Vale S.A. Form 6-K May 30, 2018

United States

Securities and Exchange Commission

Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16

of the

Securities Exchange Act of 1934

For the month of

May 2018

Vale S.A.

Praia de Botafogo nº 186, 18º andar, Botafogo 22250-145 Rio de Janeiro, RJ, Brazil

(Address of principal executive office)

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.)

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(Check One) Form 20-F x Form 40-F o

(Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1))

(Check One) Yes o No x

(Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7))

(Check One) Yes o No x

(Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.)

(Check One) Yes o No x

(If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b). 82- .)

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1. Identification of the people responsible for the content of the form

1.1 - Statement and Identification of People in Charge

Name of the person responsible for the content of the form Position of the person in charge

Fabio Schvartsman Chief Executive Officer

Name of the person responsible for the content of the form Position of the person in charge

Luciano Siani Pires Investor Relations Officer

The aforementioned officers state that:

a. they reviewed the reference form;

b. all information contained in the form complies with the provisions of CVM Instruction 480, in particular articles 14 to 19;

c. the set of information contained therein is a true, accurate and complete portrait of the economic-financial situation of the issuer and the risks inherent to its activities and the securities issued by it.

STATEMENT OF THE CHIEF EXECUTIVE OFFICER

FOR THE PURPOSES OF ITEM 1.1 OF THE REFERENCE FORM

Fabio Schvartsman, a Brazilian citizen, married, production engineer, bearer of Identity Card SSP/SP no. 4.144.579-X, enrolled with the CPF/MF under no. 940.563.318-04, residing and domiciled in the city and state of Rio de Janeiro, with business address at Torre Oscar Niemeyer, Praia de Botafogo, 186, suite 701 to 1901, Botafogo, CEP 22250-145, in the city and state of Rio de Janeiro, in the capacity of Chief Executive Officer of **Vale S.A.**, a corporation with its principal place of business in the city and state of Rio de Janeiro, at Torre Oscar Niemeyer, Praia de Botafogo, 186, suite 701 to 1901, Botafogo, CEP 22250-145, enrolled with the CNPJ/MF under no. 33.592.510/0001-54 (<u>Company</u>), hereby states that:

a. he reviewed the Company s Reference Form;

b. all information contained in the Reference Form complies with the provisions of the Securities and Exchange Commission Instruction no. 480, of December 7th, 2009, as amended, especially articles 14 to 19; and

c. the set of information contained therein is a true, accurate and complete portrait of the Company s economic-financial situation and the risks inherent to its activities and the securities issued by it.

Fabio Schvartsman Chief Executive Officer

STATEMENT OF THE CHIEF FINANCIAL OFFICER AND INVESTOR RELATIONS OFFICER

FOR THE PURPOSES OF ITEM 1.1 OF THE REFERENCE FORM

Luciano Siani Pires, a Brazilian citizen, married, mechanical engineer, bearer of Identity Card IFP/RJ no. 07.670.915-3, enrolled with the CPF/MF under no. 013.907.897-56, residing and domiciled in the city and state of Rio de Janeiro, with business address at Torre Oscar Niemeyer, Praia de Botafogo, 186, suite 701 to 1901, Botafogo, CEP 22250-145, in the city and state of Rio de Janeiro, in the capacity of Chief Executive Officer of **Vale S.A.**, a corporation with its principal place of business in the city and state of Rio de Janeiro, at Torre Oscar Niemeyer, Praia de Botafogo, 186, suite 701 to 1901, Botafogo, CEP 22250-145, enrolled with the CNPJ/MF under no. 33.592.510/0001-54 (<u>Company</u>), for the purposes of item 1.1 of the Company Reference Form, hereby states that:

a. he reviewed the Company s Reference Form;

b. all information contained in the Reference Form complies with the provisions of the Securities and Exchange Commission Instruction no. 480, of December 7th, 2009, as amended, especially articles 14 to 19; and

c. the set of information contained therein is a true, accurate and complete portrait of the Company s economic-financial situation and the risks inherent to its activities and the securities issued by it.

Luciano Siani Pires Chief Financial Officer and Investor Relations Officer 1.2 - Individual statement of new holder of the position of Chief Executive Officer or Investor Relations Officer duly signed, attesting that:

Item not applicable.

2. Auditors

2.1/2.2 - Identification and Remuneration of Auditors			
Do you have an auditor?	YES		
CVM code	418-9		
Type of auditor	National		
Company Name	KPMG Auditores Independentes		
CPF/CNPJ	57.755.217/0001.29		
Start of service contract:	30/04/2014		
End of service provision:	Ongoing		
Description of contracted service	 Provision of professional services related to the audit of the financial statements, both for local and international purposes, and work of certification of internal controls (in compliance with Section 404 of the Sarbanes-Oxley Act of 2002) for the financial years of 2014 to 2018, and Review of Quarterly Financial Information (ITR) from June 30th, 2014 to March 31st, 2019. In addition, the scope of work also encompasses the provision of other audit-related services, such as issue of previously agreed procedural reports 		
Total amount of remuneration for independent auditors separated by service	in accordance with NBC TSC4400. The services contracted with the Company s external auditors for the financial year ended December 31, 2017 for the Company and its subsidiaries were as follows:		

	Reais (thousand)
Financial Audit	16,734
Auditing - Sarbanes Oxley Act	1,222
Audit Related Services (*)	90
Other services (*)	169
Total External Audit Services	18,215

(*)Those services are mostly procured for periods of less than one year.

Reason for substitution

Not applicable

Not applicable

Reason presented by the auditor in case of disagreement with the issuer s justification

Name of technician responsible Manuel Fernandes

Period of service As from

CPF 783.840.017-15 Address Rua do Passeio, 38, setor 2, 17° Rodrigues de Sousa

04/30/2014

andar Centro/RJ Edifício Passeio Corporate 20021-290, Rio de Janeiro, RJ

e-mail: <u>mfernandes@kpmg.com.br</u> Telephone: (21) 2207-9412

2.3 - Other relevant information

The Vale Board of Directors, at a meeting held on November 28th, 2013, approved the contracting of KPMG Auditores Independentes to provide audit services for the financial statements for a period of three years, beginning in 2014. On July 3rd, 2017, the extension of the term of the agreement was approved for an additional period of 2 years, thus ending on July 3rd, 2019. That service started to be provided as of the review of the quarterly information (ITRs) for the second quarter of 2014.

The Company has specific internal procedures for the pre-approval of services contracted with its external auditors, in order to avoid conflict of interest or the loss of objectivity of its independent auditors.

The Company s policy, in relation to independent auditors and in the provision of services not related to external auditing, is based on principles that preserve its independence.

In line with best corporate governance practices, all services provided by our independent auditors are pre-approved by our Fiscal Council and a letter of independence is also obtained from the external auditors.

In addition, the Company clarifies that there are no material transfers of services or resources between the auditors and parties related to the Company, as defined in CVM Deliberation 642/10, which approves Technical Pronouncement CPC 05 (R1).

3. Selected financial information

3.1 - Financial Information - Consolidated

	Fiscal year	Fiscal year (December	Fiscal year (December 31,
(In Reais)	(December 31, 2017)	31, 2016)	2015)
Net Assets	148,106,000,000.00	133,702,000,000.00	139,419,000,000.00
Total Assets	328,097,000,000.00	322,696,000,000.00	345,547,000,000.00
Net Revenue/Intermediary Revenue	108,532,000,000.00	94,633,000,000.00	78,057,000,000.00
Financing/Premium Insurance Gains			
Gross Profit or Loss	41,275,000,000.00	33,490,000,000.00	15,277,000,000.00
Net (Loss) Profit	17,627,000,000.00	13,311,000,000.00	-44,213,000,000.00
Number of Shares, Former Treasury	5,197,432,093	5,197,432,093	5,197,432,093
Equity Value of Shares (Reais/Unit)	28.495995	25.724627	26.824593
Base Profit or Loss per Share	3.39	2.56	-8.51
Profit or Loss Diluted per Share	3.39	2.56	-8.51

3.2 - Non-accounting measurements

a. value of non-accounting measurements

The Company uses Adjusted EBITDA and Adjusted EBIT as non-accounting measurement methods. In 2017, 2016 and 2015, respectively, (i) Adjusted EBITDA was assessed in the amount of R\$48,992 million, R\$40,906 million and R\$21,741 million, and (ii) Adjusted EBIT was assessed in the amount of R\$35,837 million, R\$28,130 million and R\$8,277 million, respectively.

b. reconciliations between the amounts disclosed and the amounts of the audited financial statements

		Fiscal year ended December 31,	
(in R\$ million, except %)	2017	2016	2015
Net income (loss) for the year from continuing operations	20,278	17,455	(45,337)
(+) Income tax and social contribution	4,607	9,567	(19,339)
(+) financial result	9,650	(6,302)	36.053
EBIT	34,535	20,720	(28,623)
(+) Depreciation, amortization and depletion	11,842	12,107	12,450
EBITDA	46,377	32,827	(16,173)
Equity held on <i>joint ventures</i> and affiliates	(302)	(1,111)	1,526
Impairment and other gains or losses on non-current assets	1,025	4,168	33,893
Impairment and other results from investment in joint ventures and			
affiliates	579	4,353	1,431
Dividends received and interest from affiliates and joint ventures	1,313	669	1,064
Adjusted EBITDA from continuing operations	48,992	40,906	21,741
Dividends received and interest from affiliates and joint ventures	(1,313)	(669)	(1,064)
Depreciation, amortization, and depletion	(11,842)	(12,107)	(12,450)
Adjusted EBIT from continuing operations	35,837	28,130	8,227

c. reason why the Company understands that such measurement is more appropriate for the correct understanding of its financial condition and the result of its operations

We calculated Adjusted EBITDA and Adjusted EBITDA according to CVM Instruction No. 527 of October 04, 2012 (<u>CVM Instruction 527</u>).

Adjusted EBITDA corresponds to EBITDA added with dividends received and interest from affiliates and joint ventures, and excluding depreciation, amortization, and depletion, impairment and other gains or losses on non-current assets and onerous contracts. It presents an approximate measure of the Company s cash generation, since it excludes non-recurring effects and non-cash.

Adjusted EBIT corresponds to Adjusted EBITDA including depreciation, amortization, and depletion, and dividends received and interest from affiliates and joint ventures.

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Adjusted EBITDA and Adjusted EBIT are not measurement methods acknowledged by BR GAAP or IFRS. Adjusted EBITDA does not represent the cash flow for the periods presented and should therefore not be considered as an alternative measure for net profit (loss) as an isolated indicator of operating performance or as an alternative to cash flow or as a liquidity source.

The definitions of Adjusted EBITDA and Adjusted EBIT used by Vale may not be compared to Adjusted EBITDA and Adjusted EBIT disclosed by other companies.

3.3 - Events subsequent to the latest financial statements

The Company does not provide guidance in the form of quantitative forecasts regarding its future financial performance. The Company seeks to disclose as much information as possible about its views on the various markets where it operates, its guidelines, strategies and its implementation, in order to provide capital market participants with sound basis for their expectations regarding the Company s performance in the medium and long term.

The Company s Consolidated Financial Statements relating to the fiscal year ended December 31, 2017 were issued on February 27, 2018.

The Company s Consolidates Financial Statements, pursuant to the rules provided in the Technical Pronunciation CPC 24, as approved by Deliberation CVM No. 593/09, contain the following subsequent events:

1. In January 2018, the Company and Mosaic completed the sale transaction of fertilizer assets, which was preceded by some final adjustments made by the parties under the original terms and conditions of the negotiation. As a result of these changes, the Company received R\$3,573 billion (US\$1,080 billion) in cash and 34.2 million common shares, corresponding to 8.9% of Mosaic s net equity after the issuance of these shares (R\$2,901 billion (US\$877 million), based on Mosaic s share quotation on the closing date of the transaction). For more details, see note 14 to the Company s consolidated financial statements.

2. In a resolution of the meeting of the Board of Directors held in February 2018, a supplementary payment to the shareholders compensation was approved in the total gross amount of R\$2.6 billion by way of interest on equity. These resolutions totalize the minimum mandatory compensation for the year 2017, which was paid in March 2018. For further details, see note 29 to the Company s consolidated financial statements.

3.4 Income Allocation Policy

	2017	Fiscal year ending on December 31, 2016	2015
a. Earnings Retention Rules	legislation in force; and of a (ii) investment order to ensure the maintenance and develo	creation of a (i) tax incentive reserve, to be creat t reserve, must be considered in the proposal for opment of the main activities that make up the C he distributable up to the maximum limit of the	the distribution of profits, in Company s corporate purpose, in
a.i Values for Earnings Retentions	Out of the total net income of R\$ 17,627,200,889.00 for the year, (i) R\$881,360,044.45 were allocated to the legal reserve, (ii) R\$ 692,831,841.06 to the tax incentive reserve, and (iii) R\$ 11,331,535,765.58 to the investment reserve.	Out of the total net income of R13,311,455,285.00$ for the year, (i) R665,572,764.25$ were allocated to the legal reserve, (ii) R1,227,570,177.73$ to the tax incentive reserve, and (iii) R5,894.586,907.98$ to the investment reserve.	A net loss of R\$ 44,212,186,731.00 was determined, and said loss was absorbed pursuant to the sole paragraph of Article 189 of Law No. 6,404/1976. Accordingly, no earnings were retained from the results for the fiscal year ended on December 31st, 2015.
a. ii Percentages in relation to total reported income	Out of the total net income for the year, (i) 5% were allocated to the legal reserve, (ii) 4% to the tax incentive reserve, and (iii) 64% to the investment reserve.	Out of the total net income for the year, (i) 5% were allocated to the legal reserve, (ii) 9% to the tax incentive reserve, and (iii) 44% to the investment reserve.	There were no retained earnings from the results of the fiscal year ended December 31st, 2015.
b. Dividend distribution rules	Pursuant to Article 38 of the By-Laws, at le pay dividends.	east 25% of the annual net profits, adjusted acco	ording to the law, will be used to
		ticle 5, Paragraph 5, of the By-laws, the holders vidends to be distributed, as calculated pursuant	
	calculated based on the financial statement	sponding to (i) a minimum of 3% of the net equ s drawn up, which served as reference for the pa ituted by this class of share, whichever of the tw	ayment of dividends, or (ii) 6%
		der equal conditions with the common shares, a ablished in accordance with item a above;	fter being assured the latter a
	(c) the right to share any bonuses, under eq the distribution of dividends.	ual conditions with the common shares, observi	ing the priority established for
		e noted that the Company ceased to have Class a mmon shares. For further information, see item	
c. Frequency of dividend distributions	Out of the results for the fiscal year of 2017, R\$ 4,721,473,237.91 were paid as interest on the shareholders equity, which were paid in March 2018.	Out of the results for the fiscal year of 2016, R\$ 5,523,725,435.04 were paid as interest on the shareholders equity, of which R\$ 856,975,000.00 were paid in December 2016 and (ii)	In accordance with the practices adopted by the Company, the payments by way of dividends during the fiscal year ended December 31st, 2015 were made in

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R\$ 4,666,750,435.04 were paid in April 2017.

two semi-annual installments, in April and October. It should be noted that the shareholders compensation policy was amended at the Annual and

Special Meeting of Shareholders held on April 25th, 2016.

d. Any restrictions on the distribution of dividends enforced by legislation or special regulation applicable to the issuer, as well as contracts and court, administrative or arbitration decisions.	None.	None.	None.
e. If the issuer has a formally approved income allocation policy, stating the body responsible for approval, date of approval and, if the issuer discloses the policy, sites on the World Wide Web where the document can be consulted.	The compensation policy applicable to the 2016 fiscal year is the compensation policy approved on April 25th, 2016 by the Company s General Meeting, which is available for consultation on the CVM website (www.cvm.gov.br).	The compensation policy applicable to the 2016 fiscal year is the compensation policy approved on April 25th, 2016 by the Company s General Meeting, which is available for consultation on the CVM website (www.cvm.gov.br).	The compensation policy applicable to the 2015 fiscal year was approved on April 27th, 2005 by the Company s General Meeting.
	At a meeting held on March 29th, 2018, Vale s Board of Directors approved a new Shareholders Compensation Policy, the contents of which are available for consultation on the CVM website (www.cvm.gov.br) and the Company s website (www.vale.com).	For further information, see item 3.9 of this Reference Form.	
	For further information, see item 3.9 of this Reference Form.		

3.5 - Distribution of dividends and retention of net income

(In Reais)	Fiscal Year 12/31/2017	Fiscal Year 12/31/2016	Fiscal Year 12/31/2015
Adjusted net income	16,053,009,003.49	11,761,350,206.85	0.00000
Dividend distributed in relation to			
adjusted net income	29.41000000	46.97000000	0.00000
Rate of return in relation to the issuer s			
net assets	11.901611	10.46165000	0.00000
Total distributed dividend	4,721,473,237.91	5,523,725,435.04	0.00000
Retained net income	12,905,727,651.09	7,787,729,849.96	0.00000
Date of approval of the retention	April 13, 2018	April 20, 2017	April 25,2016

January 01, 2017 to December 31, 2017

Type of Share	Class of Share	Distributed Dividend	Amount (Unit)	Dividend Payment
Common Shares		Interest on equity	4,721,473,237.91	March 15, 2018

January 01, 2016 to December 31, 2016

Class of Share	Distributed Dividend	Amount (Unit)	Dividend Payment
	Interest on equity	2,884,837,166.99	April 28, 2017
Preferred Class A	Interest on equity	1,781,913,268.06	April 28, 2017
	Interest on equity	529,754,775.95	December 16, 2016
Preferred Class A	Interest on equity	327,220,224.04	December 16, 2016
	Preferred Class A	Preferred Class A Interest on equity Interest on equity Interest on equity	Preferred Class A Interest on equity 2,884,837,166.99 Interest on equity 1,781,913,268.06 Interest on equity 529,754,775.95

January 01, 2015 to December 31, 2015

Type of Share	Class of Share	Distributed Dividend	Amount (Unit)	Dividend Payment
Common Shares		Interest on equity	1,917,001,706.26	April 30, 2015
Preferred	Preferred Class A	Interest on equity	1,184,098,296.20	April 30, 2015
Common Shares		Mandatory Dividend	1,190,190,329.63	October 30, 2015
Preferred	Preferred Class A	Mandatory Dividend	735,159,669.85	October 30, 2015

3.6 - Report of dividends as retained earnings or reserves

Dividends distributed to the account of	Fiscal year ending on December 31,		
(in R\$ thousand):	2017	2016	2015
Retained Earnings			
Realization of Reserves	2,064,505		5,026,450

3.7 - Level of indebtedness

Financial Year December 31, 2017	Sum of current liabilities and non-current liabilities R\$179,991,000,000.00	Type of ratio Level of indebtedness	Level of indebtedness 1.2	Description and reason for using another ratio
December 31, 2017	0	Other ratios	1.47	 Gross debt/Adjusted EBITDA. The ratio is based on the US Dollar. Gross debt consists of the sum of Short-term loans and financing , Current installment of long-term loans and Long-term loans and financing . Adjusted EBITDA is calculated as described in item 3.2.b of this annualized Reference Form for the last twelve months - ADJUSTED EBITDA. The Gross Debt/Adjusted EBITDA ratio indicates the approximate time it would take for a company to pay all debts exclusively using its cash generation. The Company adopts the Gross Debt/Adjusted EBITDA ratio and the interest coverage ratio of Adjusted EBITDA/Interest expenses. These ratios are widely used by the market (rating agencies and financial institutions) and serve as a benchmark for assessing the Company s financial situation.
December 31, 2017	0	Other ratios	9.04	Adjusted EBITDA/Interest Expense - This ratio is based on US Dollar. Adjusted EBITDA is calculated as described in item 3.2.b of this Reference Form excluding non-recurring items. Interest expenses comprise the sum of all accrued or capitalized interest, whether paid or not, in a given period, arising from the Company s indebtedness. The interest coverage ratio (Adjusted EBITDA/Interest expenses) is used to determine the company s capacity to generate sufficient cash flow to cover its interest expenses. The Company adopts the Gross Debt/Adjusted EBITDA ratio and the interest coverage ratio of Adjusted EBITDA/Interest expenses. These ratios are widely used by the market (rating agencies and financial institutions) and serve as a benchmark for assessing the Company s financial situation.

