strategy is designed to protect us from excessive pricing volatility. However, since we do not typically hedge 100% of our exposure, abnormal price increases in any of these commodity markets might still negatively affect operating costs.

The following table summarizes the negative effect of a hypothetical change in the fair value of our derivative instruments outstanding as of September 30, 2023, due to a 10% and 25% change in the market price of each of the indicated commodities:

Commodity Derivative (In millions)	**10% Change**	**25% Change**
Natural gas	$ **61**	$ **152**
Electricity	**13**	**33**

Any resulting changes in fair value would be recorded as adjustments to AOCI, net of income taxes, or recognized in net earnings, as appropriate. These hypothetical losses would be partially offset by the benefit of lower prices paid for the related commodities.

VALUATION OF GOODWILL AND OTHER LONG-LIVED ASSETS

GOODWILL

We assign goodwill arising from acquired companies to the reporting units that are expected to benefit from the synergies of the acquisition. Goodwill is tested on a qualitative or quantitative basis for impairment at the reporting unit level on an annual basis (October 1) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. These events or circumstances could include a significant change in the business climate, legal factors, operating performance indicators, competition, or sale or disposition of a significant portion of a reporting unit. We have an unconditional option to bypass the qualitative test for any reporting unit in any period and proceed directly to performing the quantitative test. Should our qualitative test indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we perform a quantitative test to determine the amount of impairment, if any, to the carrying value of the reporting unit and its associated goodwill.

Application of the goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units and if a quantitative assessment is deemed necessary in determination of the fair value of each reporting unit. The fair value of each reporting unit is estimated using the guideline public company method, the discounted cash flow methodology, or a combination of both, which considers forecasted cash flows discounted at an estimated weighted average cost of capital. Assessing the recoverability of our goodwill requires significant assumptions regarding the estimated future cash flows and other factors to determine the fair value of a reporting unit, including, among other things, estimates related to forecasts of future revenues, expected Adjusted EBITDA, expected capital expenditures and working capital requirements, which are based upon our long-range plan estimates. The assumptions used to calculate the fair value of a reporting unit may change from year to year based on operating results, market conditions and other factors. Changes in these assumptions could materially affect the determination of fair value for each reporting unit.

Our Tooling and Stamping reporting unit fair value was not substantially in excess of its carrying values as of September 30, 2023. A slower than anticipated resolution of the supply chain issues related to the global semiconductor shortages that have hampered the automotive industry, higher than expected capital requirements, and/or an increase in the discount rate could result in future impairment indicators.

OTHER LONG-LIVED ASSETS

Long-lived assets are reviewed for impairment upon the occurrence of events or changes in circumstances that would indicate that the carrying value of the assets may not be recoverable. Such indicators may include: a significant decline in expected future cash flows; a sustained, significant decline in market pricing; a significant adverse change in legal or environmental factors or in the business climate; changes in estimates of our recoverable reserves; and unanticipated competition. Any adverse change in these factors could have a significant impact on the recoverability of our long-lived assets and could have a material impact on our consolidated statements of operations and statements of financial position.

A comparison of each asset group's carrying value to the estimated undiscounted net future cash flows expected to result from the use of the assets, including cost of disposition, is used to determine if an asset is recoverable. Projected future cash flows reflect management's best estimate of economic and market conditions over the projected period, including growth rates in revenues and costs, and estimates of future expected changes in operating margins and capital expenditures. If the carrying value of the asset group is higher than its undiscounted net future cash flows, the asset group is measured at fair value and the difference is recorded as a reduction to the long-lived assets. We estimate fair value using a market approach, an income approach or a cost approach. For the nine months ended September 30, 2023, we concluded that there were no additional triggering events resulting in the need for an impairment assessment.

INTEREST RATE RISK

Interest payable on our senior notes is at fixed rates. Interest payable under our ABL Facility is at a variable rate based upon the applicable base rate plus the applicable base rate margin depending on the excess availability. As of September 30, 2023, we had $325 million outstanding under our ABL Facility. An increase in prevailing interest rates would increase interest expense and interest paid for any outstanding borrowings under our ABL Facility. For example, a 100 basis point change to interest rates under our ABL Facility at the September 30, 2023 borrowing level would result in a change of $3 million to interest expense on an annual basis.

SUPPLY CONCENTRATION RISKS

Many of our operations and mines rely on one source each of electric power and natural gas. A significant interruption or change in service or rates from our energy suppliers could materially impact our production costs, margins and profitability.

FORWARD-LOOKING STATEMENTS

This report contains statements that constitute "forward-looking statements" within the meaning of the federal securities laws. As a general matter, forward-looking statements relate to anticipated trends and expectations rather than historical matters. Forward-looking statements are subject to uncertainties and factors relating to our operations and business environment that are difficult to predict and may be beyond our control. Such uncertainties and factors may cause actual results to differ materially from those expressed or implied by the forward-looking statements. These statements speak only as of the date of this report, and we undertake no ongoing obligation, other than that imposed by law, to update these statements. Investors are cautioned not to place undue reliance on forward-looking statements. Uncertainties and risk factors that could affect our future performance and cause results to differ from the forward-looking statements in this report include, but are not limited to:

- continued volatility of steel, iron ore and scrap metal market prices, which directly and indirectly impact the prices of the products that we sell to our customers;
- uncertainties associated with the highly competitive and cyclical steel industry and our reliance on the demand for steel from the automotive industry, which has been experiencing supply chain disruptions, such as the semiconductor shortage, the UAW strike, and higher consumer interest rates, which could result in lower steel volumes being demanded;
- potential weaknesses and uncertainties in global economic conditions, excess global steelmaking capacity, oversupply of iron ore, prevalence of steel imports and reduced market demand, including as a result of inflationary pressures, infectious disease outbreaks, conflicts or otherwise;