3.8 - Obligations according to nature and maturity

Latest Accounting Information (December 31, 2017)

		Other security		One to three			
Type of obligation	Type of security	or liens	Less than one year	years	Three to five years	Over five years	Total
Debt securities						40,072,682,791.	
	Unsecured		1,334,229,540.69	0	7,224,633,775.99	07	48,631,546,107.75
Loans	Unsecured		4,027,211,850.95	5,788,343,643.61	9,623,653,168.34	5,311,041,645.64	24,750,250,308.54
Loans	Secured		209,788,893.64	0	350,000,000.02	350,000,000.01	909,788,893.67
Total			5,571,230,285.28	5,788,343,643.61	17,198,286,944.35	45,733,724,436.72	74,291,585,309.96

Note: The information contained in this item refers to the Company s consolidated financial statements. The debt securities field comprises debt securities and transactions in the stock market.

3.9 - Other relevant information

Additional Information relating to Item 3.4

On November 27, 2017, all shares issued by Vale under negotiation at B3 became common, with the exception of twelve special class preferred shares held by the Federal Government. For more information on such issue, see items 3.3 and 15.7 in this Reference Form.

It should be noted that the Company s Special Meeting of Shareholders held on December 21, 2017 approved (i) the proposal for the migration of Vale to the special listing segment of B3 S.A. - Brazil, Exchange, a Counter denominated Novo Mercado (New Market), and (ii) the amendment of the Company s Articles of Incorporation to reflect the conversion of all Class A preferred shares into common shares, as well as to adapt it to the Novo Mercado rules in force at the time of the migration.

Additional Information on Financial Agreements

Part of the financing agreements entered into by the Company, as well as the outstanding debt securities issued by the Company (for more information on such securities, see item 18 of this Reference Form) contain clauses that determine the early maturity of outstanding installments in case of cross acceleration of another financial agreement entered into with the same counterparty and/or any other financial agreement.

The Company also clarifies that since the end of the fiscal year ended December 31, 2017, the Company has already prepaid US\$1.75 billion of debt in March (corresponding to R\$5.70 billion) and other US\$499 million in April (corresponding to R\$1.69 billion).

Additional Information on Distribution of Dividends

Vale recorded a net loss in the amount of R\$44,212 million for the fiscal year ended December 31, 2015, and said loss is absorbed in accordance with the sole paragraph of article 189 of Law 6,404 / 1976. Accordingly, no distribution of dividends was approved by the Annual Shareholders Meeting held on April 25, 2016.

It should be noted that dividends and interest on shareholders equity distributed by the Company in said fiscal year of 2015, as indicated in item 3.6 above, were distributed based on the retained earnings reserves approved in the Company s balance sheet referring to 2014. Considering these reserves, the Board of Directors, at its meeting on (a) April 14, 2015, approved the payment, as of April 30, 2015, of the first installment of minimum compensation to Vale s shareholders for 2015, in the total gross amount of R\$3,101,100,000.00 by way of interest on equity, corresponding to the gross total amount of R\$0.601760991 per outstanding common or preferred share issued by Vale, which is subject to the Income Tax at the current rate; (b) October 15, 2015, the payment, as of October 30, 2015, of the second installment of compensation to shareholders for 2015 by way of dividends, in the total gross amount of R\$1,925,350,000.00, corresponding to the amount of R\$0.3773609533 per outstanding common or preferred share issued by Vale.

Additional Information on Compensation Policies

The amendment to the shareholders compensation policy was approved at the Annual and Special Shareholders Meeting held on April 25, 2016. According to said approved policy:

• Shareholders compensation will be at the discretion of the Board of Directors, which will resolve on the amount to be distributed according to the Company s business situation, considering, among other factors, the Company s leverage level and future cash commitments.

• The proposed shareholders compensation will be analyzed and paid, if payment is the elected option, at two times. The first installment (initial installment) will be analyzed and, if applicable, paid in October of the current year and the second installment (complementary installment) will be analyzed and, if applicable, paid by the end of April of the following year. The amount of the first installment will be determined by the Company based on the accumulated profit or loss of the period and the estimated free cash flow generation for the year. The amount of the second installment will be determined after the calculation of the profit or loss for the fiscal year.

• The proposal for the first installment of the shareholders compensation will be submitted by the Board of Executive Officers to be resolved by the Board of Directors in October of each year and will be announced to the market as soon as it is approved. The second installment of compensation shall be included in the proposed allocation of net income for the year to be submitted by the Board of Executive Officers to the Board of Directors within the first three months of the subsequent year. The amount related to the second installment will be announced to the market after its approval by the Board of Directors, with payment subject to approval by the Annual Shareholders Meeting.

• The amount of the first installment of the shareholders compensation will be denominated in US Dollars and the payment will be made by way of dividends and/or interest on equity. The determined amount will be paid in Brazilian currency, with the conversion of the amount proposed in US Dollars into Reais based on the US Dollar exchange rate (Ptax-option 5) disclosed by the Central Bank of Brazil (BACEN), on the business day prior to the meeting of the Board of Directors that has resolved on the declaration and the respective payment of the shareholders compensation. The amount of the second installment will be denominated and paid in Reais, and the payment may be made by way of dividends and/or interest on equity. The equivalent amount in US Dollars will be calculated based on the US Dollar exchange rate (Ptax-option 5), published by the Central Bank of Brazil (BACEN) on the business day prior to payment.

• During the year, the Board of Executive Officers may propose to the Board of Directors, based on an analysis of the Company s cash flow evolution and the availability of profits or reserves of existing profits, the distribution to shareholders of an additional compensation relating to the amounts paid in October or April.

Nevertheless, the Company clarifies that, at a meeting held on March 29, 2018, its Board of Directors approved a new Shareholders Compensation Policy, which replaces the aforementioned policy, the contents of which are available for consultation on the websites of CVM (www.cvm.gov.br) and the Company (www.vale.com). According to said approved policy:

• Shareholders compensation will be composed of two semiannual installments, the first in September of the current year and the second in March of the following year, provided that the Board of Directors may declare interest on equity in the month of December of each year for payment in March of the next year. Such amounts will be deducted from the March installment.

• The compensation will be 30% of the Adjusted EBITDA minus Current Investment calculated in the first half income statement for the September installment, and the second half income statement for the March installment.

• The Board of Directors may resolve on additional compensation by way of distribution of extraordinary dividends.

4.1 Description of risk factors

(a) Risks related to the Company

Lower cash flows, as a result of the fall in prices of the Company s products, may negatively affect the Company s credit ratings, as well as the cost and availability of financing.

Lower prices for the Company s products may adversely affect its future cash flows, credit ratings and its ability to obtain financing at attractive rates. This may also adversely affect its ability to finance its capital investments, provide the financial guarantees required to get licenses in certain jurisdictions, pay dividends, and meet the financial covenants included in some of its long-term debt instruments.

It is possible that the Company will not be able to implement its strategy regarding divestitures and strategic partnerships.

Over the last few years, the Company has entered into contracts for the disposition of assets and strategic partnerships, aiming at optimizing its business portfolio and implementing its financing strategy and capital investment plans. It is possible that the Company will continue to seek disinvestment opportunities and strategic partnerships in the future. The Company is exposed to a number of risks relating to these transactions, including the imposition of regulatory conditions, the inability to meet the conditions for conclusion or receipt of additional payments, in addition to the negative market reactions. Should the Company fail to conclude dispositions or strategic partnerships, it may have to review its business and financing strategy and incur additional costs, which could, in turn, adversely affect its operating results, financial condition or reputation.

The Company is involved in legal proceedings that may have a material adverse effect on its business in the event of unfavorable outcomes.

The Company is involved in legal proceedings in which the adverse parties have requested preliminary injunctions to suspend some of its operations or claim substantial amounts, including several legal proceedings and investigations related to the collapse of the Fundão tailings dam owned by Samarco. Although the Company is vigorously defending these actions, their results are uncertain and may adversely affect its business, its liquidity and the value of securities issued by Vale or its subsidiaries. For information on such proceedings, see items 4.3 to 4.7 below.

The Company s projects are subject to risks that may result in an increase in costs or a delay in its implementation.

The Company is investing to maintain and further increase its production capacity and logistics capabilities. Vale review on a regular basis the economic feasibility of its projects. As a result of this review, the Company may decide to delay, suspend or interrupt the implementation of certain projects. Its projects are also subject to a number of risks that may adversely affect its growth prospects and profitability, including the following:

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The Company may not be able to get financing at attractive rates.

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• There may be delays or higher-than-estimated costs in obtaining the necessary equipment or services and in implementing new technologies to build and operate a project.

• Its efforts to develop projects on schedule may be hindered by the lack of infrastructure, including reliable telecommunication and power supply services.

Suppliers and contractors may fail to meet their contractual obligations assumed to the Company.

It may face unexpected weather conditions or other force majeure events.

• The Company may not be able to get the required permits and licenses to build a project, or it may experience delays or higher-than-estimated costs in obtaining or renewing them.

• Changes in market conditions or regulations may make a project less profitable than expected at the time the work was started.

There may be accidents or incidents during project implementation.

It may face shortages of skilled personnel.

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Operational problems may materially and adversely affect the Company s business and financial performance.

Ineffective project management and operational flaws might require the Company to suspend or curtail operations, which could generally reduce its productivity. Operational incidents may entail failure of plants and machinery. There is no assurance that ineffective project management or other operational problems will not occur. Any damages to the Company s projects or delays in its operations caused by ineffective project management or operational flaws may materially and adversely affect its business and operating results.

The Company s business is subject to a number of operational risks that may adversely affect the results of its operations, such as:

• Unexpected weather conditions or other force majeure events.

• Adverse mining conditions delaying or hampering its ability to produce the expected quantity of minerals and to meet specifications required by customers, which can trigger price adjustments.

• There may be accidents or incidents involving its mines and related infrastructure, such as dams, plants, railroads, railway bridges, ports and ships.

• The Company may experience delays or interruptions in the transportation of its products, including in railroads, ports and ships.

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• Tropical diseases, HIV/AIDS and other contagious diseases in regions where some of its operations or some of its projects are located, which pose health and safety risks to its employees.

Employment disputes that may disrupt its operations from time to time.

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• Changes in market conditions or regulations may affect the economic prospects of an operation and make it inconsistent with the Company s business strategy.

• Failure to get the required permits and licenses renewed, or delays or higher-than-expected costs to get them.

• Disruptions to or unavailability of crucial information technology systems and services resulting from accidents or malicious acts.

The Company s business may be adversely affected by the failure of its counter-parties, joint venture partners or non-controlling joint ventures to comply with their obligations.

Customers, suppliers, contracted companies, financial institutions, joint venture partners and other counter-parties may fail to perform existing contracts and obligations, which may unfavorably impact the Company s operations and financial results. The ability of Company s

suppliers and customers to perform their obligations may be adversely affected in times of financial stress or economic downturn.

Significant parts of Vale s iron ore, pelletizing, nickel, coal, copper, energy and other business segments are operated through joint ventures. This may reduce the Company s level of control, as well as its ability to identify and manage risks. Vale s forecasts and plans for these joint ventures and consortia assume that its partners will observe their obligations to make capital contributions, purchase products and, in some cases, provide skilled and competent managerial personnel. If any of its partners fails to observe their commitments, the affected joint venture or consortium may not be able to operate in accordance with its business plans, or it might be that the Company has to increase the level of its investment to implement these plans.

Some of the Company s investments are controlled by partners or have a separate and independent management. These investments may not fully comply with the Company s standards, controls and procedures, including health, safety, environment and community standards. Failure by any of its partners or joint ventures to adopt adequate standards, controls and procedures may lead to higher costs, reduced production or environmental, health and safety incidents or accidents, which may adversely affect the Company s results and reputation.

The Company may not have adequate insurance coverage for some business risks.

The Company s business is generally subject to a number of risks and hazards, which could result in damage to or destruction of properties, facilities and equipment. The insurance that Vale maintain against risks that are typical in its business may not provide adequate coverage. Insurance against some risks (including liabilities for environmental pollution or certain damages to the environment or interruption of certain business activities) may not be available at a reasonable cost, or at all. Even when available, the Company may self-insure in cases where it determines that this will bring it a higher cost-benefit ratio. As a consequence, accidents or other negative events involving its mining, production or transportation facilities could have an adverse effect on its operations.

Labor disputes may interrupt the Company s operations from time to time.

A substantial number of the Company s employees, and some of the employees of its subcontractors, are represented by labor unions and are covered by collective bargaining or other labor agreements, which are subject to periodic negotiation. Strikes and other labor stoppages in any of its operations may adversely affect the operation of these facilities, the timing of completion and cost of the Company s main projects. For more information on labor relations, see item 14 of this Reference Form.

In addition to it, the Company may be adversely affected by labor stoppages involving third parties who may provide it with goods or services.

Higher energy costs or energy shortages can adversely affect the Company s business.

Fuel and electricity costs are a significant component of the Company s production cost, accounting for 10.8% of its total cost of goods sold in 2017. In order to fulfill its demand for energy, the Company depends on the following sources: oil byproducts, which accounted for 32.0% of total energy needs in 2017, electricity (31.6%), natural gas (16.7%), coal (15.0%) and other energy sources (4.7%).

Electricity costs accounted for 4.6% of its total cost of goods sold in 2017. If the Company is unable to secure reliable access to electricity at acceptable prices, it may be forced to curtail production or may experience higher production costs, either of which would adversely affect its operating results. The Company faces the risk of energy shortages in the countries where it has operations and projects, especially in Brazil, due to lack of infrastructure or weather conditions, such as floods or droughts. Future shortages, and government efforts to respond to or prevent shortages, may adversely impact the cost or supply of electricity for the Company 's operations.

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Failures in the Company s information technology systems, operational technology, computer security, and telecommunications may adversely affect the Company s business and reputation.

The Company relies on information technology systems, operational technology and telecommunications for the operation of its various commercial procedures. Failures in these systems, whether caused by obsolescence, technical flaws, negligence, accident or malicious acts, may result in the disclosure or theft of confidential information, misappropriation of funds, and interference or interruption in the Company s business operations. The Company may be the target of attempts to get unauthorized access to operational technology and information technology systems through the Internet, including sophisticated and coordinated attempts, often referred to as advanced persistent threats. Disruptions in key information technology, operational technology, computer security, or telecommunications systems, or information security breaches, may damage the Company s reputation and materially adversely affect its operating performance, earnings and financial position.

The Company s reserve estimates may materially differ from mineral quantities that the Company is actually able to recover. The Company s estimates of the mines useful life may prove inaccurate, and market price fluctuations and changes in operating and capital costs may render certain ore reserves economically unfeasible to mine.

The reserves reported by the Company are estimated quantities of ore and minerals that the Company has determined can be economically mined and processed under present and assumed future conditions. There are numerous uncertainties inherent in estimating quantities of reserves and in projecting potential future rates of mineral production, including factors beyond the Company s control. Reserve reporting involves estimating deposits of minerals that cannot be measured in an exact manner, and the accuracy of any reserve estimate is a function of the quality of available data, engineering and geological interpretation and judgment. As a result, no assurance can be given that the indicated amount of ore will be recovered or that it will be recovered at the rates the Company s anticipates. Reserve estimates and estimates of the mines useful life may require revisions based on actual production experience, projects, updated exploratory drilling data and other factors. Lower market prices of minerals and metals, reduced recovery rates or increased operating and capital costs due to inflation, exchange rates, changes in regulatory requirements or other factors may render proven and probable reserves economically unfeasible to mine and may ultimately result in a reduction of reserves. Such a reduction may affect depreciation and amortization rates and have an adverse effect on the Company s financial performance.

The Company may not be able to replenish its reserves, which could adversely affect its mining prospects.

The Company engages in mineral exploration, which is highly uncertain in nature, involves many risks and frequently is non-productive. The Company s exploration programs, which involve significant expenditures, may fail to result in the expansion or replacement of reserves depleted by current production. If the Company does not develop new reserves, it will not be able to sustain its current level of production beyond the remaining useful lives of its existing mines.

The feasibility of new mineral projects may change over time.

Once mineral deposits are discovered, it can take a number of years from the initial phases of drilling until production is possible, during which the economic feasibility of production may change. Substantial time and expenditures are required to:

establish mineral reserves through drilling;

• determine appropriate mining and metallurgical processes for optimizing the recovery of metal contained in ore;

- obtain environmental and other licenses;
- construct mining, processing facilities and infrastructure required for greenfield areas; and
- obtain the ore or extract the minerals from the ore.

If a project proves not to be economically feasible by the time the Company is able to exploit it, it may incur substantial losses and be obliged to write-off its assets. In addition, potential changes or complications involving metallurgical and other technological processes arising during the life of a project may result in delays and cost overruns that may render the project not economically feasible.

The Company faces rising extraction costs or investment requirements over time as reserves deplete.

Reserves are gradually depleted in the ordinary course of a given open pit or underground mining operation. As mining progresses, distances to the primary crusher and to tailings deposits become longer, pits become steeper, mines may move from being open pit to underground, and underground operations become deeper. In addition, for some types of reserves, mineralization grade decreases and hardness increases at greater depths. As a result, over time, the Company typically experiences rising extraction costs per unit with respect to each mine, or it may need to make additional investments, including for adaptation or construction of processing plants and for expansion or construction of tailings dams. Several of the Company s mines have been operating for long periods, and it will likely experience rising extraction costs per unit in the future at these operations in particular.

The Company s governance and compliance processes may fail to prevent regulatory penalties and reputational harm.

The Company operates in a global setting and its activities extend across countless jurisdictions and across complex regulatory structures with growing inspection activities around the world. The Company s governance and compliance processes, which include review of internal controls over financial statements, may not timely identify or prevent future violations of governance, accounting or legal standards. The Company may be subject to breaches of its Code of Ethical Conduct, of anti-corruption policies and of business conduct protocols and to instances of fraudulent behavior, corrupt practices and dishonesty by its employees, contractors or other agents. Failure to comply with applicable laws and other standards by the Company may subject it to investigations by the authorities, litigation, fines, loss of its licenses to operate, disgorgement of profits, involuntary dissolution and reputational damage.

It could be difficult for investors to enforce any court order rendered outside Brazil against the Company or any of its associates.

The Company s investors may be located in jurisdictions outside Brazil and could file actions against it or against its directors or executive officers in the Courts of their home jurisdictions. Vale is a Brazilian company, and the majority of its officers and directors are residents of Brazil. The vast majority of the Company s assets and the assets of its officers and directors are likely to be located in jurisdictions other than the home jurisdictions of its foreign investors. It might not be possible for investors outside Brazil to serve process within their home jurisdictions

upon the Company or upon its officers or directors who reside outside their home jurisdictions. In addition to it, a conclusive foreign judgment may be executed in the Brazilian Courts without a new examination of the merits only if previously ratified by the Superior Court of Justice, and the ratification shall only be granted if the foreign judgment: (a) comply with all the formalities required for its enforceability under the law of the country where it was rendered; (b) has been rendered by a competent court after the due service of process upon defendant, as required by applicable law; (c) is not subject to appeal; (d) does not conflict with a final and unappealable decision rendered by a Brazilian judicial authority; (e) has been certified by a Brazilian consulate in the country where it was rendered or it is duly apostilled in accordance with the Convention Abolishing the Requirement of Legalization for Foreign Public Documents and accompanied by a sworn translation into Portuguese, unless such procedure has been exempted by an international treaty signed by Brazil; (f) does not cover matters of exclusive competence of the Brazilian Courts; and (g) is not contrary to Brazilian national sovereignty, public policies or good customs. Therefore, investors might not be able to recover against the Company or its directors and officers on judgments of the courts of their home jurisdictions predicated upon the laws of such jurisdictions.

(b) Risks related to the Controller or Controlling Group of the Company and (c) Risks related to the Company s shareholders.

The shareholders who sign the Company s Shareholders Agreement have significant influence over Vale.

On August 14th, 2017, Litel Participações S.A. (Litel), Bradespar S.A. (Bradespar), Mitsui & Co., Ltd. (Mitsui) and BNDES Participações S.A. (BNDESPAR and, together with the others, Agreement Signatory Shareholders) entered into a shareholders agreement by which they undertake to vote jointly on certain key matters (Shareholders Agreement). Such Shareholders Agreement entered into force on August 14th, 2017 and will remain valid until November 09th, 2020. On December 31st, 2017, Litel, Bradespar, Mitsui and BNDESPAR jointly held 40.29% of the Company s total capital stock. As long as they have such a shareholding and no other shareholder has a higher shareholding, the Agreement Signatory Shareholders may elect a majority of members of the Board of Directors and control the results of certain shares that require the approval by the shareholders. For a description of the Company s shareholding structure and the current shareholders agreement, see item 15 of this Reference Form.

The Brazilian Federal Government has certain veto rights.

The Brazilian Federal Government holds 12 golden shares (special class preferred shares) in Vale, which gives it veto power over certain matters involving the Company, such as changes to the corporate name, to the location of its headquarters and to its corporate purpose, regarding mining activities. For a detailed description of the veto power of golden shares, see item 18.1 of this Reference Form.

(d) Risks related to the Company s subsidiaries

For information on the risks related to the Company s investees, see the Risk Factor described in item (a) above: *The Company s business may be adversely affected by the failure of its counterparties, joint venture partners or non-controlling joint ventures to comply with their obligations*.

(e) Risks related to the Company s suppliers

For information on risks related to the Company s suppliers, see the Risk Factors described in item (a) above: *Higher energy costs or energy shortages can adversely affect the Company s business* and *The Company s business may be adversely affected by the failure of its counterparties, joint venture partners or non-controlling joint ventures to comply with their obligations*.

(f) Risks related to the Company s customers

For information on risks related to the Company s customers, see the risk factor described in item (a) above: *The Company s business may be adversely affected by the failure of its counterparties, joint venture partners or non-controlling joint ventures to comply with their obligations*.

(g) Risks related to the Economic Sectors in which the Company operates

The Company s business is exposed to the cyclicality of global economic activity and requires significant investments of capital.

As a mining company, Vale is a supplier of industrial raw materials. Industrial production tends to be the most cyclical and volatile component of global economic activity, which affects demand for minerals and metals. At the same time, investment in mining requires a substantial amount of funds in order to replenish reserves, expand and maintain production capacity, build infrastructure, preserve the environment and minimize social impacts. Sensitivity to industrial production, together with the need for significant long-term capital investments, are important sources of risk to Vale s financial performance and growth prospects.

It also possible that the Company will not be able to adjust production volume in a timely or cost-effective manner in response to changes in demand. Lower utilization of capacity during periods of weak demand may expose the Company to higher unit production costs, since a significant portion of its cost structure is fixed in the short term due to the capital intensity of mining operations. In addition, efforts to reduce costs in periods of weak demand could be limited by labor regulations or previous collective-bargaining agreements or by previous agreements with the government. Conversely, during periods of high demand, Vale s ability to rapidly increase production capacity is limited, which could prevent it from meeting demand for its products.

Moreover, there is a possibility that the Company will not be able to complete expansions and new greenfield projects in time to take advantage of rising demand for iron ore, nickel or other products. When demand exceeds its production capacity, the Company may meet excess customer demand by purchasing iron ore, iron ore pellets or nickel from joint ventures or from third parties and reselling them, which increase its costs and narrow its operating margins. If Vale is unable to meet excess customer demand in this way, it may lose customers. In addition, operating close to full capacity may expose the Company to higher costs, including demurrage fees due to capacity restraints in its logistics systems.

Adverse economic developments in China may have a negative impact on Vale s revenue, cash flow and profitability.

China has been the main driver of global demand for minerals and metals over the last few years. In 2017, China s demand accounted for 74% of global demand for seaborne iron ore, 55% of global demand for nickel and 48% of global demand for copper. The percentage of the Company s net operating revenue attributable to sales to customers in China was 41.3% in 2017. Therefore, any contraction of China s economic growth could result in lower demand for our products, leading to lower revenues, cash flow and profitability. Poor performance in the Chinese real estate sector, the largest consumer of carbon steel in China, would also negatively impact the Company s results.

(h) Risks related to the Regulation of Sectors in which the Company operates

Political, economic and social conditions in countries where the Company operates or has projects may have an adverse impact on its business.

Vale may have its financial performance negatively affected by regulatory, political, economic and social conditions in the countries where it has significant operations or projects. In many of these jurisdictions, Vale is exposed to various risks, such as political instability, bribery, extortion, corruption, robbery, sabotage, kidnapping, civil war, acts of war, guerrilla activities, piracy on international transport routes, and terrorism.

Such problems may adversely affect the economic conditions and other conditions under which the Company operates in a manner that may have a material adverse effect on its business.

Disagreements with local communities in which the Company operates may adversely impact its business and reputation.

Disputes with communities located where the Company has operations may arise from time to time. In some instances, the Company s operations and mineral reserves are located on indigenous lands or on nearby lands owned or used by indigenous people or other groups of stakeholders.

Some of the Company s mining and other operations are located on territories whose ownership may be subject to disputes or uncertainties, or in areas intended for agriculture or land reform purposes, which may lead to disagreements with landowners, organized social movements, local communities and the government. In some jurisdictions, the Company may be required to consult and negotiate with these groups as part of the process to obtain licenses required to operate, in order to mitigate impact on the Company s operations or to obtain access to lands.

Disagreements or legal disputes with local groups, including indigenous groups, organized social movements, and local communities can lead to delays in obtaining licenses, increases in planned budget, delays or disruptions in operations. These issues may have a negative effect on the Company s reputation or even hinder its ability to exploit reserves and carry out its operations. Protesters have taken actions to disrupt the Company s operations and projects, and they may continue to do so in the future, which may harm the Company s operations and could adversely affect its business. For further information, see items 4.3 to 4.7 of this Reference Form.

The Company may be adversely affected by changes in public policies or by trends such as resource nationalization, including the imposition of new taxes or royalties on mining activities.

Mining is subject to government regulation, including taxes and royalties, which can have a significant financial impact on the Company s operations. In countries where the Company is present, it is exposed to potential renegotiation, annulment or forced amendment to existing contracts and licenses, expropriation or nationalization of properties, exchange controls, changes to local laws, regulations and policies, and audits and revaluations. The Company is also exposed to new taxes or increase in existing royalties and tax rates, reduction of exemptions and tax benefits, renegotiation of tax stabilization agreements or changes to the tax base in a way that is unfavorable to the Company. Governments that have committed to provide a stable taxation or regulatory environment may alter those commitments or shorten their duration. The Company also faces the risk of having to submit to the jurisdiction of a foreign court or arbitration tribunal or having to enforce a judgment against a sovereign nation within their own territory. For more information, see item 7.5 of this Reference Form.

The Company is also required to meet domestic beneficiation requirements in certain countries, such as local processing standards, export duties or restrictions, or charges on unprocessed ores. The imposition of or increase in such requirements, taxes or charges can significantly increase the risk profile and the operating costs in those jurisdictions. The Company and the mining industry are subject to rising trends of resource nationalization in certain countries in which it operates that can result in constraints on its operations, increased taxation or even expropriations and nationalizations.

As a supplier of iron ore, nickel and other raw materials to the global integrated steel market, the Company is subject to additional risks arising from the imposition of customs duties, export and import control tariffs and other trade barriers, impacting the Company s products and the products our customers produce. Global trade is subject to a growing trend of trade barriers, which may exacerbate commodity price volatility, and thus result in price instability in our products.

Concessions, authorizations, licenses and permits are subject to expiration, limitations on renewal and various other risks and uncertainties.

Vale s operations depend on authorizations and concessions from governmental regulatory agencies in the countries in which it operates. The Company is subject to laws and regulations in many jurisdictions that can change at any time, and such changes in laws and regulations may

require modifications to Vale s technologies and operations and result in unanticipated capital expenditures.

Some of Vale s mining concessions are subject to fixed expiration dates and might only be renewed a limited number of times for a limited period of time. Apart from mining concessions, the Company may need to obtain various authorizations, licenses and permits from governmental bodies and regulatory agencies in connection with the planning, maintenance, operation and closure of the Company s mines and related logistics infrastructure, which may be subject to fixed expiration dates or periodic review or renewal. There is no assurance that such renewals will be granted when and as requested, and there is no assurance that new conditions will not be imposed in connection with the renewal. Fees payable for mining concessions might increase substantially due to the passage of time from the original issuance of each individual exploration license. If it happens, the costs to keep or renew the mining concessions may render the Company s business purposes unfeasible. Accordingly, the Company needs to continually assess the mineral potential of each mining concession, particularly at the time of renewal, to determine if the costs of maintaining the concessions are justified by the results of operations to date, and thus it might elect to let some of its concessions lapse. There is no certainty that concessions will be obtained in terms favorable to the Company, nor that concessions will be at all obtained for the Company s planned future projects of mining or exploration.

In a number of jurisdictions where the Company has exploration projects, it may be required to return to the State a certain portion of the area covered by the exploration permit as a condition to renewing the permit or obtaining a mining concession. This obligation can lead to a substantial loss of part of the mineral deposit originally identified in the Company s feasibility studies. For more information on mining concessions and other similar rights, see Mining Rights and Regulation of Mining Activities in item 7.5 of this Reference Form.

(i) Ris

Risks related to the Company s ADS (American Depositary Shares)

If ADR holders exchange the ADSs for underlying shares, they risk losing the ability to remit foreign currency abroad.

The custodian of shares underlying the Company s ADSs maintains a registration with the Central Bank of Brazil, entitling it to qualify foreign institutional investors to buy and sell securities on B3 and to remit U.S. dollars abroad from Brazil for payments of dividends and other distributions relating to the referenced shares underlying the ADSs or upon the disposition of the underlying shares. If the ADR holder exchanges its ADSs for the underlying shares, it shall be entitled to rely on the custodian s registration for only five business days from the date of exchange. Subsequently, an ADR holder may not be able to get and remit foreign currency abroad upon the disposition of, or distribution relating to, the underlying shares, unless it obtains its own registration in accordance with the applicable regulation. If the ADR holder attempts to obtain its own registration, it may incur expenses or suffer delays in the application process, which could delay the receipt of dividends and other distributions relating to the underlying shares or the return of capital in a timely manner.

The custodian s registration or any registration obtained may be affected by future legislative changes, and additional restrictions applicable to ADRs, the disposition of the underlying shares or the repatriation of the proceeds from the disposition could be imposed in the future.

ADR holders may not have all the rights of Vale s shareholders and may not be able to exercise preemptive rights related to the shares underlying their ADSs.

ADR holders may not have the same rights that are assigned to the Company s shareholders under Brazilian law or under its by-laws, and the rights of ADR holders may be subject to certain limitations provided for in the deposit contract or by the securities intermediaries through which the ADR holders hold their securities. Moreover, the ability of ADR holders to exercise their preemptive rights is not assured, particularly if the applicable law in the holder s jurisdiction (for example, the Securities Act in the United States) requires that either a registration statement be

effective or an exemption from registration be available with respect to those rights, as is in the case of the United States. The Company is not obligated to extend the offer of preemptive rights to ADR holders, to file a registration statement in the United States, or to make any other similar registration in any other jurisdiction, relating to preemptive rights, or to undertake steps that may be needed to make exemptions from registration available, and it cannot assure holders that it will file any registration statement or take such steps.

ADR Holders may face difficulties in the exercise of their voting rights.

ADR holders do not have the rights of shareholders. They have only the contractual rights set forth for their benefit under the deposit agreements. ADR holders are not permitted to attend shareholders meetings, and they may only vote by giving instructions to the depositary. In practice, the ability of a ADR holder to instruct the depositary as to voting will depend on the timing and procedures for giving instructions to the depositary, either directly or through the holder s custody and clearing system. With respect to ADSs for which no instructions are received, the depositary may, being subject to certain limitations, grant a proxy to someone designated by the Company.

The legal protections for holders of the Company s securities differ from one jurisdiction to another and may be inconsistent, unfamiliar or less effective than investors anticipate.

Vale is a global company with securities traded in several different markets and with investors located in many different countries. The legal regime for the protection of investors varies around the world, sometimes in important ways, and investors in our securities should recognize that the protections and remedies available to them may be different from those to which they are accustomed in their home markets. The Company is subject to securities legislation in several countries, which have different rules, supervision and enforcement practices. The only Business Corporation Law applicable to the Company is the Brazilian corporation law, with its specific substantive rules and legal procedures. The Company is also subject to corporate governance rules in several jurisdictions where its securities are listed, but, as a foreign private issuer, the Company is not required to follow many of the corporate governance rules that apply to U.S. domestic issuers with securities listed on the New York Stock Exchange, and it is not subject to the U.S. proxy rules.

(j) Risks related to social and environmental issues

The obligations and potential liabilities arising from the collapse of the tailings dam owned by Samarco Mineração S.A. (<u>Samarco</u>) in Minas Gerais may adversely affect the Company s business, financial condition and reputation.

In November 2015, the Fundão tailings dam owned by Samarco collapsed, causing environmental damage to the surrounding area. The collapse of Samarco s tailings dam has adversely affected and will continue to affect the Company s business, and the total impact is still uncertain and cannot be estimated. See below a report of the main effects of the dam s collapse on the Company s business.

• *Litigation.* The Company is involved in a number of legal proceedings and investigations related to the collapse of the Fundão tailings dam, and other proceedings and investigations may be instituted in the future. These legal proceedings include class actions brought by investors against the Company and some of its directors in the United States, a criminal proceeding in Brazil, public-interest civil actions filed by Brazilian authorities, and several

lawsuits involving significant claims related to damages and reparation measures. Adverse outcomes in such proceedings may have a negative effect on the Company s liquidity and financial condition. For more information on these proceedings, see items 4.3 to 4.7 of this Reference Form.

• Obligations of reparation and other commitments. In March 2016, Samarco and its

shareholders, Vale and BHP Billiton Brasil Ltda. (<u>BHPB</u>), a Brazilian subsidiary of BHP Billiton plc, entered into the Settlement and Consent Decree (<u>TTAC</u>) with several government officials, under which Samarco, Vale and BHPB agree to create a foundation (Renova Foundation) to develop and implement long-term recovery and compensation programs. In January 2017, Samarco, Vale and BHPB entered into two preliminary agreements with the Federal Prosecution Office (<u>MPF</u>), which provides, among other things, for the appointment of experts chosen by the MPF to examine and monitor the reparation programs created under the TTAC of March 2016, the provision of guarantees to secure certain reparation obligations, and a schedule for negotiating a final agreement. The preliminary agreements contemplate a potential review of the reparation programs provided for in the TTAC, based on the findings of the experts chosen by the MPF. For more information, see items 4.7 and 7.9 of this Reference Form.

As Samarco is currently unable to resume its activities, the Company and BHPB are financing the Renova Foundation and providing funds directly to Samarco in order to preserve its operations and support certain reclamation measures undertaken by Samarco. Should Samarco continue to be unable to resume its operations or generate enough cash flows to finance the required reparation measures under these agreements, the Company will be obliged to continue financing these reparation measures, which in turn may adversely affect its financial condition and operating results.

• *Risk of further environmental damage.* Failure to contain remaining tailings at Samarco s dams may cause further environmental damage, additional impacts on Company s operations, and additional claims, fines and lawsuits against Samarco and the Company. Failure to contain remaining tailings could also affect the feasibility and the schedule for the resumption of Samarco s operations.

• *Other impacts.* The Company may face delays in obtaining environmental and other licenses for its tailings dams and other facilities, and Brazilian authorities may impose stricter conditions on the licensing process for its projects and operations. In addition, as one of Samarco s shareholders, the Company s reputation has been negatively affected by the collapse of Samarco s tailings dam.

The Company s business is subject to environmental, health and safety incidents.

The Company s operations involve the use, handling, storage, discharge and disposal of hazardous substances into the environment and the use of natural resources. Therefore, the mining industry is generally subject to significant risks and hazards, including fire, explosion, toxic gas leaks, spillage of polluting substances or other hazardous materials, rock slides, dam-related accidents, failure of other operational structures and accidents involving vehicles, machinery and mobile equipment. This may occur by accident or by breach of operating and maintenance standards and may result in significant environmental and social impacts, damage to or destruction of mineral properties or production facilities, injury, illness or death of employees, service providers or members of the community surrounding the operations, environmental damage, delays in production, financial losses and possible civil liability. In addition to the above, in remote locations, employees may be exposed to tropical and contagious diseases capable of affecting their health and safety. Notwithstanding the Company s standards, policies and controls, its operations remain subject to incidents or accidents that may have a negative effect on its business or reputation.

The Company s business may be adversely affected by environmental and health and safety regulations, including regulations pertaining to climate change.

Nearly all aspects of its activities, products, services and projects around the world are subject to social, environmental and health and safety regulations, which may expose it to increased liability or increased costs. Such regulations require Vale to have environmental licenses, permits and

authorizations for its operations and projects, and to carry out environmental and social impact assessments in order to get approval for its projects and permission for initiating construction. Significant changes to existing operations are also subject to these requirements. Difficulties in obtaining or renewing licenses can lead to construction delays, cost increases, and may adversely impact its production volumes. Social, environmental and health and safety regulations also impose standards and controls on activities relating to mineral exploration, mining, pelletizing activities, railway and marine services, ports, decommissioning, refining, distribution and marketing of its products. Such regulation may give rise to significant costs and liabilities. Litigation regarding these and other related matters may adversely affect the Company s financial condition or otherwise harm its reputation.

Social, environmental and health and safety regulations in the several countries where Vale operates have become stricter in recent years and it is possible that a higher degree of regulation or stricter enforcement of existing regulations may negatively affect Vale by imposing stricter restriction on its activities and products, creating new requirements for the issuance or renewal of environmental licenses, resulting in delays in operations or forcing it to get involved in costly efforts for recovery.

It is possible that, in some of its iron ore mining operations or projects, Vale may be required to limit or modify its mining plans or to incur additional costs to preserve caves or to compensate for the impact on them, with potential consequences for production volumes, costs or reserves in its iron ore business. For more details on Brazilian environmental regulations regarding caves, refer to item 7 of this Reference Form.

In response to the collapse of Samarco s tailings dam in Minas Gerais, additional environmental and health and safety standards and regulations may be forthcoming in Brazil and authorities may impose more stringent conditions in connection with the licensing process of the Company s projects and operations. Moreover, Vale may face stricter requirements and delays in receiving environmental licenses to operate other tailings dams.

National policies and international regulations on climate change can affect many of the Company s business in several countries. Ratification of the Paris Climate Agreement in 2016 increased the international pressure to establish a global carbon price and on companies to adopt carbon pricing strategies. The pricing of greenhouse gas emissions can affect the Company s operating costs, mainly through higher prices for fossil fuels, since mining is an energy intensive industry, as well as the Company s international freight costs. The consumption of coal, one of the products that the Company sells, is especially facing pressure from international institutions due to its carbon intensity.

Regulatory initiatives at the national and international levels that affect its shipping practices could increase its costs or require Vale to make new capital expenditures.

Natural disasters may cause severe damage to Company s operations and projects in the countries where it operates and may have a negative impact on its sales to countries adversely affected by such disasters.

Natural disasters, such as windstorms, droughts, floods, earthquakes and tsunamis, may have a negative effect on Vale s operations and projects in the countries where it operates, and may cause a contraction in sales to countries affected by, among other factors, power outages and the destruction of industrial facilities and infrastructure. The physical impact of climate change on business remains uncertain, but Vale may experience changes in rainfall patterns, increased temperatures, water shortages, rising sea levels, increased storm frequency and intensity as a result of climate change, which may adversely affect its operations. On some specific occasions in recent years, the Company has determined that force majeure events have occurred due to effect of severe weather on its mining and logistics activities.

4.2 - Description of the main market risks

Political and economic instability in Brazil could adversely impact the Company s business and the market price of its securities.

The Brazilian Federal Government s economic policies may have important effects on Brazilian companies, including Vale, and on market conditions and prices of the securities of Brazilian companies. The Company s financial condition and results of operations may be adversely affected by the following factors and the Federal Government s response to these factors:

- exchange rate movements and volatility;
- inflation and high interest rates;
- financing of the current account deficit;
- liquidity of domestic capital and credit markets;
- tax policy;

• political instability resulting from allegations of corruption involving political parties, elected officials or other public officials; and

• other political, diplomatic, social and economic developments in or affecting Brazil.