- severe financial hardship, bankruptcy, temporary or permanent shutdowns or operational challenges of one or more of our major customers, including customers in the automotive market, key suppliers or contractors, which, among other adverse effects, could disrupt our operations or lead to reduced demand for our products, increased difficulty collecting receivables, and customers and/or suppliers asserting force majeure or other reasons for not performing their contractual obligations to us;
- disruptions to our operations relating to an infectious disease outbreak, including workforce challenges and the risk that novel variants will prove resistant to existing vaccines or that new or continuing pandemic lockdowns in China will impact our ability to source certain critical supplies in a timely and predictable manner;
- risks related to U.S. government actions with respect to Section 232, the USMCA and/or other trade agreements, tariffs, treaties or policies, as well as the uncertainty of obtaining and maintaining effective antidumping and countervailing duty orders to counteract the harmful effects of unfairly traded imports;
- impacts of existing and increasing governmental regulation, including potential environmental regulations relating to climate change and carbon emissions, and related costs and liabilities, including failure to receive or maintain required operating and environmental permits, approvals, modifications or other authorizations of, or from, any governmental or regulatory authority and costs related to implementing improvements to ensure compliance with regulatory changes, including potential financial assurance requirements, and reclamation and remediation obligations;
- potential impacts to the environment or exposure to hazardous substances resulting from our operations;
- our ability to maintain adequate liquidity, our level of indebtedness and the availability of capital could limit our financial flexibility and cash flow necessary to fund working capital, planned capital expenditures, acquisitions, and other general corporate purposes or ongoing needs of our business;
- our ability to reduce our indebtedness or return capital to shareholders within the currently expected timeframes or at all;
- adverse changes in credit ratings, interest rates, foreign currency rates and tax laws, including adverse impacts as a result of the Inflation Reduction Act;
- the outcome of, and costs incurred in connection with, lawsuits, claims, arbitrations or governmental proceedings relating to commercial and business disputes, antitrust claims, environmental matters, government investigations, occupational or personal injury claims, property-related matters, labor and employment matters, or suits involving legacy operations and other matters;
- uncertain availability or cost, due to inflation or otherwise, of critical manufacturing equipment and spare parts;
- supply chain disruptions or changes in the cost, quality or availability of energy sources, including electricity, natural gas and diesel fuel, or critical raw materials and supplies, including iron ore, industrial gases, graphite electrodes, scrap metal, chrome, zinc, coke and metallurgical coal;
- problems or disruptions associated with transporting products to our customers, moving manufacturing inputs or products internally among our facilities, or suppliers transporting raw materials to us;
- the risk that the cost or time to implement a strategic or sustaining capital project may prove to be greater than originally anticipated;
- our ability to consummate any public or private acquisition transactions and to realize any or all of the anticipated benefits or estimated future synergies, as well as to successfully integrate any acquired businesses into our existing businesses;
- uncertainties associated with natural or human-caused disasters, adverse weather conditions, unanticipated geological conditions, critical equipment failures, infectious disease outbreaks, tailings dam failures and other unexpected events;
- cybersecurity incidents relating to, disruptions in, or failures of, information technology systems that are managed by us or third parties that host or have access to our data and systems, including the loss, theft or corruption of sensitive or essential business or personal information and the inability to access or control systems;
- liabilities and costs arising in connection with any business decisions to temporarily or indefinitely idle or permanently close an operating facility or mine, which could adversely impact the carrying value of associated assets and give rise to impairment charges or closure and reclamation obligations, as well as uncertainties associated with restarting any previously idled operating facility or mine;
- our level of self-insurance and our ability to obtain sufficient third-party insurance to adequately cover potential adverse events and business risks;
- uncertainties associated with our ability to meet customers’ and suppliers’ decarbonization goals and reduce our GHG emissions in alignment with our own announced targets;
- challenges to maintaining our social license to operate with our stakeholders, including the impacts of our operations on local communities, reputational impacts of operating in a carbon-intensive industry that produces GHG emissions, and our ability to foster a consistent operational and safety track record;
- our actual economic mineral reserves or reductions in current mineral reserve estimates, and any title defect or loss of any lease, license, easement or other possessory interest for any mining property;

- our ability to maintain satisfactory labor relations with unions and employees;
- unanticipated or higher costs associated with pension and OPEB obligations resulting from changes in the value of plan assets or contribution increases required for unfunded obligations;
- uncertain availability or cost of skilled workers to fill critical operational positions and potential labor shortages caused by experienced employee attrition or otherwise, as well as our ability to attract, hire, develop and retain key personnel;
- the amount and timing of any repurchases of our common shares; and
- potential significant deficiencies or material weaknesses in our internal control over financial reporting.

For additional factors affecting our business, refer to *Part II – Item 1A. Risk Factors* of this Quarterly Report on Form 10-Q You are urged to carefully consider these risk factors.

Forward-looking and other statements in this Quarterly Report on Form 10-Q regarding our GHG reduction plans and goals are not an indication that these statements are necessarily material to investors or required to be disclosed in our filings with the SEC. In addition, historical, current and forward-looking GHG-related statements may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve and assumptions that are subject to change in the future.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Information regarding our market risk is presented under the caption "Market Risks," which is included in our Annual Report on Form 10-K for the year ended December 31, 2022, and *Part I – Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations* of this Quarterly Report on Form 10-Q.

ITEM 4. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our President and Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure based solely on the definition of “disclosure controls and procedures” in Rule 13a-15(e) promulgated under the Exchange Act. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As of the end of the period covered by this report, we carried out an evaluation under the supervision and with the participation of our management, including our President and Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our President and Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective.

There was no change in the Company’s internal control over financial reporting during the quarter ended September 30, 2023 that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Environmental Matters. SEC regulations require us to disclose certain information about administrative or judicial proceedings involving the environment and to which a governmental authority is a party if we reasonably believe that such proceedings may result in monetary sanctions above a stated threshold. Pursuant to SEC regulations, we use a threshold of $1 million for purposes of determining whether disclosure of any such proceedings is required. We believe that this threshold is reasonably designed to result in disclosure of any such proceedings that are material to our business or financial condition.

We have described the other material pending legal proceedings, including administrative or judicial proceedings involving the environment, to which we are a party in our Annual Report on Form 10-K for the year ended December 31, 2022, and in NOTE 17 - COMMITMENTS AND CONTINGENCIES to the consolidated financial statements in *Part I – Item 1. Financial Statements* of this Quarterly Report on Form 10-Q, which is incorporated herein by reference.

ITEM 1A. RISK FACTORS

We caution readers that our business activities involve risks and uncertainties that could cause actual results to differ materially from those currently expected by management. We described the most significant risks that could impact our results in Part I, Item 1A, "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2022.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES, USE OF PROCEEDS, AND ISSUER PURCHASES OF EQUITY SECURITIES

The following table presents information with respect to repurchases by the Company of our common shares during the periods indicated:

ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares (or Units) Purchased[1]	Average Price Paid per Share (or Unit)[2]	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs[3]
July 1 - 31, 2023	823	$ 16.55	—	$ 666,390,714
August 1 - 31, 2023	3,853,004	$ 15.11	3,850,000	$ 608,285,509
September 1 - 30, 2023	3,545	$ 16.84	—	$ 608,285,509
Total	**3,857,372**	**$ 15.11**	**3,850,000**	

[1] Includes 823 shares that were delivered to us in July 2023, 3,004 shares that were delivered to us in August 2023, and 3,545 shares that were delivered to us in September 2023, in each case, to satisfy tax withholding obligations due upon the vesting or payment of stock awards.

[2] Excludes the 1% excise tax on net stock repurchases.

[3] On February 11, 2022, we announced that our Board of Directors authorized a program to repurchase our outstanding common shares in the open market or in privately negotiated transactions, which may include purchases pursuant to Rule 10b5-1 plans or accelerated share repurchases, up to a maximum of $1 billion. We are not obligated to make any repurchases, and the program may be suspended or discontinued at any time. The share repurchase program does not have a specific expiration date.

ITEM 4. MINE SAFETY DISCLOSURES

We are committed to protecting the occupational health and well-being of each of our employees. Safety is one of our core values and we strive to ensure that safe production is the first priority for all employees. Our internal objective is to achieve zero injuries and incidents across the Company by focusing on proactively identifying needed prevention activities, establishing standards and evaluating performance to mitigate any potential loss to people, equipment, production and the environment. We have implemented intensive employee training that is geared toward maintaining a high level of awareness and knowledge of safety and health issues in the work environment through the development and coordination of requisite information, skills and attitudes. We believe that through these policies, we have developed an effective safety management system.

Under the Dodd-Frank Act, each operator of a coal or other mine is required to include certain mine safety results within its periodic reports filed with the SEC. As required by the reporting requirements included in §1503(a) of the Dodd-Frank Act and Item 104 of Regulation S-K, the information concerning mining safety and health or other regulatory matters for each of our mine locations that are covered under the scope of the Dodd-Frank Act are included in Exhibit 95 of *Part II – ITEM 6. EXHIBITS* of this Quarterly Report on Form 10-Q.

ITEM 5. OTHER INFORMATION

During the quarter ended September 30, 2023, no director or officer (as defined in Rule 16a-1(f) promulgated under the Exchange Act) of the Company adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement" (as each term is defined in Item 408 of Regulation S-K).

ITEM 6. EXHIBITS

All documents referenced below have been filed pursuant to the Securities Exchange Act of 1934 by Cleveland-Cliffs Inc., file number 1-09844, unless otherwise indicated.

Exhibit Number	Exhibit
4.1	Sixth Supplemental Indenture, dated as of July 31, 2023, among Cleveland-Cliffs Inc., the Additional Guarantors party thereto and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as trustee (filed herewith).
4.2	Sixth Supplemental Indenture, dated as of July 31, 2023, among Cleveland-Cliffs Inc., the Additional Guarantors party thereto, U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as trustee, and U.S. Bank National Association, as first lien notes collateral agent (filed herewith).
4.3	Fifth Supplemental Indenture, dated as of July 31, 2023, among Cleveland-Cliffs Inc., the Additional Guarantors party thereto and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as trustee (filed herewith).
4.4	Second Supplemental Indenture, dated as of July 31, 2023, among Cleveland-Cliffs Inc., the Additional Guarantors party thereto and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as trustee (filed herewith).
4.5	First Supplemental Indenture, dated as of July 31, 2023, among Cleveland-Cliffs Inc., the Additional Guarantors party thereto and U.S. Bank Trust Company, National Association, as trustee (filed herewith).
22	Schedule of the obligated group, including the parent and issuer and the subsidiary guarantors that have guaranteed the obligations under the 6.750% 2026 Senior Secured Notes, the 5.875% 2027 Senior Notes, the 7.000% 2027 Senior Notes, the 4.625% 2029 Senior Notes, the 6.750% 2030 Senior Notes and the 4.875% 2031 Senior Notes issued by Cleveland-Cliffs Inc. (filed herewith).
31.1	Certification Pursuant to 15 U.S.C. Section 7241, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, signed and dated by Lourenco Goncalves as of October 25, 2023 (filed herewith).
31.2	Certification Pursuant to 15 U.S.C. Section 7241, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, signed and dated by Celso L. Goncalves Jr. as of October 25, 2023 (filed herewith).
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, signed and dated by Lourenco Goncalves, Chairman, President and Chief Executive Officer of Cleveland-Cliffs Inc., as of October 25, 2023 (filed herewith).
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, signed and dated by Celso L. Goncalves Jr., Executive Vice President, Chief Financial Officer of Cleveland-Cliffs Inc., as of October 25, 2023 (filed herewith).
95	Mine Safety Disclosures (filed herewith).
101	The following financial information from Cleveland-Cliffs Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2023 formatted in Inline XBRL (Extensible Business Reporting Language) includes: (i) the Statements of Unaudited Condensed Consolidated Financial Position, (ii) the Statements of Unaudited Condensed Consolidated Operations, (iii) the Statements of Unaudited Condensed Consolidated Comprehensive Income, (iv) the Statements of Unaudited Condensed Consolidated Cash Flows, (v) the Statements of Unaudited Condensed Consolidated Changes in Equity, and (vi) Notes to the Unaudited Condensed Consolidated Financial Statements.
104	The cover page from this Quarterly Report on Form 10-Q, formatted in Inline XBRL and contained in Exhibit 101.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CLEVELAND-CLIFFS INC.

By: /s/ Kimberly A. Floriani

Name: Kimberly A. Floriani

Title: Senior Vice President, Controller & Chief Accounting Officer

Date: October 25, 2023

EXHIBIT 4.1

SIXTH SUPPLEMENTAL INDENTURE
5.875% SENIOR GUARANTEED NOTES DUE 2027

This Sixth Supplemental Indenture is made as of July 31, 2023 (this " **Supplemental Indenture**" or "**Guarantee**"), among Cleveland-Cliffs FPT Services Company, an Ohio corporation, Cleveland-Cliffs Services Holding Company, an Ohio corporation, Ferrous Processing and Trading Company, a Michigan corporation, FPT Cleveland, LLC, a Michigan limited liability company, FPT Florida, LLC, a Michigan limited liability company, FPT - Schlafer Division L.L.C., a Michigan limited liability company, Koil Metals L.L.C., a Michigan limited liability company, Lonyo Land L.L.C., a Michigan limited liability company, SLC Acquisition L.L.C., a Michigan limited liability company (collectively, the "**Additional Guarantors**"), Cleveland-Cliffs Inc., an Ohio corporation (together with its successors and assigns, the "**Company**") and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as Trustee (the "**Trustee**") under the Indenture referred to below.

WITNESSETH:

WHEREAS, the Company, the Guarantors party thereto and the Trustee have heretofore executed and delivered an Indenture, dated as of May 13, 2019 (as amended, supplemented, waived or otherwise modified, the "**Indenture**"), providing for the issuance of an aggregate principal amount of $750,000,000 of 5.875% Senior Guaranteed Notes due 2027 of the Company (the "**Notes**");

WHEREAS, Section 3.08 of the Indenture provides that, after the Issue Date, the Company is required to cause certain direct or indirect Subsidiaries of the Company to execute and deliver to the Trustee a supplemental indenture pursuant to which such Subsidiary will unconditionally guarantee, on a joint and several basis with the other Guarantors, the full and prompt payment of the principal of, premium, if any, and interest on the Notes on an unsecured basis; and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee and the Company are authorized to execute and deliver this Supplemental Indenture to amend or supplement the Indenture, without the consent of any Holder.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Additional Guarantor, the Company and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

ARTICLE 1
Definitions

Section 1.01 *Defined Terms*. As used in this Supplemental Indenture, terms defined in the Indenture or in the preamble or recitals hereto are used herein as therein defined. The words "herein," "hereof" and "hereby" and other words of similar import used in this Supplemental Indenture refer to this Supplemental Indenture as a whole and not to any particular section hereof.

ARTICLE 2
Agreement to be Bound; Guarantee

Section 2.01 *Agreement to be Bound*. Each Additional Guarantor hereby becomes a party to the Indenture as a Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Guarantor under the Indenture. Each Additional Guarantor agrees to be bound by all of the provisions of the Indenture applicable to a Guarantor and to perform all of the obligations and agreements of a Guarantor under the Indenture.

Section 2.02 *Guarantee*. Each Additional Guarantor agrees, on a joint and several basis with all the existing Guarantors, to fully, unconditionally and irrevocably Guarantee to each Holder of the Notes and the Trustee the Guaranteed Obligations pursuant to Article 10 of the Indenture on an unsecured basis.

ARTICLE 3
Miscellaneous

Section 3.01 *Notices*. All notices and other communications to the Additional Guarantors shall be given as provided in the Indenture to the Additional Guarantors, at their respective addresses set forth below, with a copy to the Company as provided in the Indenture for notices to the Company.

Cleveland-Cliffs FPT Services Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Cleveland-Cliffs Services Holding Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Ferrous Processing and Trading Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Cleveland, LLC
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
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Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Florida, LLC
c/o Cleveland-Cliffs Inc.
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FPT - Schlafer Division L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Koil Metals L.L.C.
c/o Cleveland-Cliffs Inc.
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Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Lonyo Land L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
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Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

SLC Acquisition L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Section 3.02 *Parties*. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, other than the Company, the Additional Guarantors, Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this Supplemental Indenture or the Indenture or any provision herein or therein contained.