Historically, the country s political situation has influenced the performance of the Brazilian economy, and political crises have affected the confidence of investors and the general public, which resulted in economic deceleration, reduction of credit ratings of the Brazilian government and Brazilian issuers, and heightened volatility in the securities issued abroad by Brazilian companies. In August 2016, the Brazilian Congress approved the impeachment of president Dilma Roussef. Additionally, the current investigations into corruption have resulted in claims against former and current government authorities, members of major political parties and managers and officers of several Brazilian companies. In addition, the next presidential and federal legislative election in Brazil will take place in October 2018. The Company cannot predict the outcome of these elections or whether they will bring about changes in the governmental or economic policies of Brazil or the mining industry. Political instability and the upcoming elections may aggravate economic uncertainties in Brazil and increase volatility in the securities of Brazilian issuers.

Over the last years, Brazil faced an economic recession, adverse fiscal developments and political instability. Brazilian GDP increased by 1% in 2017, but decreased 3.6% in 2016 and 3.85% in 2018. Unemployment rate was 12.7% in 2017, 11.5% in 2016 and 6.9% in 2015. The inflation, as reported by the National Consumer Price Index IPCA, was 2.95% in 2017, 6.29% in 2016 and 10.67% in 2015. The Brazilian Central Bank s base interest rate (SELIC) was 7.00% on December 31, 2017, 13.75% on December 31, 2016 and 14.25% on December 31, 2015. Future economic, social and political developments in Brazil may impair the Company s business, financial condition or results of operations, or cause the market value of its securities to decline.

Significant Market Risks Applicable to the Company

Considering the nature of the Company s business and operations, the main market risk factors that it is exposed to are:

- price of products and inputs;
- foreign exchange rates and interest rates.

Price risk of products and inputs

The Company is exposed to market risks related to volatility in the prices of its production inputs and products, as follows:

Global prices for the Company s products are subject to volatility, which may affect the Company s business.

Global prices for metals are subject to significant fluctuations and are affected by many factors, including actual and expected global macroeconomic and political conditions, regional and sectorial factors, levels of supply and demand, the availability and cost of substitutes, inventory levels, technological developments, regulatory issues and foreign trade issues, investments by commodity funds, and actions of participants in the commodity markets. Continued low market prices for products sold by the Company may result in the suspension of some of its projects and operations, the reduction of its mineral reserves and the loss of value of its assets, which may adversely affect the Company s cash flows, financial situation and results of operations.

Demand for our iron ore, coal and nickel products depends on global demand for steel. Iron ore and iron ore pellets, which together accounted for 71.2% of the Company s 2017 net operating revenues, are used to produce carbon steel. Nickel, which accounted for 13.7% of the Company s 2017 net operating revenues, is used mainly to produce stainless and alloy steels. The prices of different steels and the performance of the global steel industry are highly cyclical and volatile, and these business cycles in the steel industry affect demand and prices for the Company s products. In addition, vertical backward integration of the steel and stainless steel industries and the use of scrap could reduce the global seaborne trade of iron ore and primary nickel. The demand for copper is affected by the demand for copper wire, and a continued decline in the construction industry demand could have a negative impact on the Company s copper business.

The Company is more affected by changes in iron ore prices. For example, a price reduction of US\$1 per dry metric ton unit (dmt) in the average iron ore price would have reduced the Company s operating income for the year ended December 31, 2017 by approximately US\$320 million. Average iron ore prices decreased 59% in the last two years, from US\$135 per dmt in 2013 to US\$97 per dmt in 2014, US\$55.5 per dmt in 2015, US\$58.5 per dmt in 2016 and US\$71.3 per dmt in 2017, according to the average Platts IODEX (62% Fe CFR China). On February 28, 2018 the year to date average Platts IODEX iron ore price was US\$76.60 per dmt.

For further information on the average prices obtained for the products sold by the Company, refer to item 10.2 of this Reference Form.

For information on the risks related to inputs, see the Risk Factors described in item 4.1(a) above: *Higher energy costs or energy shortages* would adversely affect the Company s business.

Foreign Exchange Risks

The Company s cash flow is subject to the volatility of several currencies, since the prices of its products are predominantly indexed to US Dollar, while a significant part of the costs, expenses and investments are indexed to other currencies, mainly Reais and Canadian Dollars, as highlighted in the risk below.

The Company also has debt instruments denominated in currencies other than US Dollar, mainly in Brazilian Reais and Euros. The Company uses swaps and forward transactions to convert to US dollars a portion of the cash outflows of these debt securities.

Changes in the exchange rates of the currencies in which the Company conducts its operations may adversely affect its financial condition and results of operations.

A substantial portion of the Company s revenues, trade receivables and debt is denominated in U.S. Dollars, and considering that its functional currency is Brazilian Reais, changes in exchange rates may result in (i) losses or gains on its net U.S. dollar-denominated indebtedness and accounts receivable and (ii) market value losses or gains on exchange derivatives used to stabilize its cash flow in U.S. Dollars. In 2017, the Company had net foreign exchange losses of US\$463 million, while it had net foreign exchange gains of US\$3.252 million in 2016 and net foreign exchange losses of US\$7.044 million in 2015. In addition, the fluctuating values of the Brazilian Reais, the Canadian Dollar, the Australian Dollar, the Euro, the Indonesian Rupiah and other currencies against the U.S. Dollar affects the Company s results since most of its costs of goods sold are denominated in currencies other than the U.S. Dollar, principally the Real (52% in 2017) and the Canadian Dollar (12% in 2017), while its revenues are mostly U.S. dollar-denominated. Currency fluctuations should continue to affect the Company s financial income, expenses and cash flow generation.

Significant volatility in currency prices may also result in disturbances in foreign exchange markets, which could limit the Company s ability to transfer or to convert certain currencies into U.S. Dollars and other currencies for the purpose of making timely payments of interest and principal on our indebtedness. The central banks and governments of the countries in which Vale operates may institute restrictive exchange rate policies in the future and impose taxes on foreign exchange transactions.

Interest Rate Risk

The Company is also exposed to interest rates on loans and financings. Debts with fluctuating interest rates in US Dollars consist mainly of loans, including export prepayment operations and loans from commercial banks and multilateral organizations. In general, these debts are indexed to the LIBOR (London Interbank Offered Rate). Floating debts denominated in Reais are indexed mainly to the Interbank Deposit Certificate (CDI), Long Term Interest Rate (TJLP) and the National Consumer Price Index (IPCA), and part of these debts are converted to fixed interest rates in US Dollars through swap operations.

On December 31, 2017, 75.3% of our indebtedness was denominated in US Dollars (US\$), corresponding to R\$56,035,600,320.40, of which R\$42,298,197,505.14 at fixed interest and R\$13,737,402,815.26 linked to Libor. Other 18.4% of the debt was denominated in Reais (R\$), corresponding to R\$13,719,215,308.42, of which R\$962,663,228.22 related to the DI Rate, R\$7,026,409,294.21 linked to TJLP and R\$ 6,692,806,014.21 at fixed interest and others. The remaining 6.2% of debt, corresponding to R\$4,637,352,339.50 at fixed interest rates, was

denominated predominantly in Euros ().

4.3 - Relevant non-secret legal, administrative or arbitration proceedings

As at December 31, 2017 the Company was not party to any non-secret arbitration.

(i) Labor

As at December 31, 2017 the Company and its controlled companies were parties to 20,926 legal proceedings of labor nature involving the total amount of R\$18.0 billion for which there are R\$1.7 billion of provisions by reason of the risks involved. The labor lawsuits brought against the Company relate to matters such as overtime, commuting hours, premium for unhealthy and hazardous work, equal pay and outsourcing, among others.

The tables below present an individual description of labor proceedings considered relevant to the Company s and/or its subsidiaries businesses as of December 31, 2017:

Court	6th Panel of the Superior Labor Court (TST)
Instance	3rd Instance
Date of filing	Nov 27, 2006
Parties in the case	Labor Prosecution Office of Minas Gerais (<u>MPT-MG</u>) (plaintiff) and Vale (defendant)
Amounts, assets or rights involved	R\$ 15,388,224.99
Main facts	MPT-MG filed on November 27, 2006, a public civil action aimed at preventing the outsourcing of services of (i) operation of machinery and equipment for mining, such as loader, excavator and drill; (ii) monitoring and reading of instruments in waste dams and sterile piles; and (iii) preparation and performance of a fire plan (detonation).
	On August 20, 2009, a judgment was rendered (partially granted) ordering Vale to refrain from outsourcing the aforementioned services and, therefore, to conduct such activities through its own employees. The court understood that such services would be the Company s end activities and thus could not be outsourced.
	On February 22, 2010, the Regional Labor Court of the 3rd Region (<u>TRT</u> 3) dismissed the appeal filed by Vale and partially granted the MPT-MG appeal, in order to grant the interlocutory relief for immediate enforcement of the judgment.
	On May 18, 2010, Vale filed an appeal to the Superior Labor Court (<u>TS</u> T), holding the claim of breach of article 129, III, of the Federal Constitution and article 83 of Complementary Law No. 75/93, as well as divergence of precedents regarding the lack of collective interest in authorizing the filing of a public civil action by the MPT-MG, which would lead to its lack of standing to file the action, and, consequently, nonsuit (article 267, I and VI and article 295, V, of the Code of Civil Procedure). Vale

also claimed breach of article 5, paragraphs XXII, LIV and LV, of the Federal Constitution, and article 899 of the Consolidation of Labor Laws (CLT), due to the unreasonable judicial mortgage determined by TRT3 without there being an execution procedure. Finally, Vale claimed breach of items II and XIII of article 5, and sole paragraph of article 170, both of

the Federal Constitution, for disrespect to the right to free exercise of the job or legal profession, since the legal qualifications are met, since the activities performed by the service providers are specialized and can be legitimately contracted.

On May 21, 2010, in the action for a provisional remedy filed by Vale, TST granted an injunction request to suspend the interlocutory relief that determined the immediate enforcement of the judgment.

On July 19, 2010, Vale filed an interlocutory appeal with TST due to the denial of the Review Appeal by TRT3.

On March 18, 2015, the Interlocutory Appeal was filed by Vale, determining the consideration of Vale s Review Appeal.

On April 8, 2015, the Review Appeal was found partially favorable to Vale by annulling the decision of the Motion for Clarification issued by TRT3.

Despite the above decision, MPT-MG understands there is a fine for alleged noncompliance with the decision, and, as a precaution, Vale calculated the amounts sought by the Prosecution Office (approximately R\$ 7.6 million) which would be added to the original requests of the case and classified with chance of remote loss. Due to the aforementioned questioning by MPT-MG, the amount involved in the case was reassessed in order to consider the new MPT-MG s allegations regarding noncompliance with the court decision. Accordingly, the amount of the claim was revalued from R\$ 856,000 on December 31, 2014 to R\$ 12.8 million on December 31, 2015, although Vale does not agree with the determination of noncompliance and the application of the fine.

The documents returned to TRT3, for a new judgment of the Motion for Clarification. Upon delay of the Motion for Clarification, a new Review Appeal was filed and, in view of its denial, an Interlocutory Appeal was filed, which is pending before the TST and was assigned to the 6th Panel.

In March 2018, Vale filed a petition before the TST requesting that the Court recognize that the action became moot, as Laws 13,429/17 and 13,467/17 authorize the outsourcing of the end activity. Subsequently, in the event of non-acceptance of this request, the Rapporteur of the appeal was requested to limit the adverse judgment until November 2017, when the mentioned law came into force.

1.83% of the total updated order was classified as Likely Loss, the remaining amount being classified as Remote Loss.

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company

Chance of a loss

In case the court holds the unfavorable decision, Vale will be obliged, in the region of Minas Gerais, to refrain from outsourcing the aforementioned services, and conduct such activities, therefore, through its own employees; and to cause the termination of outsourcing agreements that have such services as purpose. However, with the adoption of labor reform and consequent legal permission to outsource end

Notes

Court

Instance

Date of filing

Main facts

activities, there is the possibility of the recognition of mootness of the

rejection of the collective mental distress claim sought by the Prosecution Office, and its final decision on April 23, 2018, this risk no longer exists.

action or, also, limitation of the adverse judgment until adoption of the new legislation. Not applicable 2) Case n. 0000676-11.2012.5.24.0041 Labor Court of Corumbá/MS 1st Instance Oct 24, 2012 Parties in the case Labor Prosecution Office of Mato Grosso do Sul (MPT-MS) (plaintiff) and Mineração Corumbaense Reunida (_MCR_) (defendant) Amounts, assets or rights involved R\$225,644.06 MPT-MSSul filed a public civil action under the allegation that MCR should be compelled to comply with the labor security standards set forth in the Labor Regulatory Norms. On December 12, 2012, MCR presented its defense, maintaining that it always complied with the Labor Regulatory Norms, and that the accident reported in the action occurred due to the employee s failure to comply with the safety procedures and standards required by the Company. An initial hearing was held to determine whether or not the non-compliance with the Regulatory Norms exists. A court decision was issued, with no pecuniary value, to order MCR only to register the Specialized Service in Safety Engineering - SESMT and Occupational Medicine in accordance with the Regulatory Norms. Failure to comply with the obligation to do so will result in a fine of R\$60,000.00 per event, reversible to the Worker s Support Fund (FAT) or to another social allocation fund in favor of the community, to be timely on the execution. The order requests were denied. An ordinary appeal was filed by MPT-MS, which was dismissed, which is why MPT-MS filed a Review Appeal. The Review Appeal was admitted and judged on February 23, 2018, and the Panel decided for its non-cognizance. It is a favorable decision to MCR, since it maintained the rejection of the collective mental distress claim sought by the Labor Prosecution Office. Chance of a loss The chance of loss related to collective mental distress claim no longer exists, since the MPT appeal was not cognized and this decision recently became final and unappealable on April 23, 2018. Analysis of the impact in case of Failure to comply with the obligation to do so would result in a fine of loss / Reasons for the relevance of R\$60,000.00 per event, reversible to the Worker s Support Fund (FAT) or to the case to the Company another social allocation fund in favor of the community, to be timely on the execution. The obligation to do so imposed on MCR has already been performed. In view of the recent decision of TST that maintained the

3) Case n. 00329.2006.92020003

Court	Labor Court of Maruim - Sergipe
Instance	3rd instance (TST)
Date of filing	Jan 23, 2001
Parties in the case	Vale S.A. (defendant) and Sindicato dos Trabalhadores nas Indústrias de Extração de Ferro, Metais Básicos e Preciosos - Sindimina (plaintiff)
Amounts, assets or rights involved	Guarantee of operational activities in the potassium chloride exploration mine in Sergipe.
Main facts	Action filed by SINDIMINA in the State of Sergipe on January 23, 2001, aiming at adjusting the working conditions of employees located in the Sergipe potash subsoil mine to the NR-15 regulatory standard, especially regarding the temperature of the mine and the level of noise.
	On February 14, 2001, Vale defended the union s lack of standing in order to file the action and non-existence of a breach of the NR-15 regulatory standard, which would have been proven during the production of evidence.
	On February 20, 2006, a judgment was issued determining that, within 30 days, measures had to be taken to improve the mine s refrigeration, under penalty of stoppage of the activities until the implementation of the measures and a daily fine of R\$100,000. On September 25, 2006, Vale filed an appeal to the Regional Labor Court (TRT). On August 7, 2007, it partially granted the appeal of Vale to exclude from the adverse judgment the determination of the stoppage of the mine s activity and the payment of a daily fine in the amount of R\$100,000.
	On November 29, 2007, Vale filed an appeal to the Superior Labor Court (TST), which was denied on December 19, 2011. On February 6, 2012, Vale filed a motion for clarification that was denied. In March 2012, Vale filed an appeal to the Individual Grievance Session - 1 (SDI-1), and also an Extraordinary Appeal addressed to the Federal Supreme Court (STF).
	In November 2013, the parties filed a conciliation request, and, in the scope of the conciliation hearing, the parties agreed to the formation of a commission for expert assessment of the conditions of the working environment for further presentation in the case file and approval of any such agreement.
	On May 18, 2015, the case was re-assigned by succession to the office of Minister Walmir Correia da Costa. On August 14, 2017, a decision was issued ordering the lowering of the records to the Labor Court of Maruim for the conduction of legal expert testimony to determine the activities developed within the scope of the mine to subsidize the examination of the request for approval of the agreement between the parties. In the case brought before the Court of Maruim, an order was issued on February 16, 2018 ordering the parties to indicate conditions and appoint a technical assistant, as well as appointing Mr. Ronald Donald as a legal expert, who acted in the original expert testimony, and the company submitted a challenge considering that there was not exemption on the part

	of the expert to change the opinion previously presented. On May 21, 2018 an order was issued rejecting the company s request for substitution of the expert. The defendant company will present an appropriate remedy in order to challenge such decision.
Chance of a loss	Likely.
Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company	Any unfavorable decision may lead to the adoption of measures to adjust work hours and temperatures of the underground mine, under penalty of imposition of injunction, fines and, in the worst case, the total or partial stoppage of the activities in the underground potash mine.
	There is no amount provisioned for this action (except for the nominal amount of R \$1.00), since it is an injunction (obligation to do) (that is, to adapt the working conditions to the relevant legal and regulatory standards), with future consequences, without impact on past and present results.
4) Case n. 0292800-44.2009.5.08.0117	
Court	2ª. Labor Court of Marabá - PA
Instance	1st Instance
Date of filing	Dec 10, 2009
Parties in the case	Vale S.A. (defendant) and Labor Prosecution Office of Pará (<u>MPT</u> PA) (plaintiff)
Amounts, assets or rights involved	R\$749,597,013.58
Main facts	In 2009, after a fatal accident with the Company s employee, MPT-PA filed a Public Civil Action petitioning for safety and occupational health measures, and in the end requested that the company be ordered to pay the amount of R\$1 million, as collective mental distress damages, in addition to a fine of R\$50,000 per unfulfilled obligation. Subsequently, the MPT-PA amended the statement of claims to require that the mental distress damages be increased to R\$10 million.
	On June 11, 2015 a judgment was issued by the court of Marabá who ordered the Company to pay collective mental distress damages in the amount of R\$44.1 million, that is, in a much higher amount than required

R\$804.1 million.

by MPT-PA. It also condemned Vale, *extra petita* (not required in the request made by MPT-PA), to pay R\$326.3 million for social dumping, as well as to pay retroactive default interest in the amount of R\$310.2 million and a fine of R\$7.7 million per fine for malicious prosecution and court costs of R\$15.8 million, so that the amount of the adverse judgment totaled

On June 16, 2015, an injunction was issued on the Writ of Mandamus filed by Vale before the Regional Labor Court (<u>TR</u>T), ordering the reduction of the court costs to R\$200.000 so as to assure the right of the Company to file

On October 20, 2015, after Vale s Ordinary Appeal, a judgment was issued by the Second TRT of the Eighth Region, largely favorable to Vale, determining reversal of the decision isseud by the court of Marabá, to

an appeal against the judgment of the Marabá court.

reduce the amount of collective

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mental distress damages to R\$1 million and exclude from the adverse judgment the social dumping indemnity and the fine for malicious prosecution granted by the court of Marabá.

Upon this second instance decision the total award was reduced from R\$804 million to R\$1.1 million.

On October 26, 2015, Vale filed a Motion for Clarification seeking to suppress omission and contradiction of the judgment, due to the lack of challenge to the amount in controversy. Vale reiterated the preliminary argument of defect of the amendment to the complaint claiming that plaintiff could not have increased the amount in controversy more than 10 times without any justification and grounds. However, in August 2016, the Motion for Clarification was denied.

On September 27, 2016, the MPT filed a Review Appeal, which was granted and consequently, contradicted by the Company. The Review Appeal was submitted to the Superior Labor Court (<u>TST</u>) on March 16, 2017 and is pending judgment.

Possible loss, since, after judgment in second instance, all items recognized in the judgment were removed and only the collective mental distress damages, in the amount of R\$2.5 million (amount of the updated award), were maintained. The difference in the amount involved against the amount of the award is considered to be a remote loss. The amounts of other motions attributed by the Court of the 1st Instance, additionally to the Plaintiff s motion have a prognosis of remote loss.

The Company considers that the suit is relevant due to the amount involved that was recognized in a first-instance judgment (R\$804 million) and impact on the adoption of several health and safety measures in the location (Carajás).

Ministry of Labor and Employment (<u>MTE</u>)

2ª. Administrative Instance

Feb 12, 2015

MTE and Vale

R\$475,970.92 (being R\$475,324.70 relating to notice 20.588.905-1 and R\$646.22 relating to notice 20.589.903-0)

In February 2015, the Ministry of Labor and Employment (MTE) supervised the activities of company Ouro Verde Locação e Serviços SA (Ouro Verde), which provided services to Vale for the transportation of finished products between Pico Mine (Itabirito-MG) and the railway terminals in Fábrica Mine (Congonhas-MG).

The referred inspection resulted in notices of violation issued by the MTE, related to alleged (i) inadequate hygiene conditions; (ii) violation of safety standards; (iii) excessive working hours; (iv) outsourcing of finished products considered as end activity not subject to outsourcing; and (v) due to all of the aforementioned violations, the MTE filed a notice of violation for practices similar to slave labor.

Chance of a loss

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company

5) Notices of Violation 20.588.905-1 and 20.589.903-0

Administrative Level

Instance

Date of filing

Parties in the case

Amounts, assets or rights involved

Main facts

Although all the practices subject to the notices of violation refer to Ouro Verde, as the outsourcing was considered illegal, all the notices were drawn against Vale.

Vale filed administrative defense before the MTE claiming: (i) that the transportation of products is outsourced; (ii) that there is no direct employment relationship between Vale and the employees of Ouro Verde; (iii) that there was a misunderstanding of the classification of alleged irregularities as practice similar to slave labor. The administrative defenses were not granted and Vale appealed to the second administrative instance. In April 2016, decisions were issued denying Vale s appeals.

Once the administrative level had been exhausted, Vale filed an Action for Provisional Remedy (case n. 0010627-83.2016.5.03.0005) in which it obtained an injunction in favor of Vale to suspend the enforceability of the fine. The main action, an Annulment Action of Notices of Violation was assigned to the same judge presiding over a connected lawsuit on May 27, 2016.

As a result of the notices of violation issued by the MTE, the Prosecution Office (MPT) commenced Public Civil Inquiry No. 3212.2014.03.000/9-12 to investigate the alleged practice similar to slave labor in the services provided by Ouro Verde, upon Vale having signed with MPT Consent Decree no. 118/2015 (<u>TAC</u>), by means of which preventive and corrective measures were agreed to guarantee the labor rights of the employees of the companies that provide services. The commitments undertaken have been properly implemented. For information on said TAC, see item 4.7.

By adopting a broad interpretation of the law, the Ministry of Labor concluded that the employees had been working under conditions similar to slavery. Upon becoming aware of the findings, the Company promptly remedied the issues and, subsequently, terminated the contract with the transportation company.

However, the Ministry of Labor filed an administrative proceeding against the Company. Vale presented its defense, which was rejected, the subsistence of the records being maintained. Against this decision, an administrative appeal was filed, which was not accepted, and the administrative proceeding was terminated.

In June 2016, Vale commenced a legal proceeding requesting the annulment of administrative notices of violation and that the Ministry of Labor refrain from classifying it as a company involved in practices similar to slavery. For information on such lawsuits, see items 6 and 7 below.

On April 30, 2018, the judgments regarding the annulment actions mentioned in items 6 and 7 below were rendered, through which revoked, among other things, interlocutory relief

that prevented the registration of the fines as overdue tax liability.

Chance of a loss Likely Analysis of the impact in case of Low economic value, but relevant impact to image. loss / Reasons for the relevance of the case to the Company 6) Case n. 0010784-59.2016.5.03.0004 Court 5th Labor Court of Belo Horizonte/MG Instance 1st Instance Date of filing May 27, 2016 Vale S.A. (Plaintiff) Parties in the case Federal Government (Defendant) Amounts, assets or rights involved R\$600.178.67 Main facts The purpose of this action is the annulment of notice of violation no. 20.588.905-1 drawn up against Vale by the Ministry of Labor based on the understanding of the supervisory authority that the transport service of iron ore at the segment of the Pico/Fábrica road could not be performed by thrid party employees, thus the contract between Vale and the employees of Ouro Verde Locação e Serviços SA (Ouro Verde) was ilegal. On May 10th, 2016, an interlocutory injunction was granted in favor of Vale establishing, through a precautionary measurement distributed on April 29th, 2016, that the Ministry of Labor refrained from registering the infraction notice at the federal debt roster, as well as execute it before a sentence related to the annulment law suit, to be filed by the plaintiff (Vale), is imposed by a court of law. On May 2nd, 2018 the judgment was concluded dismissing the annulment law suit and revoking the injunction previously given. Vale filed a Motion for Clarification on May 9th, 2018, to clarify omissions and contradictions, such as the decision related to the revocation of the injunction. The motion has not been judged yet. Chance of a loss Likely (in view of the judgment rendered) Analysis of the impact in case of The maintenance of the understanding of illegality, in principle, would loss / Reasons for the relevance of compel the Company to prioritize the transportation of ore, even in the case the case to the Company of a finished product, in the Pico/Fábrica area. The adverse judgment in said lawsuit may cause financial and reputational losses to the Company. Note The subject matter of said lawsuit has correlation with lawsuit 7 below. Thus, see also the description and impacts of lawsuit 7 described below.

7) Case n. 0010787-11.2016.5.03.0005

Court

5th Labor Court of Belo Horizonte/MG

Instance

Date of filing

Parties in the case

Amounts, assets or rights involved

Main facts

Chance of a loss

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company

8) Case No. 0001698-92.2014.5.03.0179

Court

Instance

Date of filing

Parties to thecase

1st Instance

May 27, 2016

Vale S.A. (Plaintiff) Federal Government (Defendant)

R\$686.71

The purpose of this action is the annulment of notice of violation no. 20.589.903-0 drawn up against Vale by the Ministry of Labor based on the understanding of the supervisory authority that employees of Ouro Verde Locação e Serviços SA (Ouro Verde) worked under conditions similar to slavery, subject to exhaustive working hours and degrading working conditions. Due to the understanding maintained by the auditors of the Ministry of Labor regarding the unlawfulness of the outsourcing between the Company and Ouro Verde, the notice of violation related to work similar to slavery was issued against Vale.

On May 10th, 2016, an interlocutory injunction was granted in favor of Vale establishing, through a precautionary measurement distributed on April 29th, 2016, that the Ministry of Labor refrained from registering the infraction notice at the federal debt roster, as well as execute it before a sentence related to the annulment law suit, to be filed by the plaintiff (Vale), is imposed by a court of law.

On May 2nd, 2018 the judgment was concluded dismissing the annulment law suit. Vale filed a Motion for Clarification on May 9th, 2018. On May 21st, 2018 (published on May 24th, 2018), it was decided that the revoking of the interlocutory injunction may only be effective after the res judicata of the decision, which did not occur as the case is on appeal.

Likely (in view of the judgment rendered)

The potential adverse judgment in this lawsuit and in the one described in item 6 above may cause financial and reputational losses to the Company, especially beacause Vale may be included at the slavery employer list maintained by the Ministry of Labor.

41st Labor Court of Belo Horizonte/MG

Higher Instance

May 29, 2014

Sindicato dos Trabalhadores em Empresas Ferroviarias de Belo Horizonte STEFBH

Vale S.A

Amount in controversy attributed by Sindicato (Union) was R\$40,000.00. The updated amount in controversy (as at December 31, 2017), to the knowledge of the Company, was R\$20,303,425.45.

Main facts

By means of the aforementioned labor claim, Sindicato (Union) indented the following requests to be granted:

(i) individual mental distress damages;

(ii) collective mental distress damages;

(iii) 01 extra daily hour with 50% overtime premium or higher conventional rate for not granting the full intra-day interval;

(iv) payment of overtime premium for the whole period available as hours of commuting, standby and readiness;

(v) union fees;

(vi) mandatory injunction for abstaining from adopting a mono conduction system and to adopt a dual conduction system, to provide appropriate sanitary conditions, to adopt mono conduction with permission to use toilets during journeys or stops, to open stations in the travel sections so that they can be used for meal and satisfaction of physiological needs, all under penalty of fine to be determined by the court;

(vii) interlocutory relief for fulfillment of the obligations to do; (viii) union fees.

On June 09, 2014, Vale presented its defense initially addressing the Union s lack of standing to sue, and exclusion of the non-associate substitutes. It argued that the action is barred by the statute of limitations and on the merits it fully challenged all the pleas.

The hearing was scheduled for November 26, 2014. At the hearing the testimony of Vale s representative and the testimony of the plaintiff s witness was gathered. The trial date was set for December 5, 2014.

In the judgment, the court dismissed the case in relation to those substituted in case records 0001784-59.2012.5.03.0106 due to the *lis alibi pendens* of the requests, it rejected the preliminary arguments, declared the prescription of the intentions prior to December 09, 2008 and ordered Vale to pay the following portions:

(i) interval between shifts and its reflexes;

(ii) handover time and its reflexes;

(iii) Union fees to the amount of 15% of the net value calculated in settlement of the case;

It arbitrated the judgment of R\$ 30,000.00 with costs by VALE in the amount of R\$ 600.00.

Vale filed an Ordinary Appeal asking for a review of the decision so that the lack of standing to sue with the union as plaintiff might be recognized and on the merits that the interval between shifts, handover time and union fees might be separated from the judgment.

The Union, as plaintiff, prepared an Ordinary Appeal asking for a revision of the judgment to determine that the defendant operate the locomotives with two drivers; ordering the defendant to pay individual and collective non-pecuniary damages; payment of the deferred portions with the inclusion of the portions yet to be paid.

In the TRT3 the relevance and public interest of the matters contained in the records was recognized and their submission

to the Labor Prosecution Office, which manifested itself in favor of partial granting of the Ordinary Appeal filed by the Union, as plaintiff, to order the defendant to adopt the two driver system and compensation for individual and collective non-pecuniary damages.

The judgment rejected the preliminary arguments and on the merits partially granted the Ordinary Appeal filed by Vale to separate the order to pay handover time and its reflexes.

However, the referred to judgment partially granted the Ordinary Appeal filed by the Union, as plaintiff, to add to the judgment:

(i) on one side, to abstain from adopting a single-driver system and to adopt the two-driver system of the locomotives as from the final decision under a penalty of a daily fine of R\$ 2,000.00 for each adversely affected worker found in an irregular situation at each monthly observation of non-compliance;

(ii) compensation for individual non-pecuniary damages to the amount of R\$ 10,000.00 for each one substituted;

(iii) compensation for collective non-pecuniary damages to the amount of R\$ 500,000.00 reverted to the Workers Support Fund (FAT Fundo de Amparo ao Trabalhador);

(iv) add the portions payable of the obligations of payment of interval overtime, while the situations remain that gave raise to them;

(v) collection of FGTS, specifying that they should consider as a basis for calculation, the interval overtime already increased by the granted reflexes;

It raised the value of the judgment from R 30,000.00 to R 550,000.00 with consequent procedural costs in the amount of R 11,000.00.

The Union, as plaintiff, filed an Appeal for Review to change the judgment with regard to the rejection of the hours of readiness and standby.

Vale filed an Appeal for Review for a change of the judgment for recognition of the lack of standing to sue of the plaintiff Union, nullity of the judgment for lack of jurisdiction, in the measure that it did not examine the thesis addressed in the Ordinary Appeal, as well as the absence of exhaustive or analytical grounds of the judgment, a decision above and beyond the request; and on the merits a review with regard to the granting of interval overtime, an obligation to do or not do relating to the adoption of a two-driver system; compensation for individual and collective non-pecuniary damages and reduction of the compensatory amount and application of a fine for bad-faith litigation.

The Regional Court of the 3rd Region received the Appeal for Review prepared by the Union, as plaintiff, and denied continuation of the Appeal for Review issued by VALE.

VALE filed an Interlocutory Appeal for Review that awaits judgment.Process in phase of Provisory Execution.Chance of a lossLikely (34%) and Remote (66%)Analysis of the impact in case of
loss / Reasons for the relevance of
the case to the CompanyThe relevance of the case comes about because if the decision of the Regional Court is maintained,
Vale, in the territorial area of the STEFBH, will have to implement the two-driver scheme. In other
words, the Engine Drivers should be accompanied by another employee when travelling.

The loss of the referred to case could cause significant financial losses to the Company.

(ii) Tax Cases

The tables below present an individual description of the tax cases considered relevant to the business of the Company and/or its subsidiaries.

As a consequence of the classification of cases as likely loss, the Company has constituted, over the years, a provision that added up to, on December 31, 2017, the amount of R\$ 4,873 million, of which (i) R\$ 329 million are linked to subsidiary companies abroad, (ii) R\$ 324 million refer to Brazilian subsidiary companies, and (iii) R\$ 2,483 million refer to other tax cases of the Company.

With regard to the cases indicated below that question the levying of IRPJ and CSLL on the profits of the subsidiaries and affiliates of the Company abroad, we emphasize that: (i) the understanding of the Company is that those of the 2011 tax-year and prior to this, have lapsed. However, one cannot rule out the adoption of a different understanding on the part of the Tax Authorities, according to which only the base year 2010 and earlier would be barred by statute of limitations; (ii) with regard to the part of the amounts of IRPJ and CSLL questioned in Writ of Mandamus no. 2003.51.01.002937-0 (item 1 of this section), the Company applied to join the Special Installment Scheme established by Law 12,865, October 9, 2013 (<u>Special Installment Scheme</u>); and (iii) with regard to another part of the debts of IRPJ and CSLL referred to in Writ of Mandamus no. 2003.51.01.002937-0 (item 1 of this section), relative to the period of 2002 (which contains generating facts that occurred in the period from 1996 to 2002), part of the debts relating to the year of 2005 (referring to tax credits shown in Active Debt Certificates no. 70.2.12.000303-20 and 70.6.12.000814-20, resulting from Administrative Case no. 18471.001.243/2007-69, and consubstantiated in Tax Foreclosure no. 0015197- 06.2012.4.02.5101), and to the year 2013 onwards, were not applicable to the installment scheme.

The debts relating to the years from 1996 to 2002 were not included in the tax recovery program due to the lack of retroactivity of the tax law, a principle violated by the sole paragraph of article 74 of MP 2158/01, which, having been instituted only in 2001, intended, by a legal fiction, to require the taxation of past facts (1996 to 2001) in 2002. With regard to the part of the tax credit relating to the year 2005, there was no adhesion, since this installment corresponds to the requirement of taxes resulting from the offset of compensated tax losses accumulated in previous fiscal years (1996 to 2002). With regard to the years 2013 onwards, there was no adhesion as the installment program in question permits the payment of debts whose generating facts have occurred only up to December 31, 2012. These years, therefore, are beyond the scope of the settlement by installment scheme. The total amount in dispute for the period between 1996 and 2002 is R\$ 2,277,088,484.86.

Additionally, bearing in mind the favorable decision obtained by the Company in May of 2012, attributing active suspensive efficacy to the extraordinary appeal and, consequently, removing the enforceability of the amounts in discussion, duly discussed by the Full Court in April in 2013, there is no need for presenting a guarantee while this decision remains in force. In this sense,

by the way, the Company obtained all the letters of guarantee offered and cancelled a levy relating to the third infraction notice (year 2007).

There occurred the judgment of the special appeal directed to the Higher Court of Justice (STJ), included in the records of Writ of Mandamus no. 2003.51.01.002937-0 in the session of November 26, 2013, an occasion on which the Justice Rapporteur, Napoleão Maia, partially admitted the appeal, and, in this part, granted it, while Justice Sérgio Kukina partially admitted the appeal, and, in that part, denied the appeal. The referred to judgment considered again on March 25, 2014, an occasion on which Justice Ari Pargendler cast his vote in agreement with the rapporteur, Napoleão Nunes Maia Filho, in the sense of considering the taxation of the profit earned by the foreign subsidiary companies of Vale as undue, since the international treaties against double taxation must prevail. The hearing was terminated on April 24, 2014, when the First Panel of the STJ decided, by majority vote, in favor of Vale. The judgment was published on May 20, 2014.

The aforementioned judgment determined: (i) the incompatibility of the taxation of the profits of subsidiaries and affiliates domiciled abroad introduced by art. 74 of Provisional Measure no. 2.158-35/01 with certain international treaties against double taxation; (ii) the illegality of the taxation of the positive result of the of the equity equivalence referred to in article 7, of Normative Instruction no. 213/2002 and (iii) that the profits calculated by Vale in the Bermudas are subject to art. 74, *head provision of* MP 2.158-35/2001. The Tax Authorities filed an extraordinary appeal before the Federal Supreme Court and a decision is pending.

The debts related to the referred to Writ of Mandamus and under discussion in the records of the following cases were included in the Special Installment Scheme: (i) Tax Foreclosure 0023959- 11.2012.4.02.5101 (IRPJ and CSLL debts referring to the years from 2003 to 2006); (ii) Tax Foreclosure 2011.51.01.518168-2 and Motion to Stay Tax Foreclosure 2011.51.01.509917-5 (IRPJ and CSLL debts referring to the year 2007); (iii) Tax Foreclosure 0023958- 26.2012.4.02.5101 (IRPJ and CSLL debts referring to the year 2007); (iv) Tax Foreclosure 0011487-75.2012.4.02.5101 (CSLL debts referring to the year 2008); (v) Tax Foreclosure 0011476-46.2012.4.02.5101 and Motion to Stay Tax Foreclosure 0013553-28.2012.4.02.5101 (IRPJ debts referring to the year 2008); and (vi) Tax Foreclosure 0023974-77.2012.4.02.5101 (IRPJ and CSLL debts referring to the year 2008). Motion to Stay Tax Foreclosure 2011.51.01.509917-5, Tax Foreclosure 0011476-46.2012.4.02.5101 (IRPJ and CSLL debts referring to the year 2008). Motion to Stay Tax Foreclosure 2011.51.01.509917-5, Tax Foreclosure 0011476-46.2012.4.02.5101 (IRPJ and CSLL debts referring to the year 2008). Motion to Stay Tax Foreclosure 2011.51.01.509917-5, Tax Foreclosure 0011476-46.2012.4.02.5101 and Motion to Stay Tax Foreclosure 0013553-28.2012.4.02.5101 have already been terminated.

As determined in the Special Installment Scheme legislation, on November 29, 2013, the Company made the initial payments of the amounts due relating to IRPJ and CSLL on the profit of the affiliates abroad, because of adhesion to the referred to installation scheme. On this occasion, the Company also formally adhered to the terms of the Special Installment Scheme, by means of the delivery of the respective attachments referred to by PGFN/RFB Joint Ordinance no. 9/2013. Accordingly, the monthly payments of the installments have been made since then.

The adhesion to the Special Installment Scheme implied payment to the Federal Revenue Service of R\$ 5.940 billion at the end of the month of November, 2013. Additionally, under the terms of the REFIS program of Law 12,865/13, we paid R\$ 6.0 billion in 2013, including early payment and an initial installment and we agreed to pay the remaining R\$ 16.3 billion in monthly installments. On December 31, 2017, the balance of US\$ 5.249 billion (R\$17.364 billion) remains due in 130 monthly installments, subject to interest at the SELIC rate. The total amount under litigation for the years from 2003 to 2012, including periods notified and not notified to the company and its subsidiaries has been estimated at R\$45.0 billion - R\$17.084 billion principal, R\$9.831 billion fine, R\$11.983 billion interest and interest on the fines, and R\$6.094 billion charges.

Among the options offered by the legislation, the Company decided on the payment in cash of the principal relating to 2003, 2004 and 2006 and the payment by installment of the principal, fines and interest relating to the years of 2005, and 2007 to 2012. According to the legislation,

in the case of payment in cash, only the principal of the tax is due, while in the alternative of installment, 80% of the fines, 50% of the interest and 100% of the charges were exempted.