Section 3.03 *Governing Law*. This Supplemental Indenture shall be governed by, and construed in accordance with, the laws of the State of New York.

Section 3.04 *Severability Clause*. In case any provision in this Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

Section 3.05 *Ratification of Indenture; Supplemental Indenture Part of Indenture*. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Notes heretofore or hereafter authenticated and delivered shall be bound hereby. The Trustee shall not be responsible for and makes no representation or warranty as to the validity, execution, or sufficiency of this Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

Section 3.06 *Counterparts*. The parties hereto may sign one or more copies of this Supplemental Indenture in counterparts, all of which together shall constitute one and the same agreement.

Section 3.07 *Headings*. The headings of the Articles and the sections in this Guarantee are for convenience of reference only and shall not be deemed to alter or affect the meaning or interpretation of any provisions hereof.

Section 3.08 *Execution, Delivery and Validity*. The Company and the Additional Guarantors each represent and warrant to the Trustee that this Supplemental Indenture has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, except as enforcement may be limited by equitable principles or by bankruptcy, insolvency, receivership, administration, reorganization, moratorium, or similar laws relating to or limiting creditors’ rights generally.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

CLEVELAND-CLIFFS FPT SERVICES COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

CLEVELAND-CLIFFS SERVICES HOLDING COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FERROUS PROCESSING AND TRADING COMPANY, as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

FPT CLEVELAND, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT FLORIDA, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT - SCHLAFER DIVISION, L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

KOIL METALS L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

LONYO LAND L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

SLC ACQUISITION L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

CLEVELAND-CLIFFS INC.

By: /s/ Celso L. Goncalves Jr.
Name: Celso L. Goncalves Jr.
Title: Executive Vice President, Chief Financial Officer

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION (successor in interest to U.S. Bank National Association), as Trustee

By: /s/ William E. Sicking

Name: William E. Sicking

Title: Vice President

EXHIBIT 4.2

SIXTH SUPPLEMENTAL INDENTURE
6.75% SENIOR SECURED NOTES DUE 2026

This Sixth Supplemental Indenture is made as of July 31, 2023 (this " **Supplemental Indenture**" or "**Guarantee**"), among Cleveland-Cliffs FPT Services Company, an Ohio corporation, Cleveland-Cliffs Services Holding Company, an Ohio corporation, Ferrous Processing and Trading Company, a Michigan corporation, FPT Cleveland, LLC, a Michigan limited liability company, FPT Florida, LLC, a Michigan limited liability company, FPT – Schlafer Division L.L.C., a Michigan limited liability company, Koil Metals L.L.C., a Michigan limited liability company, Lonyo Land L.L.C., a Michigan limited liability company, SLC Acquisition L.L.C., a Michigan limited liability company (collectively, the "**Additional Guarantors**"), Cleveland-Cliffs Inc., an Ohio corporation (together with its successors and assigns, the "**Company**"), U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as Trustee, and U.S. Bank National Association, as First Lien Notes Collateral Agent under the Indenture referred to below.

WITNESSETH:

WHEREAS, the Company, the Guarantors, the First Lien Notes Collateral Agent and the Trustee have heretofore executed and delivered an Indenture, dated as of March 13, 2020 (as amended, supplemented, waived or otherwise modified, the "**Indenture**"), providing for the issuance of an aggregate principal amount of $845,000,000 of 6.75% Senior Secured Notes due 2026 of the Company (the "**Notes**");

WHEREAS, Section 3.08 of the Indenture provides that, after the Issue Date, the Company is required to cause certain direct or indirect Subsidiaries of the Company to execute and deliver to the Trustee a supplemental indenture pursuant to which such Subsidiary will unconditionally guarantee, on a joint and several basis with the other Guarantors, the full and prompt payment of the principal of, premium, if any, and interest on the Notes on a secured basis; and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee and the Company are authorized to execute and deliver this Supplemental Indenture to amend or supplement the Indenture, without the consent of any Holder.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Additional Guarantors, the Company and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

ARTICLE 1
Definitions

Section 1.01 *Defined Terms*. As used in this Supplemental Indenture, terms defined in the Indenture or in the preamble or recitals hereto are used herein as therein defined. The words "herein," "hereof" and "hereby" and other words of similar import used in this Supplemental Indenture refer to this Supplemental Indenture as a whole and not to any particular section hereof.

ARTICLE 2
Agreement to be Bound; Guarantee

Section 2.01 *Agreement to be Bound*. Each Additional Guarantor hereby becomes a party to the Indenture as a Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Guarantor under the Indenture. Each Additional Guarantor hereby becomes a party to the Security Agreement, pursuant to the terms of such agreement, as a Grantor thereunder with the same force and effect as if originally named therein as a Grantor and as such hereby assumes all obligations and liabilities of a Grantor thereunder. Each Additional Guarantor agrees to be bound by all of the provisions of the Indenture and the Collateral Documents applicable to a Guarantor and to perform all of the obligations and agreements of a Guarantor under the Indenture and the Collateral Documents.

Section 2.02 *Guarantee*. Each Additional Guarantor agrees, on a joint and several basis with all the existing Guarantors, to fully, unconditionally and irrevocably Guarantee to each Holder of the Notes and the Trustee the Guaranteed Obligations pursuant to Article 10 of the Indenture on a secured basis.

ARTICLE 3
Miscellaneous

Section 3.01 *Notices*. All notices and other communications to the Additional Guarantors shall be given as provided in the Indenture to the Additional Guarantors, at their respective addresses set forth below, with a copy to the Company as provided in the Indenture for notices to the Company.

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Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Section 3.02 *Parties*. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, other than the Company, the Additional Guarantors, Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this Supplemental Indenture or the Indenture or any provision herein or therein contained.

Section 3.03 *Governing Law*. This Supplemental Indenture shall be governed by, and construed in accordance with, the laws of the State of New York.

Section 3.04 *Severability Clause*. In case any provision in this Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

Section 3.05 *Ratification of Indenture; Supplemental Indenture Part of Indenture*. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Notes heretofore or hereafter authenticated and delivered shall be bound hereby. The Trustee shall not be responsible for and makes no representation or warranty as to the validity, execution, or sufficiency of this Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

Section 3.06 *Counterparts*. The parties hereto may sign one or more copies of this Supplemental Indenture in counterparts, all of which together shall constitute one and the same agreement.

Section 3.07 *Headings*. The headings of the Articles and the sections in this Guarantee are for convenience of reference only and shall not be deemed to alter or affect the meaning or interpretation of any provisions hereof.

Section 3.08 *Execution, Delivery and Validity*. The Company and the Additional Guarantors each represent and warrant to the Trustee that this Supplemental Indenture has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, except as enforcement may be limited by equitable principles or by bankruptcy, insolvency, receivership, administration, reorganization, moratorium, or similar laws relating to or limiting creditors' rights generally.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

CLEVELAND-CLIFFS FPT SERVICES COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

CLEVELAND-CLIFFS SERVICES HOLDING COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FERROUS PROCESSING AND TRADING COMPANY, as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

FPT CLEVELAND, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT FLORIDA, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT - SCHLAFER DIVISION, L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

KOIL METALS L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

LONYO LAND L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

SLC ACQUISITION L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

CLEVELAND-CLIFFS INC.

By: /s/ Celso L. Goncalves Jr.
Name: Celso L. Goncalves Jr.
Title: Executive Vice President, Chief Financial Officer

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION (successor in interest to U.S. Bank National Association), as Trustee

By: /s/ William E. Sicking
Name: William E. Sicking
Title: Vice President

U.S. BANK NATIONAL ASSOCIATION, as First Lien Notes Collateral Agent

By: /s/ William E. Sicking
Name: William E. Sicking
Title: Vice President

EXHIBIT 4.3

FIFTH SUPPLEMENTAL INDENTURE
7.00% SENIOR GUARANTEED NOTES DUE 2027

This Fifth Supplemental Indenture is made as of July 31, 2023 (this “ **Supplemental Indenture**” or “**Guarantee**”), among Cleveland-Cliffs FPT Services Company, an Ohio corporation, Cleveland-Cliffs Services Holding Company, an Ohio corporation, Ferrous Processing and Trading Company, a Michigan corporation, FPT Cleveland, LLC, a Michigan limited liability company, FPT Florida, LLC, a Michigan limited liability company, FPT - Schlafer Division L.L.C., a Michigan limited liability company, Koil Metals L.L.C., a Michigan limited liability company, Lonyo Land L.L.C., a Michigan limited liability company, SLC Acquisition L.L.C., a Michigan limited liability company (collectively, the “**Additional Guarantors**”), Cleveland-Cliffs Inc., an Ohio corporation (together with its successors and assigns, the “**Company**”) and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as Trustee under the Indenture referred to below.

WITNESSETH:

WHEREAS, the Company, the Guarantors and the Trustee have heretofore executed and delivered an Indenture, dated as of March 16, 2020 (as amended, supplemented, waived or otherwise modified, the “**Indenture**”), providing for the issuance of an aggregate principal amount of $335,376,000 of 7.00% Senior Guaranteed Notes due 2027 of the Company (the “**Notes**”);

WHEREAS, Section 3.08 of the Indenture provides that, after the Issue Date, the Company is required to cause certain direct or indirect Subsidiaries of the Company to execute and deliver to the Trustee a supplemental indenture pursuant to which such Subsidiary will unconditionally guarantee, on a joint and several basis with the other Guarantors, the full and prompt payment of the principal of, premium, if any, and interest on the Notes on an unsecured basis; and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee and the Company are authorized to execute and deliver this Supplemental Indenture to amend or supplement the Indenture, without the consent of any Holder.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Additional Guarantors, the Company and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

ARTICLE 1
Definitions

Section 1.01 *Defined Terms*. As used in this Supplemental Indenture, terms defined in the Indenture or in the preamble or recitals hereto are used herein as therein defined. The words “herein,” “hereof” and “hereby” and other words of similar import used in this Supplemental Indenture refer to this Supplemental Indenture as a whole and not to any particular section hereof.

ARTICLE 2
Agreement to be Bound; Guarantee

Section 2.01 *Agreement to be Bound*. Each Additional Guarantor hereby becomes a party to the Indenture as a Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Guarantor under the Indenture. Each Additional Guarantor agrees to be bound by all of

the provisions of the Indenture applicable to a Guarantor and to perform all of the obligations and agreements of a Guarantor under the Indenture.

Section 2.02 *Guarantee*. Each Additional Guarantor agrees, on a joint and several basis with all the existing Guarantors, to fully, unconditionally and irrevocably Guarantee to each Holder of the Notes and the Trustee the Guaranteed Obligations pursuant to Article 10 of the Indenture on an unsecured basis.

ARTICLE 3
Miscellaneous

Section 3.01 *Notices*. All notices and other communications to the Additional Guarantors shall be given as provided in the Indenture to the Additional Guarantors, at their respective addresses set forth below, with a copy to the Company as provided in the Indenture for notices to the Company.

Cleveland-Cliffs FPT Services Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Cleveland-Cliffs Services Holding Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Ferrous Processing and Trading Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Cleveland, LLC
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Florida, LLC
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT - Schlafer Division L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Koil Metals L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Lonyo Land L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

SLC Acquisition L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Section 3.02 *Parties*. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, other than the Company, the Additional Guarantors, Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this Supplemental Indenture or the Indenture or any provision herein or therein contained.

Section 3.03 *Governing Law*. This Supplemental Indenture shall be governed by, and construed in accordance with, the laws of the State of New York.

Section 3.04 *Severability Clause*. In case any provision in this Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

Section 3.05 *Ratification of Indenture; Supplemental Indenture Part of Indenture*. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Notes heretofore or hereafter authenticated and delivered shall be bound hereby. The Trustee shall not be responsible for and makes no representation or warranty as to the validity, execution or sufficiency of this Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

Section 3.06 *Counterparts*. The parties hereto may sign one or more copies of this Supplemental Indenture in counterparts, all of which together shall constitute one and the same agreement.

Section 3.07 *Headings*. The headings of the Articles and the sections in this Guarantee are for convenience of reference only and shall not be deemed to alter or affect the meaning or interpretation of any provisions hereof.

Section 3.08 *Execution, Delivery and Validity*. The Company and the Additional Guarantors each represent and warrant to the Trustee that this Supplemental Indenture has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, except as enforcement may be limited by equitable principles or by bankruptcy, insolvency, receivership, administration, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

CLEVELAND-CLIFFS FPT SERVICES COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

CLEVELAND-CLIFFS SERVICES HOLDING COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FERROUS PROCESSING AND TRADING COMPANY, as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

FPT CLEVELAND, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT FLORIDA, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT - SCHLAFER DIVISION L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

KOIL METALS L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

LONYO LAND L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

SLC ACQUISITION L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

CLEVELAND-CLIFFS INC.

By: /s/ Celso L. Goncalves Jr.
Name: Celso L. Goncalves Jr.
Title: Executive Vice President, Chief Financial Officer

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION (successor in interest to U.S. Bank National Association), as Trustee

By: /s/ William E. Sicking
Name: William E. Sicking
Title: Vice President

EXHIBIT 4.4

SECOND SUPPLEMENTAL INDENTURE
4.625% SENIOR GUARANTEED NOTES DUE 2029
4.875% SENIOR GUARANTEED NOTES DUE 2031

This Second Supplemental Indenture is made as of July 31, 2023 (this " **Supplemental Indenture**" or "**Guarantee**"), among Cleveland-Cliffs FPT Services Company, an Ohio corporation, Cleveland-Cliffs Services Holding Company, an Ohio corporation, Ferrous Processing and Trading Company, a Michigan corporation, FPT Cleveland, LLC, a Michigan limited liability company, FPT Florida, LLC, a Michigan limited liability company, FPT - Schlafer Division L.L.C., a Michigan limited liability company, Koil Metals L.L.C., a Michigan limited liability company, Lonyo Land L.L.C., a Michigan limited liability company, SLC Acquisition L.L.C., a Michigan limited liability company (collectively, the " **Additional Guarantors** "), Cleveland-Cliffs Inc., an Ohio corporation (together with its successors and assigns, the "**Company**") and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as Trustee (the "**Trustee**") under the Indenture referred to below.