The option chosen by the Company presented a face value estimated at R\$22.214 billion, including R\$16.222 billion of principal, R\$1.565 billion in fines and R\$4.427 billion in interest and interest on the fines. The reduction of principal occurs due to the deduction of R\$857 million as a result of losses accumulated in Brazil. The current amount of this option after tax benefits is R\$14.425 billion, proving itself to be better than the option for the total payment in cash by reducing the pressure on the liquidity of the company and minimizing the current amount of the payments.

With regard to the REFIS program in the years of 2015, 2016 and 2017, we had financial expenses of US\$ 546 million (R\$ 1,798 million, and in the year 2016, we had financial expenses of US\$ 515 million (R\$ 1,788 million) and US\$ 396 million (R\$ 1,261 million), respectively.

In this respect, we must point out that on December 18, 2013, to comply with the requirements of Law 12,865/13, the Company entered the application protocol into the records of the referred to case before the Higher Court of Justice (STJ), asking for partial withdrawal of the discussion held and, further the waiver of the legal arguments on which the referred to actions are grounded, all in compliance with the parameters of partial withdrawal/waiver made in Writ of Mandamus no. 2003.51.01.002937-0.

Administrative cases no. 18471.000141/2008-15, 12897.000868/2009-98, 10569.000135/2011- 64, 12897.000023/2010-36; 10569.000199/2010-84; 16682.720029/2012-61 and 18471.001243/2007-69 are concluded. The matter continued under discussion in the legal sphere, being an object of Tax Foreclosure. These foreclosures, in turn (except the tax foreclosure originating from PAF no. 18471.001243/2007-69) were the object of withdrawal for purposes of adhesion to the Special Installment Scheme, according to the requirements in Law 12,865/13.

1) Writ of Mandamus 2003.51.01.002937-0

Court	Higher Court of Justice and Federal Supreme Court
Instance	3rd court
Date of filing	February 03, 2003
Parties in the case	Vale (plaintiff/petitioner) and Federal Revenue Office (defendant)
Amounts, assets or rights involved	Not applicable
Main facts	In February, 2003, Vale filed a suit of Writ of Mandamus to assure the right not to be subject to taxation of IRPJ and CSLL over the profits of its subsidiaries and affiliates abroad, as defined in the sole paragraph of art. 74, of Provisional Measure 2,158-34/2001, and later re-editions.
	Arguments of the Company: (i) article 74 of the Provisional Measure ignores the treaties against double taxation signed by Brazil; (ii) the Brazilian Tax Code prohibits the referred to taxation by means of a Provisional Measure; (iii) even if article 74 of the Provisional Measure were valid, the exchange variation should be excluded from the calculation of taxes due; (iv) illegality of IN 213/2002; and (v) violation of the principle of

prior taxation, in relation to generating facts occurring before December of 2001.

In February, 2003, an injunction was granted to suspend the enforceability of the tax credit resulting from the contested legislation, so that the regime of Law no. 9.532/97 could continue to be followed.

In August, 2005, judgment of inadmissibility was handed down, which entailed the revocation of the injunction previously obtained by Vale.

Vale filed an appeal, received on September 29, 2005, to the suspensive effect which restored the suspension of the enforceability of the tax credit that had been obtained by the company as an injunction.

On March 29, 2011, the Federal Regional Court of the 2nd Region (TRF 2nd Region) denied the appeal, rejecting the arguments of Vale.

After analyzing the judgment, published on May 30, 2011, Vale altered the prognosis from remote to possible , as reflected in its quarterly information report of June 30, 2011, archived on July 28, 2011. On June 3, 2011, Vale presented an appeal (motion for clarification) against the judgment of the TRF 2nd Region, pointing out the omissions relating to the issues of exchange variation and the unconstitutionality of the sole paragraph of article 74 of the Provisional Measure, and contradiction referring to the application of the treaties against double taxation. The contradiction sustained by Vale was based on the fact that the referred to decision recognized at the same time, that (a) article 7 of the treaties against double taxation prohibits Brazil from levying taxes on the profits of affiliates and subsidiaries abroad, (b) that the treaties prevail over internal laws and (c) that, however, this provision made by convention would not imply the application of art. 74 of MP 2,158-35/01.

On November 28, 2011, the judgment was published that partially granted the referred to appeal (motion for clarification), to exclude the exchange variation from the amount of the investment abroad, but to deny the other requests and lift the suspensive effect granted at the time of the filing of the appeal.

On December 13, 2011, Vale filed a Special Appeal (STJ) and Extraordinary Appeal (STF).

The Special and Extraordinary Appeals were accepted on May 7, 2012, the same day on which Vale filed Provisional Remedies before the High Court of Justice (STJ) and the Federal Supreme Court (STF) with a request asking for a suspensive effect of the Special and Extraordinary Appeals. The objective of the Provisional remedies was to suspend the enforceability of the tax credits in question. In the STJ, although an injunction had been granted initially, the judgment that was considering the provisional remedy rejected Vale s intention, revoking the injunction. Then, in the STF, the injunction was granted on May 9, 2012 and confirmed by the full court and confirmed by the full court of the STF on April 10, 2013, by which it continues in force.

On October 22, 2013, the Special Appeal of Vale (STJ) was included in the agenda for judgment, but later withdrawn at the

request of the Federal Prosecutors Office, which, then, expressed its unfavorable opinion against Vale s plea.

	On November 26, 2013, the First Panel of the STJ considered the appeal again, an occasion on which Justice Rapporteur Napoleão Maia partially accepted the appeal and, in this part, granted it, while Justice Sergio Kukina also partially accepted the appeal and, in this part, denied the request. The referred to judgment considered again on March 25, 2014, an occasion on which Justice Ari Pargendler cast his vote in agreement with the rapporteur, Napoleão Nunes Maia Filho, in the sense of considering the taxation of the profit earned by the foreign subsidiary companies of Vale as undue, since the international treaties against double taxation must prevail. The hearing was terminated on April 24, 2014, at which time the First Panel of the STJ decided, by majority vote, in favor of Vale, the judgment having been published on May 20, 2014. The said judgment, in summary, determined: (i) the incompatibility of the taxation system of the profits of subsidiaries and affiliates domiciled abroad, introduced by art. 74 of Provisional Measure no. 2.158-35/01 with certain international treaties against double taxation of the positive result of the equity equivalence provided for in article 7, of Normative Instruction no. 213/2002 and (iii)that the profits calculated by Vale in the Bermudas are subject to art. 74, head provision of MP 2,158-35/2001. The Attorney s of the Federal Revenue Office filed an Extraordinary Appeal before the Federal Supreme Court and a decision is pending.
Chance of a loss	Possible (with regard to the remaining discussion, where the debt was not an object of the tax recuperation program).
Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company	In case of an eventual unfavorable final decision in all the arguments presented by the Company, the tax credits will be enforced by the Brazilian Revenue Service, respecting the principle of the counter-argument and ample defense in the specific administrative and legal recovery procedures.
	This impact relates to the period that is not the object of withdrawal/waiver, to participate in the Special Installment System, corresponding to the amount of R\$1,786 billion, by way of IRPJ (December, 2017), and R\$0.490 billion, by way of CSLL (December, 2017), adding up to R\$ 2,277 billion. Values referring to the debts of 1996 and 2002, the installment of 2005 and to the year 2013 are not included.
Notes	1 - On September 20, 2012, Vale receive notification from the Brazilian Revenue Service recognizing the extinction of the values referring to the exchange variation, in the amount of approximately R\$1.6 billion. This extinction occurred because of the partially favorable decision given in the judgment of an appeal (motion for clarification) of the Company in Writ of Mandamus 2003.51.01.002937-0, as described above, in the item Principal Facts .
	2 - The judgment of the direct action of unconstitutionality (ADI) proposed by the National

Confederation of Industry (CNI) questioning the constitutionality of article 74 of Provisional

Measure 2,158-35/01 was considered again on April 03, 2013. On April 10, 2013 the result of the aforementioned ADI was announced, and it was determined that article 74 does not apply to affiliate companies situated in countries without favored taxation (not tax havens), but is applicable to the subsidiary companies headquartered in countries with favored taxation (tax havens). It also decided for the non-retroactivity of the sole paragraph of article 74 of the MP, which implies the impossibility of applying this legislation to generating facts prior to 2002. On this same date the Extraordinary Appeals of Cooperativa Agropecuária Mourãoense - COAMO and EMBRACO were judged. The injunction in the Provisional Remedy of Vale was unanimously maintained, as described in item 1.1 below.

3 - On December 18, 2013, in fulfillment of the requirements provided in Law 12,865/13, the Company lodged a petition with the Higher Court of Justice asking for the partial withdrawal of the discussion and, additionally, asking for the waiver of the legal arguments on which the action was based. On February 19, 2014, in the records of the Special Appeal, the partial waiver of the right upon which the action is based was authorized, under the terms asked for by Vale. The partial withdrawal from the discussion produces effects in all the other tax contingencies, set out above.

above). On February 24, 2014, Vale presented the requested documents,

1.1) The outworking of Writ of Mandamus 2003.51.01.002937-0: Provisional Remedy no. 3,141

Court	Federal Supreme Court
Instance	3rd court
Date of filing	May 07, 2012
Parties in the case	Vale (plaintiff) and Federal Government (defendant)
Amounts, assets or rights involved	Not applicable
Main facts	On May 7, 2012, Vale filed an action (provisional remedy) to try and attribute a suspensive effect to the Extraordinary Appeal filed in the records of the principal Writ of Mandamus (item 1), aimed at the suspension of the enforceability of the amounts of IRPJ and CSLL in question. On May 9, 2012, Justice Marco Aurélio Mello, of the Federal Supreme Court, granted an injunction in this sense. On May 25, 2012, the Federal Government presented its defense. On May 28, 2012, it filed an appeal (interlocutory appeal) against the decision that granted the injunction. On June 8, 2012, Vale presented its response to this resource. In April 10, 2013, a decision was handed down that, by unanimous vote, rejected the appeal of the Federal Government (interlocutory appeal) and, maintained the injunction favorable to Vale. This decision was published on September 30, 2013 and there was no filing of any other appeal. Therefore, unless the justices reconsider their decision, the suspensive effect granted will produce effects until the judgment of the extraordinary appeal. On December 18, 2013, Vale filed a petition of withdrawal for purposes of joining the REFIS program. On February 14, 2014, a decision was published determining the attachment of a copy of the request for partial withdrawal and of the approved decision handed down on the principal writ of mandamus (item 1

and the case proceeded for the examination of the justice rapporteur. The records remain concluded since then.

Possible (with regard to the remaining discussion, the debt will not be subject to the tax recovery program).

In case of an unfavorable final decision, there exists the possibility of a requirement for a guarantee of the amounts in question. This impact relates to the period that it is not the object of withdrawal/waiver, for adhesion to the Special Installment System.

5th Tax Foreclosure Court of Rio de Janeiro 1st federal court 03/13/2012 Federal Revenue Office (plaintiff/creditor) and Vale (defendant/debtor) Total of the debt R\$ 2,277 billion (December/2017) On March 12, 2012, the Federal Revenue Office filed a tax foreclosure action to collect the amounts of IRPJ and CSLL supposedly due, having in view the decision of DEMAC, mentioned in item 2 above. On April 25, 2012 the Federal Revenue Office presented a petition asking for the levy of dividends that would be distributed by Vale on April 30, 2012. On April 26, 2012, Vale presented a petition challenging the petition of the Federal Government and offering, alternatively, a bank guarantee to cover the debt. On the same date, a decision was handed down granting the offer of the guarantee, which was presented by Vale on April 27, 2012. On May 8, 2012, the Federal Revenue Office presented a request to block amounts through the BACENJUD system through which the magistrate has direct access to all the bank accounts of the country -, which, after a challenge from Vale, was denied, because of the injunction granted by Justice Marco Aurélio de Mello, which suspended the enforceability of the tax credits which are the object of this foreclosure (item 1.1 above). Vale, then, asked that lack of need for a guarantee from the court be recognized since the enforcement of the credits is suspended with the undoing of the

letter of bank guarantee previously offered to guarantee the foreclosure, which was granted by the court. In view of this decision, on May 14, 2012, Vale withdrew the referred to letter of guarantee. Due to the already mentioned injunction granted in the provisional remedy of item 1.1, the case is suspended, since the Federal Revenue Office cannot collect unenforceable credits. On July 17, 2014, Vale filed a petition asking for the extinction of the tax foreclosure, in view of the decision of the STF in ADI 2.588, which declared the unconstitutionality of the sole paragraph of art. 74 of Provisional Measure 2,158-35/01.

In October 19, 2016, the Treasury stated that Vale s request was inadmissible. On December 02, 2016, a decision was given, receiving the Company s petition as an exception of pre-prosecution and rejected it. On December 09, 2016, Vale filed

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company

2) Tax Foreclosure no. 0015197-06.2012.4.02.5101

Court

Instance

Date of filing

Parties in the case

Amounts, assets or rights involved

Main facts

an application for reconsideration, which was rejected in a decision published on March 08, 2017. This decision received the application for reconsideration from Vale as well as a motion for clarification, accepting them to determine the suspension of the case until the final decision of Writ of Mandamus no. 2003.51.01.002937-0.

Remote

In case of an unfavorable decision in the records of the provisional remedy, subject of item 1.1 above, Vale may have to offer a new guarantee of the amounts in question in this tax foreclosure.

7th Tax Foreclosure Court of Rio de Janeiro

1st federal court

03/13/2012

Federal Revenue Office (plaintiff/creditor) and Vale (defendant/debtor)

R\$14,216,689,702.56 (in November, 2013, date of the adhesion to the REFIS program), without the factors of reduction included in the tax recovery program. Value already included in the amount of Administrative Case no. 18471.000141/2008-15

On May 8, 2012, even before the publication of the judgment handed down by the STJ in the provisional remedy mentioned in the item above, and, therefore, when the suspensive effect of the injunction granted in that provisional remedy was still in force, even with the enforceability of the credits suspended, it filed a tax foreclosure for collection of the amounts of IRPJ and CSLL supposedly due, which, in its understanding, would be possible, having in mind the decision of the Chairman of the 2nd Chamber of CARF, mentioned in item 3.1 above. On May 11, 2012, Vale presented a petition informing the granting of the injunction decision of the STF, which suspended the enforceability of the credits (item 1.1 above), and, on the same date, the decision was given suspending the tax foreclosure referred to herein. On December 18, 2013, Vale filed a petition sustaining the loss of purpose of the foreclosure in view of the adhesion to the REFIS program. On February 24, 2014, a court order was published determining (a) the statement of the Federal Revenue Office about the payment informed, and (b) the inclusion, by Vale, of a legible power of attorney, which has already been complied with by the Company. After the Federal Revenue Office required the extension of the period for 90 days, on November 26, 2014, this was once again notified to express itself about the payment by installment informed by Vale. On December 16, certificates were issued attesting that there was no statement given by the Federal Revenue Office, as well as proceeding with the suspension of the case. The decision regarding this request has not yet been made.

Chance of a loss

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company

3) Tax Foreclosure no. 0023959-11.2012.4.02.5101

Court

Instance

Date of filing

Parties in the case

Amounts, assets or rights involved

Main facts

Chance of a loss

Not applicable, since the debt was eliminated with the adhesion to the REFIS program.

Not applicable, in view of the adhesion to the REFIS program.

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company

4) Tax Foreclosure no. 2011.51.01.518168-2

Court 9th Tax Foreclosure Court of Rio de Janeiro Instance 1st federal court Date of filing July 08, 2011 Parties in the case Federal Revenue Office (plaintiff/creditor) and Vale (defendant/debtor) R\$ 33,903,846.09 (in November 2013, date of the adhesion to the REFIS Amounts, assets or rights involved program) already included in the amount of Administrative Case no. 12897.000868/2009-98, plus legal charges. On July 8, 2011, the Federal Revenue Office filed a tax foreclosure to collect Main facts the amounts of IRPJ and CSLL supposedly due, in view of the collection letter mentioned in item 4.1 above. On August 29, 2011, Vale presented the bank guarantee letter as collateral to the tax foreclosure, with which the Federal Revenue Office specifically agreed. On September 28, 2011, Vale presented its defense (motion to stay execution no. 2011.51.01.509917-5), requiring the suspension of the foreclosure until the definitive judgment of the principal writ of mandamus (item 1 above) and the annulment of the Active Debt Certificate due to material error, in view of the incongruence of the amounts indicated therein. On September 13, 2012, the Federal Revenue Office presented a response to the motion for stay of execution of Vale. The enforceability of the tax credits discussed here is suspended because of the injunction decision of the STF (item 1.1 above), which made possible the cancelation, on July 04, 2013, of the guarantee letter presented as collateral. On December 18, 2013, Vale presented a petition sustaining the loss of purpose of this tax foreclosure because of the adhesion to the REFIS program. On August 20, 2014, the suspension of the foreclosure was determined until the end of the payment of installments. As from April 10, 2017 the following information appeared: Case suspended due to payment by installments since March 19, 2015 . Chance of a loss Not applicable, since the debt was eliminated with the adhesion to the REFIS program. Analysis of the impact in case of Not applicable, in view of the adhesion to the REFIS program. loss / Reasons for the relevance of the case to the Company 4.1) Tax Foreclosure no. 0023958-26.2012.4.02.5101 Court 7th Tax Foreclosure Court of Rio de Janeiro Instance 1st federal court

May 08, 2012

Parties in the case	Federal Revenue Office (plaintiff/creditor) and Vale (defendant/debtor)
Amounts, assets or rights involved	R\$ 17,623,009,684.76 (in November, 2013, date of the adhesion to the REFIS program), value already included in the amount of Administrative case no. 12897.000868/2009-98, plus legal charges.
Main facts	On May 8, 2012, even before the publication of the judgment handed down by the STJ in the provisional remedy mentioned in the item above, and, therefore, when the suspensive effect of the injunction granted in that provisional remedy was still in force, even with the enforceability of the credits suspended, it filed a tax foreclosure for collection of the amounts of IRPJ and CSLL supposedly due, in view of the monocratic administrative decision in the scope of Administrative Case no. 12897.000868/2009-98.
	The enforceability of the tax credits discussed here is suspended because of the injunction decision of the STF (item 1.1 above).
	Vale presented a petition asking for the suspension of the foreclosure based on this decision. The request was accepted and the case is suspended. On December 18, 2013, Vale presented a petition sustaining the loss of purpose of this tax foreclosure because of the adhesion to the REFIS program. On February 20, 2014, a court order was published determining (a) the statement of the Federal Revenue Office about the payment informed, and (b) the inclusion, by Vale, of a legible power of attorney, which was already complied with by the Company. The Federal Revenue Office did not reply within the legal time limit and, on March 26, 2014, the decision was given determining the suspension of the case. On April 07, 2014, the Federal Revenue Office required the suspension of the act for ninety days, because of the adhesion of Vale to the installment program with the legal benefits, with the use of tax loss and negative basis for calculation of CSLL. A decision is awaited from the court about the request of the Federal Revenue Office.
Chance of a loss	Not applicable, since the debt was eliminated with the adhesion to the REFIS program.
Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company	Not applicable, in view of the adhesion to the REFIS program.
5) Tax Foreclosure no. 0011487-75.2012.4.02.5101	
Court	9th Tax Foreclosure Court of Rio de Janeiro
Instance	1st federal court
Date of filing	01/26/2012
Parties in the case	Federal Revenue Office (plaintiff/creditor) and Vale (defendant/debtor)
Amounts, assets or rights involved	R\$21,731,827.64 (in November 2013, date of adhesion to the REFIS program), by way of CSLL, a value already included in the amount of Administrative Case no. 12897.000023/2010-36, plus legal charges.