WITNESSETH:

WHEREAS, the Company, the Guarantors party thereto and the Trustee have heretofore executed and delivered an Indenture, dated as of February 17, 2021 (as amended, supplemented, waived or otherwise modified, the "**Indenture**"), providing for the issuance of an aggregate principal amount of $500,000,000 of 4.625% Senior Guaranteed Notes due 2029 and $500,000,000 of 4.875% Senior Guaranteed Notes due 2031 of the Company (collectively, the "**Notes**");

WHEREAS, Section 3.08 of the Indenture provides that, after the Issue Date, the Company is required to cause certain direct or indirect Subsidiaries of the Company to execute and deliver to the Trustee a supplemental indenture pursuant to which such Subsidiary will unconditionally guarantee, on a joint and several basis with the other Guarantors, the full and prompt payment of the principal of, premium, if any, and interest on the Notes on an unsecured basis; and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee and the Company are authorized to execute and deliver this Supplemental Indenture to amend or supplement the Indenture, without the consent of any Holder.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Additional Guarantors, the Company and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

ARTICLE 1
Definitions

Section 1.01 *Defined Terms*. As used in this Supplemental Indenture, terms defined in the Indenture or in the preamble or recitals hereto are used herein as therein defined. The words "herein," "hereof" and "hereby" and other words of similar import used in this Supplemental Indenture refer to this Supplemental Indenture as a whole and not to any particular section hereof.

ARTICLE 2
Agreement to be Bound; Guarantee

Section 2.01 *Agreement to be Bound*. Each Additional Guarantor hereby becomes a party to the Indenture as a Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Guarantor under the Indenture. Each Additional Guarantor agrees to be bound by all of

the provisions of the Indenture applicable to a Guarantor and to perform all of the obligations and agreements of a Guarantor under the Indenture.

Section 2.02 *Guarantee*. Each Additional Guarantor agrees, on a joint and several basis with all the existing Guarantors, to fully, unconditionally and irrevocably Guarantee to each Holder of the Notes and the Trustee the Guaranteed Obligations pursuant to Article 10 of the Indenture on an unsecured basis.

ARTICLE 3
Miscellaneous

Section 3.01 *Notices*. All notices and other communications to the Additional Guarantors shall be given as provided in the Indenture to the Additional Guarantors, at their respective addresses set forth below, with a copy to the Company as provided in the Indenture for notices to the Company.

Cleveland-Cliffs FPT Services Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Cleveland-Cliffs Services Holding Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Ferrous Processing and Trading Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Cleveland, LLC
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Florida, LLC
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT - Schlafer Division L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Koil Metals L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Lonyo Land L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

SLC Acquisition L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Section 3.02 *Parties*. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, other than the Company, the Additional Guarantors, Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this Supplemental Indenture or the Indenture or any provision herein or therein contained.

Section 3.03 *Governing Law*. This Supplemental Indenture shall be governed by, and construed in accordance with, the laws of the State of New York.

Section 3.04 *Severability Clause*. In case any provision in this Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

Section 3.05 *Ratification of Indenture; Supplemental Indenture Part of Indenture*. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Notes heretofore or hereafter authenticated and delivered shall be bound hereby. The Trustee shall not be responsible for and makes no representation or warranty as to the validity, execution or sufficiency of this Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

Section 3.06 *Counterparts*. The parties hereto may sign one or more copies of this Supplemental Indenture in counterparts, all of which together shall constitute one and the same agreement.

Section 3.07 *Headings*. The headings of the Articles and the sections in this Guarantee are for convenience of reference only and shall not be deemed to alter or affect the meaning or interpretation of any provisions hereof.

Section 3.08 *Execution, Delivery and Validity*. The Company and the Additional Guarantors each represent and warrant to the Trustee that this Supplemental Indenture has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, except as enforcement may be limited by equitable principles or by bankruptcy, insolvency, receivership, administration, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

CLEVELAND-CLIFFS FPT SERVICES COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

CLEVELAND-CLIFFS SERVICES HOLDING COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FERROUS PROCESSING AND TRADING COMPANY, as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

FPT CLEVELAND, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT FLORIDA, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT - SCHLAFER DIVISION L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

KOIL METALS L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

LONYO LAND L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

SLC ACQUISITION L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

CLEVELAND-CLIFFS INC.

By: /s/ Celso L. Goncalves Jr.
Name: Celso L. Goncalves Jr.
Title: Executive Vice President, Chief Financial Officer

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION
(successor in interest to U.S. Bank National Association), as
Trustee

By: /s/ William E. Sicking
Name: William E. Sicking
Title: Vice President

[Second Supplemental Indenture – 4.625% Senior Guaranteed Notes due 2029 and 4.875% Senior Guaranteed Notes due 2031]

EXHIBIT 4.5

FIRST SUPPLEMENTAL INDENTURE
6.750% SENIOR GUARANTEED NOTES DUE 2030

This First Supplemental Indenture is made as of July 31, 2023 (this " **Supplemental Indenture**" or "**Guarantee**"), among Cleveland-Cliffs FPT Services Company, an Ohio corporation, Cleveland-Cliffs Services Holding Company, an Ohio corporation, Ferrous Processing and Trading Company, a Michigan corporation, FPT Cleveland, LLC, a Michigan limited liability company, FPT Florida, LLC, a Michigan limited liability company, FPT - Schlafer Division L.L.C., a Michigan limited liability company, Koil Metals L.L.C., a Michigan limited liability company, Lonyo Land L.L.C., a Michigan limited liability company, SLC Acquisition L.L.C., a Michigan limited liability company (collectively, the "**Additional Guarantors**"), Cleveland-Cliffs Inc., an Ohio corporation (together with its successors and assigns, the "**Company**") and U.S. Bank Trust Company, National Association (successor in interest to U.S. Bank National Association), as Trustee (the "**Trustee**") under the Indenture referred to below.

WITNESSETH:

WHEREAS, the Company, the Guarantors party thereto and the Trustee have heretofore executed and delivered an Indenture, dated as of April 14, 2023 (as amended, supplemented, waived or otherwise modified, the "**Indenture**"), providing for the issuance of an aggregate principal amount of $750,000,000 of 6.750% Senior Guaranteed Notes due 2030 (the "**Notes**");

WHEREAS, Section 3.08 of the Indenture provides that, after the Issue Date, the Company is required to cause certain direct or indirect Subsidiaries of the Company to execute and deliver to the Trustee a supplemental indenture pursuant to which such Subsidiary will unconditionally guarantee, on a joint and several basis with the other Guarantors, the full and prompt payment of the principal of, premium, if any, and interest on the Notes on an unsecured basis; and

WHEREAS, pursuant to Section 9.01 of the Indenture, the Trustee and the Company are authorized to execute and deliver this Supplemental Indenture to amend or supplement the Indenture, without the consent of any Holder.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Additional Guarantors, the Company and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Notes as follows:

ARTICLE 1
Definitions

Section 1.01 *Defined Terms*. As used in this Supplemental Indenture, terms defined in the Indenture or in the preamble or recitals hereto are used herein as therein defined. The words "herein," "hereof" and "hereby" and other words of similar import used in this Supplemental Indenture refer to this Supplemental Indenture as a whole and not to any particular section hereof.

ARTICLE 2
Agreement to be Bound; Guarantee

Section 2.01 *Agreement to be Bound*. Each Additional Guarantor hereby becomes a party to the Indenture as a Guarantor and as such will have all of the rights and be subject to all of the obligations and agreements of a Guarantor under the Indenture. Each Additional Guarantor agrees to be bound by all of

the provisions of the Indenture applicable to a Guarantor and to perform all of the obligations and agreements of a Guarantor under the Indenture.

Section 2.02 *Guarantee*. Each Additional Guarantor agrees, on a joint and several basis with all the existing Guarantors, to fully, unconditionally and irrevocably Guarantee to each Holder of the Notes and the Trustee the Guaranteed Obligations pursuant to Article 10 of the Indenture on an unsecured basis.

ARTICLE 3
Miscellaneous

Section 3.01 *Notices*. All notices and other communications to the Additional Guarantors shall be given as provided in the Indenture to the Additional Guarantors, at their respective addresses set forth below, with a copy to the Company as provided in the Indenture for notices to the Company.

Cleveland-Cliffs FPT Services Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Cleveland-Cliffs Services Holding Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Ferrous Processing and Trading Company
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Cleveland, LLC
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT Florida, LLC
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

FPT - Schlafer Division L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Koil Metals L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Lonyo Land L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

SLC Acquisition L.L.C.
c/o Cleveland-Cliffs Inc.
200 Public Square, Suite 3300
Cleveland, Ohio 44114
Attention: James Graham, Executive Vice President, Human Resources,
Chief Legal and Administrative Officer & Secretary

Section 3.02 *Parties*. Nothing expressed or mentioned herein is intended or shall be construed to give any Person, other than the Company, the Additional Guarantors, Holders and the Trustee, any legal or equitable right, remedy or claim under or in respect of this Supplemental Indenture or the Indenture or any provision herein or therein contained.

Section 3.03 *Governing Law*. This Supplemental Indenture shall be governed by, and construed in accordance with, the laws of the State of New York.

Section 3.04 *Severability Clause*. In case any provision in this Supplemental Indenture shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability.

Section 3.05 *Ratification of Indenture; Supplemental Indenture Part of Indenture*. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Notes heretofore or hereafter authenticated and delivered shall be bound hereby. The Trustee shall not be responsible for and makes no representation or warranty as to the validity, execution or sufficiency of this Supplemental Indenture or with respect to the recitals contained herein, all of which recitals are made solely by the other parties hereto.

Section 3.06 *Counterparts*. The parties hereto may sign one or more copies of this Supplemental Indenture in counterparts, all of which together shall constitute one and the same agreement.

Section 3.07 *Headings*. The headings of the Articles and the sections in this Guarantee are for convenience of reference only and shall not be deemed to alter or affect the meaning or interpretation of any provisions hereof.

Section 3.08 *Execution, Delivery and Validity*. The Company and the Additional Guarantors each represent and warrant to the Trustee that this Supplemental Indenture has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms, except as enforcement may be limited by equitable principles or by bankruptcy, insolvency, receivership, administration, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

CLEVELAND-CLIFFS FPT SERVICES COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

CLEVELAND-CLIFFS SERVICES HOLDING COMPANY, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FERROUS PROCESSING AND TRADING COMPANY, as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

FPT CLEVELAND, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT FLORIDA, LLC, as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

FPT - SCHLAFER DIVISION L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

KOIL METALS L.L.C., as a Guarantor

By: /s/ James D. Graham
Name: James D. Graham
Title: Vice President, Human Resources

LONYO LAND L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

SLC ACQUISITION L.L.C., as a Guarantor

By: /s/ Adam D. Munson
Name: Adam D. Munson
Title: Secretary

CLEVELAND-CLIFFS INC.

By: /s/ Celso L. Goncalves Jr.
Name: Celso L. Goncalves Jr.
Title: Executive Vice President, Chief Financial Officer

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By: /s/ William E. Sicking
Name: William E. Sicking
Title: Vice President

[First Supplemental Indenture – 6.750% Senior Guaranteed Notes due 2030]

EXHIBIT 22

The following entities are included in the obligated group as of September 30, 2023, as defined in the Quarterly Report on Form 10-Q of Cleveland-Cliffs Inc. to which this document is being filed as an exhibit, including Cleveland-Cliffs Inc., as the parent and issuer, and the subsidiary guarantors that have guaranteed the obligations under the 6.750% 2026 Senior Secured Notes, the 5.875% 2027 Senior Notes, the 7.000% 2027 Senior Notes, the 4.625% 2029 Senior Notes, the 6.750% 2030 Senior Notes and the 4.875% 2031 Senior Notes issued by Cleveland-Cliffs Inc.

Exact Name of Issuer or Guarantor Subsidiary (1) (2)	State of Incorporation or Organization
Cleveland-Cliffs Inc.	Ohio
Cannon Automotive Solutions - Bowling Green, Inc.	Delaware
Cleveland-Cliffs Burns Harbor LLC	Delaware
Cleveland-Cliffs Cleveland Works LLC	Delaware
Cleveland-Cliffs Columbus LLC	Delaware
Cleveland-Cliffs FPT Services Company	Ohio
Cleveland-Cliffs Investments Inc.	Ohio
Cleveland-Cliffs Kote Inc.	Delaware
Cleveland-Cliffs Kote L.P.	Delaware
Cleveland-Cliffs Minorca Mine Inc.	Delaware
Cleveland-Cliffs Monessen Coke LLC	Delaware
Cleveland-Cliffs Plate LLC	Delaware
Cleveland-Cliffs Railways Inc.	Delaware
Cleveland-Cliffs Riverdale LLC	Delaware
Cleveland-Cliffs Services Holding Company	Ohio
Cleveland-Cliffs South Chicago & Indiana Harbor Railway Inc.	Delaware
Cleveland-Cliffs Steel Corporation	Delaware
Cleveland-Cliffs Steel Holding Corporation	Delaware
Cleveland-Cliffs Steel Holdings Inc.	Ohio
Cleveland-Cliffs Steel LLC	Delaware
Cleveland-Cliffs Steel Management Inc.	Delaware
Cleveland-Cliffs Steel Properties Inc.	Delaware
Cleveland-Cliffs Steelton LLC	Delaware
Cleveland-Cliffs Steelworks Railway Inc.	Delaware
Cleveland-Cliffs Tek Inc.	Delaware
Cleveland-Cliffs Tek Kote Acquisition Corporation	Ohio
Cleveland-Cliffs Tek L.P.	Delaware
Cleveland-Cliffs Tooling and Stamping Company	Delaware
Cleveland-Cliffs Tooling and Stamping Holdings LLC	Delaware
Cleveland-Cliffs Tubular Components LLC	Delaware
Cleveland-Cliffs Weirton LLC	Delaware
Cliffs Mining Company	Delaware
Cliffs Minnesota Mining Company	Delaware
Cliffs Steel Inc.	Ohio
Cliffs TIOP Holding, LLC	Delaware
Cliffs TIOP, Inc.	Michigan
Cliffs TIOP II, LLC	Delaware
Cliffs UTAC Holding LLC	Delaware
Ferrous Processing and Trading Company	Michigan
Fleetwood Metal Industries, LLC	Delaware
FPT - Schlafer Division L.L.C.	Michigan
FPT Cleveland, LLC	Michigan
FPT Florida, LLC	Michigan

EXHIBIT 22

Exact Name of Issuer or Guarantor Subsidiary (1) (2)	**State of Incorporation or Organization**
IronUnits LLC	Delaware
Koil Metals L.L.C.	Michigan
Lake Superior & Ishpeming Railroad Company	Michigan
Lonyo Land L.L.C.	Michigan
Metallics Sales Company	Delaware
Mid-Vol Coal Sales, Inc.	West Virginia
Mountain State Carbon, LLC	Delaware
Northshore Mining Company	Delaware
Silver Bay Power Company	Delaware
SLC Acquisition L.L.C.	Michigan
SNA Carbon, LLC	Delaware
The Cleveland-Cliffs Iron Company	Ohio
Tilden Mining Company L.C.	Michigan
United Taconite LLC	Delaware

(1) The address and phone number of each issuer and guarantor subsidiary is c/o Cleveland-Cliffs Inc., 200 Public Square, Suite 3300, Cleveland, Ohio 44114, (216) 694-5700.