Main facts	On January 26, 2012, the Federal Revenue Office filed a tax foreclosure to collect the amounts of CSLL supposedly due, in view of the collection letter mentioned in item 4.1 above.
	On February 2, 2012, Vale presented a guarantee to the tax foreclosure and on February 6, 2012 a decision was handed down considering the foreclosure guaranteed.
	The enforceability of the tax credits discussed here is suspended because of the injunction decision of the STF (item 1.1 above). On May 7, 2013, a decision was published suspending the case, based on the decision of the STF and withdrawing the need for a guarantee of the amounts claimed, further authorizing the cancelation of the bank guarantee letter presented by Vale. On December 18, 2013, Vale filed a petition of withdrawal for purposes of joining the REFIS program. On January 28, 2014, the case was sent back to the Federal Revenue Office. On June 24, 2014, the Federal Revenue Office asked for the suspension of the act for sixty days to examine the payment made. On September 03, 2014 a decision was given that determined the suspension of the Federal Revenue Office on September 25, 2014.
Chance of a loss	Not applicable, since the debt was eliminated with the adhesion to the REFIS program.
Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company	Not applicable, in view of the adhesion to the REFIS program.
5.1) Tax Foreclosure no. 0011476-46.2012.4.02.5101	
Court	9th Tax Foreclosure Court of Rio de Janeiro
Court Instance	9th Tax Foreclosure Court of Rio de Janeiro 1st federal court
Instance	1st federal court
Instance Date of filing	1st federal court 01/26/2012
Instance Date of filing Parties in the case	 1st federal court 01/26/2012 Federal Revenue Office (plaintiff/creditor) and Vale (defendant/debtor) R\$60,325,116.23 (in November 2013, date of adhesion to the REFIS program), by way of IRPJ, a value already included in the amount of

through the BACENJUD system, by

means of which the magistrate has direct access to the bank accounts maintained in the country. Against this decision, Vale presented an appeal (interlocutory appeal).

The enforceability of the tax credits discussed is suspended because of the injunction decision of the STF (item 1.1 above), the reason for which, on May 14, 2012, the court of this foreclosure determined the suspension of the case.

On May 14, 2013, Vale filed an application requesting the release of the on line levy. On May 15, 2013, the bank guarantee letter was returned to the Company, and, then, a court order was given determining the manifestation of the Federal Revenue Office with regard to the release of the levied amount. On June 18, 2013, the Federal Revenue Office stated that it was against the request to cancel the on line levy. On July 09, 2013, a decision was handed down that cancelled the levy of Vale s credits in case no. 2003.5101.024181-3, however, it maintained the on line levy. On December 18, 2013, Vale presented a petition sustaining the loss of purpose of this tax foreclosure because of the adhesion to the REFIS program. On June 16, 2014, the Federal Revenue Office required that Caixa Econômica Federal be officially asked to convert the deposit that guarantees the foreclosure into revenue, in the amount of R\$ 62,698,188.94, with the reductions for cash payment provided for by Law 12.865/13, besides asking for the later examination of the records to perform the administrative procedures necessary for the settlement of the debt. Afterwards, the Federal Revenue Office was allowed to examine it to indicate the amount to be transformed into definitive payment, with the reductions of the installment. On October 31, 2014, the Federal Revenue Office requested the conversion into revenue of the amount of R\$ 41,299,643.64 and on November 05, 2014 an official letter was sent to Caixa Econômica Federal for fulfillment. On January 29, 2015, a petition was filed by the Federal Revenue Office, asking for the suspension of the act for five days, so that the sector responsible for verifying the payment and for cancelling the enrolment could conclude the necessary procedures. On March 06, 2015 a petition was filed by the Federal Revenue Office informing that the payments were confirmed and that the remaining balances had been cancelled, thus requiring the extinction of the deed. On March 19, 2015 Vale asked for the remaining amount of the judicial balance to be calculated, which, according to the official letter from Caixa Econômica was R\$14.198.955.67 on November 25, 2014. On the same date, the sentence was published that determined the extinction the action and authorized the calculation of the remaining balance of the judicial deposit. On May 13, 2015 the Federal Revenue Office took knowledge of this and on May 15, 2015 the definitive judgment was given. On July 02, 2015 a permit was included in the records allowing the calculation of the remaining amount of the deposit. Finally, Vale calculated the amount at R\$18.5 million.

Chance of a loss

Not applicable, since the debt was eliminated with the adhesion to the REFIS program.

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company

5.2) Foreclosure no. 0023974-77.2012.4.02.5101

Court 9th Tax Foreclosure Court of Rio de Janeiro Instance 1st federal court Date of filing May 08, 2012 Parties in the case Federal Revenue Office (plaintiff/creditor) and Vale (defendant/debtor) Amounts, assets or rights involved R\$ 4.609,749,384.28 (in November 2013, date of the adhesion to the REFIS program), value already included in the amount of Administrative case no. 12897.000023/2010-36, plus legal charges. On May 8, 2012, even before the publication of the judgment handed down Main facts by the STJ in the provisional remedy mentioned in item 1 above, and, therefore, when the suspensive effect of the injunction granted in that provisional remedy was still in force, the Federal Revenue Office, even with the enforceability of the credits suspended, filed a tax foreclosure for collection of the amounts of IRPJ and CSLL supposedly due, in view of the monocratic administrative decision in the scope of Administrative Case no. 12897.000023/2010-36. The Revenue Office filed a petition for the blocking and levy of amounts through the BACENJUD system, which was denied. Vale notified in the records that the enforcement of the tax credits discussed is suspended because of the injunction decision of the STF (item 1.1 above), which made the court decide for the suspension of the foreclosure. On May 11, 2012, Vale presented a petition informing the attribution of the suspensive effect to the extraordinary appeal filed in the records of writ of mandamus no. 0002937-09.2003.4.02.5101 because of the provisional remedy filed with the STF (items 1 and 1.1 above) and asking for the suspension of the foreclosure, which was granted in a decision given on May 17, 2012. On May 22, 2012 Vale filed an appeal (interlocutory appeal), which was admitted to clarify that the foreclosure will remain suspended until the arrival of the notification of the final judgment of the extraordinary appeal filed by Vale (item 1 above). On December 18, 2013, Vale filed a petition of withdrawal for purposes of joining the REFIS program. On July 22, 2014, the Federal Revenue Office asked for the suspension of the act for sixty days to verify the regularity of the payment of the installments. On September 03, 2014, a decision was handed down determining the suspension of the case up to the end of the installments, with the knowledge of the Federal Revenue Office on September 25, 2014. Chance of a loss

Not applicable, since the debt was eliminated with the adhesion to the REFIS program.

Not applicable, since the debt was eliminated with the adhesion to the REFIS

program and later conversion into revenue of the judicially deposited amount

(as a result of the levy) with the discounts of the amnesty.

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company Not applicable, in view of the adhesion to the REFIS program.

Court	Higher Court of Justice and Federal Supreme Court
Instance	3rd court
Date of filing	02/20/2006
Parties in the case	Federal Government (plaintiff) and Vale (defendant)
Amounts, assets or rights involved	R\$ 6.652 billion on December 31, 2017.
Main facts	This is an Action for Relief from Judgment for collection of CSLL based on the calculation of IRPJ.
	In 2004, the Higher Court of Justice (STJ) granted to Vale the right to deduct the amounts that it pays by way of social security contributions over net profit (CSLL) from Corporate Income Tax (IRPJ).
	In 2006, the General Attorneys Office of the Federal Revenue Service (PGFN) filed an action for relief from judgment to review the final decision of 2004. The action for relief from judgment was rejected by the Federal Court of Rio de Janeiro and by the Federal Court of Appeals (TRF) of the 2nd Region.
	On April 13, 2009, the Attorneys Office of the Federal Revenue Service appealed to the Higher Court of Justice (STJ) and to the Federal Supreme Court (STF). After the Special Appeal of the Federal Revenue Office was denied on November 23, 2012, it presented an interlocutory appeal, within the legal time frame. This, in turn, was granted, which lead to the presentation of an interlocutory appeal by Vale on September 16, 2014.
	The appeal of Vale was denied, in a judgment published on June 16, 2016, and the STJ determined that the case be returned to the TRF of the 2nd Region so that it could judge the motion for relief opposed by the PGFN in 2008 again. On April 10, 2017, Vale presented its counter-arguments to the motion and awaits the new judgment by the TRF of the 2nd Region.
Chance of a loss	Possible
Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company	In case of a possible granting of the Action for Relief from Judgment, the amount to collect will depend on the terms and scope of the final decision.

7) Valepar - Writ of Mandamus n° 2011.51.01.011763-1

Court	17(a) Court of the Judiciary Section of Rio de Janeiro
Instance	1(a) Federal Instance
Date of filing	08/05/2011
Parties in the case	Delegate of the Federal Revenue Service of the State of Rio de Janeiro (defendant) and Valepar (author / petitioner)
Amounts, assets or rights involved	Total judicial deposits made since 08.05.2011: R\$ 2.29 billion (December 31, 2017)
Main facts	In August 2011, Valepar filed a writ of mandamus with the purpose of guaranteeing its right not to include the amounts received as JCP in the PIS and COFINS calculation basis from 2004 onwards, arguing, in summary, the inequality of the taxpayers according to the tax regime and/or domicile of the partner. At each distribution, the PIS and COFINS amounts deposited on the JCP are deposited.
	In view of the judgment that dismissed the case without resolution of the merits, in view of a supposed lis pendens with the Writ of Mandamus n° 2007.51.01.002752-4, an Appeal was filed by Valepar, which was denied follow-up. Special and Extraordinary Resources were filed by Valepar after an unfavorable decision.
	In December 2013, a petition was filed, giving up part of the act and waiving the right on which the lawsuit is based, only in relation to the facts that were generated in April / 2005, April / 2005, April / 2006, 2007, Oct / 2007, Apr / 2008 and Oct / 2008, for the conversion into income with the cash payment benefits, brought in Law 12,865 / 2013. In March 2014, decisions were made available that approved the partial withdrawal and denied the special and extraordinary resources. Shortly thereafter, appeals were filed for damages by Valepar against the rejection orders of the Special and Extraordinary Appeal.
	In the judgment of the Leading Case, the decision was unfavorable to the taxpayers, with the prevalence of the thesis that interest on equity can not be equated to dividends, and therefore make up the basis of calculation of PIS / PASEP contributions and COFINS. They concluded that Laws n° 10.637 / 2002 and 10.833 / 2003 define as the basis for calculation of PIS / COFINS the total revenues earned by the legal entity, regardless of their accounting assignment.
	In August 2016, there was a favorable judgment of the Special Appeal of Valepar, granting it, to dismiss the lis pendens, annulling the sentence and determining the return of the records to the origin to analyze the merits of the action.
	On August 3, 2017, a judgment denying security was issued and determining the conversion into income of all deposits made after the final and unappealable decision. As a result, there were opposing Embargoes of Declaration on August 24, 2017.
	In August 2017, Valepar was merged into Vale S.A.

On March 27, 2018, a decision was dismissed dismissing the Embargo de Declaration, and the company filed an Appeal on April 20, 2018.

The appeal is pending review and judgment.

Chance de perda

Provável

Análise do impacto em caso de perda/ Razões da relevância do processo para a Companhia

Em caso de decisão final desfavorável, o montante remanescente do depósito judicial será convertido em renda da União Federal, não havendo necessidade de desembolso por parte da Companhia.

interlocutory relief on the case, Vale requested a new application and

increase to the fine previously established.

(iii) Civil

The tables below present an individual description of the civil cases deemed relevant for the businesses of the Company and/or of its controlled companies, established by December 31, 2017. For information on relevant cases established after said date, see item 4.7 of this Reference Form.

1) Case no. 0063023-34.2008.8.19.0001

Court	41st Civil Court of the State Appellate Court of Rio de Janeiro
Instance	1st Instance
Date of filing	03/17/2008
Parties in the case	Vale (plaintiff) and the Landless Workers Movement ($\underline{MS}T$) (defendant)
Amounts, assets or rights involved	Protection of the Company s assets and guarantee of its operational activities.
Main facts	Vale filed a lawsuit with the purpose of ceasing violent acts of violation or incitement that would cause the halting of the Company s operational activities by the MST. The request for interlocutory relief was granted so as to determine that the MST refrain from such acts. The MST failed to comply with said judicial order, reason for which Vale requested an increase to the fine established in case of non-compliance, which was granted by the court.
	In 2012, the parties initiated efforts towards a possible settlement for the resolution of this case. On July 06, 2015, an order was published determining that the parties should state whether they were in fact interested in entering into an agreement, it being no longer possible for the parties to request the suspension of the case. Production of evidence phase started. By reason of the recent non-compliance with the judicial order that granted the

On September 30, 2016, the case was removed from the ruling group (TN: a group of judges working as a task force with the purpose of speeding up the process of deciding on pending cases before the Judiciary branch) as the justice found that part of the order had not been fulfilled. Next, the justice determined that the Plaintiff collected the costs for issuing the letters of request aimed at taking the testimonies of the witnesses called by him, such decision being published on October 19, 2015.

On October 26, 2016, Vale filed the petition declining from the

testimonial evidence due to the long time elapsed since the filing of the lawsuit, requesting the confirmation of the preliminary injunction granted in 2008 and the granting of the claim of the initial pleading, as well as the increase to the fine for failure to comply with the interlocutory relief, in view of the new non-compliances reported in the record.

On February 15, 2018, a judgment was entered in the record and, thus, Vale s claim was granted to determine that the defendants abstain from inciting and promoting the practice of violent acts against the facilities of the plaintiff, as well as acts that might cause the interruption of the plaintiff company s activities, within 72 hours counting from the disclosure of the judgment, under penalty of a fine of R\$ 100,000.00 per act practiced in disagreement with this precept. The judgment also confirmed the order, making it definite, observing the increase to the applied fine. The defendants were also ordered to pay the procedural costs and attorney s fees in favor of the plaintiff s lawyer, which were set at 10% of the amount in dispute.

On April 20, 2018, the notary office certified that the decision was made final and unappealable.

The next step shall be to cause the execution of the judgment to receive the fines, costs and fees for the loss of the suit.

Chance of a loss

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company Remote

The case was initiated with the purpose of guaranteeing the protection of the Company s assets and its operational activities. An eventual unfavorable decision might increase the company s exposure to the incitement acts of the MST.

2) Case no. 0015963-69.2006.4.02.5101 (Former number: 2006.51.01.015963-0)

Court	ORIGIN 30th Federal Court of the Federal Courts System of Rio de Janeiro, on appeal from final judgment, assigned to the 7th Specialized Panel of the Regional Federal Appellate Court of the 2nd Region and currently at the Vice-Presidency of the TRF2.
Instance	2nd Instance
Date of filing	08/18/2006
Parties in the case	Rede Ferroviária Federal S.A., succeeded by the Federal Government (plaintiff) and Vale (defendant)
Amounts, assets or rights involved	Approximately R\$ 4.5 billion (December 31, 2017).

The plaintiff filed a lawsuit against the Company aiming to receive damages under the claim that it had suffered losses resulting from contractual non-compliance by Vale involving the failure to carry out works related from the railway transposition in the city of Belo Horizonte.

The parties entered into an agreement that established that the costs for constructing a new railroad segment shall be deducted from the eventual adverse judgment that Vale may suffer, in case the lawsuit is granted in favor of the Federal Government. This agreement was legally ratified. On June 25, 2012, a judgment was entered as to deny the claims made by the Federal Government.

On appeal from final judgment, on February 24, 2016, the Regional Federal Appellate Court confirmed the June 2012 decision of the federal justice. Against the appellate decision, both parties filed motions for clarification (Vale on March 21, 2016 and the Federal Government on April 08, 2016). Both motions were denied considering that, on September 19, 2016, the Federal Government filed new motions to remedy a material error of the decision subject to the motion.

On February 23, 2017, the second motions of the Federal Government were granted to remedy said material error, such records being sent to the Office of the General Counsel to the Federal Government on April 03, 2017.

On May 22, 2017, the Federal Government filed an appeal to the Superior Court of Justice and to the Federal Supreme Court.

Vale was notified to file appellee s brief on the appeals of the Federal Government on May 29, 2017, having filed the response papers on June 19, 2017.

On July 06, 2017, the record was sent to the judge to be taken under advisement and to examine the admissibility of the appeals by the Vice-Presidency of the TRF2, the appeal to the Superior Court of Justice and to the Federal Supreme Court having been denied on August 01, 2017.

Against the decisions of inadmissibility of said appeals, the Federal Government filed, on January 08, 2018, Interlocutory Appeals. Consequently, Vale was notified to file appellee s brief on the interlocutory appeals on March 01, 2018 and, thus, it filed its brief on March 22, 2018.

On April 24, 2018, a decision was entered by the Vice- Presidency maintaining the inadmissibility of the appeal to the Superior Court of Justice and to the Federal Supreme Court by the Federal Government, determining the remittance of the Interlocutory Appeals against the inadmissibility decisions to the competent Superior Courts.

On April 26, 2018, the appeals started being processed to be remitted to the STJ. There is still no assignment before the STJ.

Chance of a loss

Remote

Analysis of the impact in case of loss / Reasons for the relevance of the case to the Company An eventual unfavorable decision might cause a relevant financial loss to the Company, in view of the amounts involved.

Court	Original court: 30th Federal Court of Rio de Janeiro, appeal assigned to the 7th Specialist Panel of the Regional Federal Court of the 2nd Region, and now before the Vice President of TRF2
Level of court	2nd instance
Date instigated	October 18, 2005
Parties	Vale (plaintiff); Rede Ferroviária Federal S.A., succeeded by the federal government (defendant)

Sums, assets or rights involved Main facts	Approximately R\$1.9 billion (as of December 31, 2017) In 1994, prior to its privatization, Vale entered into an agreement with Rede Ferroviária Federal S.A. (RFFSA), Brazil s federal railroad operator, to build two stretches of railroad in Belo Horizonte, Brazil, to be incorporated into an existing stretch, as part of a project titled Belo Horizonte Bypass. It subsequently entered into a similar agreement with the Brazilian government to begin construction work on an alternative stretch of railroad, as it was not possible to build the originally agreed-upon stretches.
	Vale filed a lawsuit against RFFSA, to question and annul the inflation correction clauses in its contract with RFFSA. It argued that the calculation method used by the Brazilian government was not compliant with applicable Brazilian legislation. Under the terms of the partial agreement of RFFSA s originally lawsuit, if the case went in favor of the federal government, the costs incurred by Vale to build the new stretch of railroad would be accepted in lieu of the compensation owed by Vale in this case, representing a significant reduction in the amount the company would be obliged to pay.
	In June 2012, a federal judge rejected Vale s intention to revise the inflation correction clauses. Vale appealed this decision and, on February 24, 2016, the Regional Federal Court of the 2nd Region (TRF2) upheld the federal judge s decision of June 2012. Vale then filed a special appeal against the terms of TRF2 s decision on September 1, 2016. The federal government was ordered to present its response on September 5, 2016, and it did so on October 17, 2016.
	The special appeal was submitted to the vice president of TRF 2 to examine its admissibility on July 6, 2017, and it was rejected on August 1, 2017. Vale then filed a special appeal on August 31, 2017. The federal government was instructed to present its response on December 11, 2017, and it did so on January 8, 2018.
	Vale s special appeal is still before TRF2 and awaiting submission to the Superior Court of Appeals.
Chance of loss	Possible
Analysis of impact in event of loss / Reasons this case is significant to the Company	A possible unfavorable decision could generate a significant financial loss for the Company, given the sums involved.
3) Lawsuit 0009362-71.1997.4.02.50	001
Court	5th Panel of the Regional Federal Court of the 2nd Region
Level of court	2nd instance
Date instigated	November 10, 1997

Public Prosecutors Office of Espírito Santo (plaintiff); federal government, Gerdau Açominas S.A., Companhia Siderúrgica de Tubarão, Usinas Siderúrgicas de Minas Gerais S.A., Vale, Odacir Klein, Luis Andre Rico Vicente, Jorge Eduardo Brada Donato, José Armando Figueiredo Campos, Rinaldo Campos Soares,

		Amaral, Claudio José Anchieta de Carvalho Borges, Ivo Costa Serra, and Companhia pírito Santo (CODESA) (defendants)
Sums, assets or rights involved	Incalculable	Request to annul the port concession contract for Tubarão Complex s terminals.
Main facts	This is a public-interest civil action that seeks to annul the authorization by which Vale and some of the other defendants operate Praia Mole Port Terminal in the state of Espírito Santo. In November 2007, 10 years after the case was filed, a sentence was issued, deeming the case to be completely groundless and recognizing the validity of the concession contracts that permit the use of the port terminals located at Praia Mole. On July 3, 2012, the sentence was upheld by the Regional Federal Court of the 2nd Region when judging an appeal filed by the Federal Public Prosecutors Office. The latter, unhappy with the decision against it, taken by the Regional Federal Court of the 2nd Region, filed a special appeal with the Superior Court of Appeals and an extraordinary appeal with the Superior Court of Appeals is pending. Case held by the judge-rapporteur since July 6, 2017.	
Chance of loss	Remote	
Analysis of impact in event of loss / Reasons this case is significant to the Company	Incalculable value. It could also impact Vale s other operations in the state of Espírito Santo.	
4) Lawsuit 0024892-89.2011.8.13.0)570	
Court		1st Civil District Court of Salinas, Minas Gerais
Level of court		1st instance
Date instigated		September 14, 2011
Parties		Minas Gerais State Public Prosecutors Office (plaintiff); Vale S.A., Instituto de Terras de Minas Gerais (ITER), Manoel da Silva Costa Junior, Evandro Carvalho, Mauro Eurípedes Rocha Mendes, Ricardo de Carvalho Rocha, Luciana Rocha Mendes, Orozino Marques de Carvalho, Adelzuith Marques Santos, Altemar Alves Ferreira, and Breno Rodrigues Mendes (defendants)
Sums, assets or rights involved		Compensation for damages to the state government of Minas Gerais amounting to at least R\$200 million, a civil fine of no less than R\$600 million, and the ownership of lands acquired by Vale. However, it should be noted that these sums were attributed by the plaintiff, and it is not possible to specify the true amount, and at this date it is inestimable.
Main facts		This is a public-interest civil action filed by the State Public Prosecutors Office against Vale and 10 other defendants. In short, the Public Prosecutors Office argues for the existence of an <i>organized group of</i> <i>people who have acted to illegally appropriate lands belonging to the state</i> <i>government of Minas Gerais</i> . The Public Prosecutors Office requested an injunction to seize the assets of the defendants, <u>except Vale</u> , up to the sum of R\$200,000,000, to carry out a search and seizure of movable assets, and to remove their banking and tax confidentiality. The injunction was granted by the court and upheld by the Minas Gerais Court of Appeals. In the end, the

Public Prosecutors Office requested the following: the suspension of all effects and consequent annulment of all titles of legitimate agricultural use issued by ITER involving lands located in the municipalities of Salinas, Santa Cruz de Salinas, Padre Carvalho, Fruta de Leite and Rubelita, in the period between January 2007 and August 2011; an order for ITER to hire a specialized company, at its own expense, to carry out an audit of all the titles of legitimate agricultural use issued by the state government of Minas Gerais in the period between January 2007 and August 2011; to condemn all the defendants to the loss of illegally gained goods or sums; to provide full compensation for the harm imposed on the state government of Minas Gerais, whose minimum value must be R\$200,000,000; to levy a civil fine of no less than R\$600,000,000; to remove their public functions and positions; to suspend their political rights; and to prohibit them from entering into contracts with the public authorities or receiving benefits from them.