(2) Cleveland-Cliffs Inc. is the issuer, all other entities listed are guarantor subsidiaries.

Exhibit 31.1

CERTIFICATION

I, Lourenco Goncalves, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cleveland-Cliffs Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect the registrant’s internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 25, 2023

By: /s/ Lourenco Goncalves
Lourenco Goncalves
Chairman, President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Celso L. Goncalves Jr., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cleveland-Cliffs Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)), for the registrant and have:
   - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   - (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect the registrant’s internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 25, 2023

By: /s/ Celso L. Goncalves Jr.
Celso L. Goncalves Jr.
Executive Vice President, Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Cleveland-Cliffs Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Form 10-Q”), I, Lourenco Goncalves, Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer’s knowledge:

(1) The Form 10-Q fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Form 10-Q.

Date: October 25, 2023

By: /s/ Lourenco Goncalves

Lourenco Goncalves

Chairman, President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Cleveland-Cliffs Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Form 10-Q”), I, Celso L. Goncalves Jr., Executive Vice President, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer’s knowledge:

(1) The Form 10-Q fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Form 10-Q.

Date: October 25, 2023

By: /s/ Celso L. Goncalves Jr.

Celso L. Goncalves Jr.
Executive Vice President, Chief Financial Officer

Exhibit 95

Mine Safety Disclosures

The operation of our mines located in the United States is subject to regulation by MSHA under the FMSH Act. MSHA inspects these mines on a regular basis and issues various citations and orders when it believes a violation has occurred under the FMSH Act. We present information below regarding certain mining safety and health citations that MSHA has issued with respect to our mining operations. In evaluating this information, consideration should be given to factors such as: (i) the number of citations and orders will vary depending on the size of the mine; (ii) the number of citations issued will vary from inspector to inspector and mine to mine; and (iii) citations and orders can be contested and appealed and, in that process, are often reduced in severity and amount, and are sometimes dismissed.

Under the Dodd-Frank Act, each operator of a coal or other mine is required to include certain mine safety results within its periodic reports filed with the SEC. As required by the reporting requirements included in §1503(a) of the Dodd-Frank Act, we present the following items regarding certain mining safety and health matters, for the period presented, for each of our mine locations that are covered under the scope of the Dodd-Frank Act:

(A) The total number of violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard under section 104 of the FMSH Act (30 U.S.C. 814) for which the operator received a citation from MSHA;

(B) The total number of orders issued under section 104(b) of the FMSH Act (30 U.S.C. 814(b));

(C) The total number of citations and orders for unwarrantable failure of the mine operator to comply with mandatory health or safety standards under section 104(d) of the FMSH Act (30 U.S.C. 814(d));

(D) The total number of imminent danger orders issued under section 107(a) of the FMSH Act (30 U.S.C. 817(a));

(E) The total dollar value of proposed assessments from MSHA under the FMSH Act (30 U.S.C. 801*et seq.*);

(F) Legal actions pending before the Federal Mine Safety and Health Review Commission involving such coal or other mine as of the last day of the period;

(G) Legal actions instituted before the Federal Mine Safety and Health Review Commission involving such coal or other mine during the period; and

(H) Legal actions resolved before the Federal Mine Safety and Health Review Commission involving such coal or other mine during the period.

During the three months ended September 30, 2023, our U.S. mine locations did not receive any flagrant violations under section 110(b)(2) of the FMSH Act (30 U.S.C. 820(b)(2)), or any written notices of a pattern of violations, or the potential to have such a pattern of violations, under section 104(e) of the FMSH Act (30 U.S.C. 814(e)). In addition, on August 18, 2023, a miner's death occurred at Mine No. 39. MSHA's initial findings indicated medical-related issues as the cause of death. Following receipt of the death certificate, MSHA has preliminarily classified this death as mining-related, pending receipt of autopsy results and a final determination.

Following is a summary of the information listed above for the three months ended September 30, 2023:

		Three Months Ended September 30, 2023								
		(A)	(B)	(C)	(D)	(E)		(F)		(G)	(H)
Mine Name/ MSHA ID No.	Operation	Section 104 S&S Citations	Section 104(b) Orders	Section 104(d) Orders	Section 107(a) Orders	Total Dollar Value of MSHA Proposed Assessments (1)		Legal Actions Pending as of Last Day of Period		Legal Actions Instituted During Period	Legal Actions Resolved During Period
Tilden / 2000422	Iron Ore	—	—	—	—	$	712	4	(2)	3	2
Empire / 2001012	Iron Ore	—	—	—	—	$	—	—		—	—
Northshore Plant / 2100831	Iron Ore	—	—	—	—	$	—	1	(3)	1	—
Northshore Mine / 2100209	Iron Ore	—	—	—	—	$	—	—		—	—
Hibbing / 2101600	Iron Ore	—	—	—	—	$	—	2	(4)	2	1
United Taconite Plant / 2103404	Iron Ore	—	—	—	—	$	488	4	(5)	2	—
United Taconite Mine / 2103403	Iron Ore	—	—	—	—	$	—	2	(6)	2	—
Minorca Mine / 2102449	Iron Ore	—	—	—	—	$	—	—		—	—
Virginia Point No. 1 Surface Mine / 4407172	Coal	2	—	—	—	$	—	—		—	—
Low Gap Surface Mine / 4605741	Coal	—	—	—	—	$	—	—		—	—
Eckman Surface Mine / 4608647	Coal	—	—	—	—	$	—	—		—	—
Redhawk Surface Mine / 4609300	Coal	—	—	—	—	$	—	—		—	—
Dry Branch Surface Mine / 4609395	Coal	—	—	—	—	$	752	—		—	3
Dans Branch Surface Mine / 4609517	Coal	—	—	—	—	$	—	—		—	—
Eckman Loadout / 4603341	Coal	—	—	—	—	$	—	—		—	—
Roadfork Loadout / 4608278	Coal	—	—	—	—	$	—	—		—	—
Eckman Plant / 4609357	Coal	—	—	—	—	$	—	—		—	—
Mine No. 35 / 4608131	Coal	—	—	—	—	$	—	—		—	—
Mine No. 39 / 4609261	Coal	22	1	4	—	$	79,998	3	(7)	3	—
Mine No. 43 / 4609496	Coal	—	—	—	—	$	—	—		—	—
Mine No. 44 / 4609523	Coal	1	—	—	—	$	2,757	—		—	—

(1) Amounts included under the heading “Total Dollar Value of MSHA Proposed Assessments” are the total dollar amounts for proposed assessments received from MSHA on or before September 30, 2023.

(2) This number consists of 4 pending legal actions related to contests of proposed penalties referenced in Subpart C of FMSH Act's procedural rules.

(3) This number consists of 1 pending legal action related to contests of proposed penalties referenced in Subpart C of FMSH Act's procedural rules.

(4) This number consists of 2 pending legal actions related to contests of proposed penalties referenced in Subpart C of FMSH Act's procedural rules.

(5) This number consists of 4 pending legal actions related to contests of proposed penalties referenced in Subpart C of FMSH Act's procedural rules.

(6) This number consists of 2 pending legal actions related to contests of proposed penalties referenced in Subpart C of FMSH Act's procedural rules.

(7) This number consists of 3 pending legal actions related to contests of proposed penalties referenced in Subpart C of FMSH Act's procedural rules.