Vale presented its defense (challenge) on March 15, 2012, but the fact-checking stage has not yet begun. On April 28, 2016, the process was submitted to the Public Prosecutors Office. On June 1, 2016, a decision was published, ordering the case to be transferred to the jurisdiction of Belo Horizonte. Consequently, the Minas Gerais State Public Prosecutors Office filed a motion for clarification, which was upheld. On March 23, 2017, a conflict of jurisdiction was claimed. On April 11, 2017, the case was held by the judge under advisement. On May 8, 2017, the judge raised a possible conflict of jurisdiction, and for this reason, the Minas Gerais Court of Appeals filed conflict of jurisdiction number 0238729-84.2017.8.13.0000 to determine whether the case would remain with the court of Salinas or be transferred to Belo Horizonte. On May 18, 2017, the motion for clarification filed by the defendant, Orozino, was rejected. The Minas Gerais Court of Appeals decided that the 1st Civil District Court of Salinas would judge the public-interest civil action, and Vale must now wait for the case to be seen.

Chance of loss

5) Extraordinary Appeal 808621

Possible

Analysis of impact in event of
loss / Reasons this case is
significant to the CompanyHarm to the Company s image by having its name associated with the practice of fraudulent
appropriation of lands in the northern part of the state of Minas Gerais, the cancellation of land
acquisitions, and the loss of sums paid by Vale (approximately R\$35.0 million).

e) Entracional frippear 000021	
Court	Supreme Federal Court
Level of court	Superior
Date instigated	May 15, 2014
Parties	Interunion Capitalização S.A. and others (plaintiffs); Companhia Paulista de Ferro Ligas (CPFL) (defendant)
Sums, assets or rights involved	R\$1,466,285,684.60
Main facts	Interunion filed an enforcement procedure against Vale subsidiary CPFL to demand R\$248,968,222.18, corresponding to 200 bonds that were the subject of a contract that despite being titled Purchase and Sale of Bonds, was in fact a bond lease contract. The defense (motion to stay execution) presented by CPFL was rejected, leading it to file an appeal with

the Bahia Court of Appeals. In judging this appeal, the Bahia Court of Appeals upheld the decision to reject the appeal. CPFL then filed a special appeal with the Superior Court of Appeals. The Superior Court of Appeals accepted CPFL s special appeal and ordered the annulment of the enforcement process, deeming that Interunion had not adequately demonstrated the calculation of the enforced amount, which is indispensable when requesting such an enforcement process. Interunion then filed a series of appeals against the Superior Court of Appeals decision (a motion for clarification, an appeal against a divergent decision, an internal interlocutory appeal, and a new motion for clarification), all of which were rejected in turn. Interunion then filed an extraordinary appeal with the Supreme Federal Court. When examining this appeal s admissibility, the Superior Court of Appeals deemed that the appeal was groundless and did not allow it to progress to the Supreme Federal Court for analysis of the case s merits, in line with the ruling published on March 10, 2014. Interunion filed an appeal against this decision of inadmissibility, and on April 22, 2014 it was submitted to the Supreme Federal Court. The Office of the Prosecutor General then issued an opinion, ruling that the extraordinary appeal should not be allowed to proceed.

After this opinion was issued by the Office of the Prosecutor General, a single-judge decision was handed down, rejecting the extraordinary appeal, published on August 30, 2016. On September 5, 2016, Interunion filed an internal interlocutory appeal against the single-judge decision. On September 13, 2016, permission was granted for the defendant to present its counterarguments. The appeal was judged on October 4, 2016. On the same date, in a subsequent act, the case records were submitted to the judge-rapporteur and they are pending judgment.

Remote

An unfavorable decision in the case would generate financial losses for the Company.

12th Federal Court of Minas Gerais

1st instance

December 17, 2015

Federal government, Brazilian Environmental Protection Agency (<u>IBAMA</u>), Chico Mendes Institute, National Water Agency (<u>ANA</u>), National Mineral Production Department (<u>DNPM</u>), state government of Minas Gerais, State Forest Institute (<u>IEF</u>), Minas Gerais Water Management Institut<u>e</u> (<u>IGAM</u>), State Environmental Foundation (<u>FEAM</u>), state government of Espírito Santo, State Environment and Water Resources Institute (<u>IEMA</u>), and State Water Resources Agency (<u>AGERH</u>) (<u>Plain</u>tiffs); Samarco, Vale and BHPB (<u>Defendan</u>ts)

Sum demanded by the Plaintiffs: R\$20,204,968,949.00. Given the subject and progress of the case, the Company deems the sum arising from a possible condemnation to be inestimable.

Chance of loss

Analysis of impact in event of loss / Reasons this case is significant to the Company

6) Lawsuit 0069758-61.2015.4.01.3400

Court

Level of court

Date instigated

Parties

Sums, assets or rights involved

Main facts

On December 17, 2015, the federal government filed a public- interest civil action aimed at forcing Vale, Samarco and BHPB to take a series of urgent measures, in order to repair alleged social and environmental damage arising from the failure of Samarco s tailings dam in the municipality of Mariana (Fundão Dam) and to prevent potential future environmental damage. For information on this accident, see item 7.9 of this Reference Form.

On December 18, 2015, a decision was handed down, granting an injunction to: (i) issue a provisional remedy to forbid Samarco from discharging the volume of tailings that were still retained behind the failed dam (or prove that these tailings had already been contained); (ii) order the Defendants to: (a) hire companies to immediately start evaluating the contamination of fish by inorganic substances and any potential risks caused by human consumption of these fish, and to control the proliferation of species benefiting from the manmade occurrence; and (b) carry out studies and take measures to prevent the volume of mud discharged into the Doce River from reaching the Doce River lagoon system and to protect the mineral water sources mapped by DNPM; (c) carry out studies to map the different levels of potential resilience of the impacted locations; (iii) order Samarco to make an initial deposit in court of R\$2.0 billion; (iv) freeze the Defendants existing mining concession licenses; (v) grant an injunction to force the Defendants to present an overall social and environmental recovery plan for the Doce River Basin and the entire degraded area; and (vi) order the provision of services to the people impacted by the disaster. Within the scope of the decision in question, a daily fine of R\$150,000 was also established in the event of non-compliance with each of the measures imposed on the Defendants, and a daily fine of R\$1.5 million was established in the event of a delay in making the aforementioned mandatory R\$2.0 billion deposit in court.

On January 7, 2016, Samarco filed a petition, requesting the following: (i) A partial reconsideration of the injunction, arguing against the need for the ordered measures, taking into account technical factors and processes needed to execute them, which would undermine the injunction s own objectives, as Samarco argued it was necessary to hire specialized companies and to carry out environmental and social impact assessments in order to implement the injunction s demand; (ii) Extensions to the deadlines, as follows: a) Submission of the studies related to the thickness of the mud layer, until January 18, 2016; b) Submission of the preliminary recovery plans, up to 45 days; c) Removal of all the volume of mud deposited along the banks of the Doce River, for an indeterminate period, due to the technical difficulties involved; (iii) Removal of the obligation to make the R\$2.0 billion deposit; (iv) A reversal of the freezing of the Defendants mining rights; and (v) Recognition of the impossibility of submitting the necessary plans within the deadline originally set. In addition, through this petition, Samarco reiterated its request for a justification and conciliation hearing and the suspension of the fine established by the decision that granted the injunction, until the final terms of the

new deadlines were established, as requested in the petition.

On the same date, Vale also filed a request to reconsider the injunction, in which it demonstrated that Samarco had already been taking measures needed to mitigate the accident s impacts. It also demonstrated that the measures ordered in the injunction were unreasonable, insofar as they did not take into consideration the studies needed to identify the measures to be taken to mitigate the damage. In addition, it claimed that these measures ought not to be ordered through an injunction.

After this, on January 14, 2016, Vale, Samarco and BHP filed an appeal against the injunction, requesting the suspension of the injunction s effects and a comprehensive review of it.

On February 3, 2016, Samarco, Vale and BHPB filed a petition to request a further 30-day suspension of the process and the effects of the injunction granted, in view of the fact that negotiations had begun with the aim of reaching an agreement.

On February 4, 2016, Samarco filed a petition, reiterating its request to reconsider the decision ordering the taking of certain measures aimed at preventing and mitigating damage arising from the accident, and reinforcing its request to not be obliged to provide a new deposit or make new deposits in court, at the risk of endangering the commitments already voluntarily assumed to repair the damage caused by the accident.

On February 5, 2016, Samarco filed a challenge, arguing there was a lack of procedural assumptions and merit. Samarco also argued that it had been taking the measures envisaged in the case voluntarily, and it requested the dismissal of the initial requests.

On February 10, 2016, Vale filed a challenge, through which it requested the dismissal of the case, without judgment of its merits, given the Plaintiffs lack of interest in acting. Considering the hypothesis of the case not being dismissed without resolution of its merit, Vale also requested judgment of the rejection of the requests formulated initially, through the revocation of the injunction and provisional remedies, as well as condemnation of the Plaintiffs to pay the case s costs and legal fees.

On March 2, 2016, the federal government, the state government of Minas Gerais and various other governmental bodies entered into a Transaction and Conduct Adjustment Agreement (TTAC), which was submitted to the court on March 7 with a request for its legal approval.

On May 5, 2016, at a hearing attended by the parties to the case and the Federal Public Prosecutors Office, the TTAC was registered within the Federal Court Conciliation System, an organization that is part of the structure of the Regional Federal Court of the 1st Region, and the lawsuit was suspended during the period of execution of the obligations assumed by the parties within the scope of the TTAC.

The Federal Public Prosecutors Office filed a motion for clarification against the decision that approved the TTAC, questioning the jurisdiction of the Regional Federal Court of the 1st Region to approve the TTAC. In addition, the Federal Public Prosecutors Office questioned the terms of the TTAC, regarding the appropriateness of the measures established in it, as well as the legitimacy of the agreement s parties to enter into the TTAC. Accordingly, it requested the granting of infringing effects to the motion for clarification and the suspension of the decision s effectiveness.

At the same time, the Federal Public Prosecutors Office filed a complaint with the Superior Court of Appeals against the decision of the Regional Federal Court of the 1st Region that approved the TTAC.

On June 30, 2016, the complaint s judge-rapporteur granted an injunction to suspend, until the definitive judgment of the complaint, the decision of the Regional Federal Court of the 1st Region, of May 5, 2016, which approved the TTAC.

On August 17, 2016, the Fifth Panel of the Regional Federal Court of the 1st Region declared null and void the decision that approved the TTAC and rejected the appeals made by Vale, BHP and Samarco, while upholding the injunction granted by the 12th Federal Court of Belo Horizonte on December 18, 2015, including the freezing of the Defendants mining concessions, but without limiting their production and sale activities.

On November 4, 2016, the Federal Courts ordered the Defendants to: (i) present evidence, within 90 days, that the leakage of waste from the Fundão Dam had been definitively contained; (ii) to submit conclusive studies within six months, endorsed by the relevant environmental agencies, regarding an action plan and the feasibility of removing the mud spread along the banks of the Doce River, along its tributaries and in areas near its estuary; and (iii) to make a deposit of R\$1.2 billion, within 30 days, to guarantee future remedial measures. This cash deposit of R\$1.2 billion was provisionally replaced by the guarantees provided for in Preliminary Conduct Adjustment Agreement I ().

On November 16, 2016, Samarco filed a motion for clarification, through which, for the purpose of making the ordered deposit in court, it requested recognition of the spending already incurred to execute the remedial measures, and the possibility of offering the court other assets or forms of guarantee.

On December 6, 2016, Samarco filed a petition requesting the granting of an additional 30 days to make the deposit in court.

On December 7, 2016, a decision was handed down, granting an additional 30 days to make the deposit in court.

On January 11, 2017, a decision was issued, ordering the defendants, within three days, to submit their opinion on the

petition filed by the municipal government of Ponte Nova, requesting its participation in the lawsuit, and to submit their opinion on the registration program within five days.

On January 18, 2017, the Federal Public Prosecutors Office, Vale, Samarco and BHPB filed a petition to: (i) report the signing of Preliminary Conduct Adjustment Agreement I by the parties; (ii) accept the guarantees provided for in this agreement for the purpose of provisional compliance with the requirement to make the deposit specified in the injunction granted within the scope of Public-Interest Civil Action 0069758-61.2015.4.01.3400; and (iii) request the suspension of the case.

On January 26, 2017, a decision was handed down, suspending the procedural timeframe related to the deposit of R\$1.2 billion and providing five days for the plaintiffs to express their opinion on Preliminary Conduct Adjustment Agreement I, entered into by the defendants and the Federal Public Prosecutors Office.

On March 6, 2017, the Federal Public Prosecutors Office and the defendants filed a joint petition reiterating the request to approve Preliminary Conduct Adjustment Agreement I, while mentioning that a firm called Integratio Mediação Social e Sustentabilidade Ltda. had been hired to serve as independent technical assistants.

On February 5, 2017, the plaintiffs filed a joint petition agreeing to Preliminary Conduct Adjustment Agreement I.

On March 16, 2017, a decision was issued, which: (i) partially approved Preliminary Conduct Adjustment Agreement I, ordering the suspension of the case until a further judicial decision; and (ii) accepted, for the time being, the guarantees provided for in Preliminary Conduct Adjustment Agreement I, with the condition that they would not replace or modify the order for a cash deposit specified in the injunction.

On April 24, 2017, Samarco filed a petition, requesting the incorporation of the tailings management plan presented to the environmental regulators.

On May 15, 2017, a decision was issued to grant the request to extend the deadline and suspend the instrument until October 30, 2017.

On June 29, 2017, a decision was issued to grant the request to extend the deadline formulated by the parties and consequently to approve a partial alteration to the TAP, granting a deadline of October 30, 2017 for the parties to present the court with the terms of the final agreement (TACF). The same decision extended the legal and procedural effects of the Preliminary Conduct Adjustment Agreement and the approval granted on March 16, 2017.

On August 14, 2017, Samarco filed a petition requesting the incorporation of documents related to the obligation to present

studies about the plan to remove mud deposited along the banks of the Doce River.

On October 31, 2017, a decision was issued, which granted the request made by Samarco, Vale, BHP and the Federal Public Prosecutors Office and approved a partial alteration to the Preliminary Conduct Adjustment Agreement, granting a deadline of November 16, 2017 to present the terms of the final agreement (TACF). The same decision extended the legal and procedural effects of the Preliminary Conduct Adjustment Agreement and the approval granted on March 16, 2017.

On November 20, 2017, a decision was issued, which granted the request made by Samarco, Vale, BHP and the Federal Public Prosecutors Office and approved a partial alteration to the Preliminary Conduct Adjustment Agreement, granting a deadline of April 20, 2018 to present the terms of the final agreement (TACF). The same decision extended the legal and procedural effects of the Preliminary Conduct Adjustment Agreement and the approval granted on March 16, 2017.

On November 20, 2017, a decision was issued to allow the parties to express their positions on a request to add and accept an amicus brief to the case records.

On December 19, 2018, Vale filed a petition requesting rejection of the request to add and accept an amicus brief to the case records.

On April 24, 2018, Samarco, Vale and BHP filed a petition requesting authorization to hire the Getulio Vargas Foundation to work on the socioeconomic diagnosis of the impacts of the failure of the Fundão Dam.

On May 3, 2018, a decision was issued to authorize the hiring of the Getulio Vargas Foundation to work on the socioeconomic diagnosis of the impacts of the failure of the Fundão Dam.

On May 4, 2018, Samarco filed a motion for clarification regarding the decision that authorized the hiring of the Getulio Vargas Foundation to work on the socioeconomic diagnosis of the impacts of the failure of the Fundão Dam, in order to rectify a material error, clarifying that it will work as a technical assistant to the Federal Public Prosecutors Office.

On May 8, 2018, a decision was issued to uphold the motion for clarification filed by Samarco, to clarify that the Getulio Vargas Foundation will work as a technical assistant to the Federal Public Prosecutors Office.

The TTAC remains valid and the parties will continue to meet their agreed-upon obligations.

For additional information on the main terms and conditions of the TTAC and Preliminary Conduct Adjustment Agreement I, mentioned above, see Agreements Related to the Failure of Samarco s Dam, contained in item 4.7 of this Reference Form.

The case will be suspended until June 25, 2018, and until then, the effects of the decision issued on March 16, 2017 will remain in effect. Chance of loss Possible Analysis of impact in event of loss / The parties entered in the TTAC, through which it was agreed to carry out Reasons this case is significant to programs needed for the environmental and social restoration of the areas the Company impacted by the accident. For more information about the TTAC, see item 4.7 of this Reference Form. The parties also entered into Preliminary Conduct Adjustment Agreement I, which concerns the case s guarantees. For more information, see item 4.7 of this Reference Form. 7) Lawsuit 0197171-92.2015.8.13.0521 (0007284-81.2016.4.01.3800) Court 2nd Civil District Court of Ponte Nova, Minas Gerais Court of Appeals (12th Federal Court of Belo Horizonte) Level of court 1st instance Date instigated November 17, 2015 Parties Núcleo Assessoria Comunidades Atingidas Por Barragens (NACAB) (<u>Plaintiff</u>); Samarco, Vale and BHPB (together <u>Defendants</u>) Sums, assets or rights involved Sum demanded by the Plaintiff: R\$100,000,000. Given the subject and progress of the case, the Company deems the sum arising from a possible condemnation to be inestimable. Main facts On November 17, 2015, the Plaintiff filed a public-interest civil action requesting an injunction to force the Defendants to submit and execute, for the region of the municipalities of Santa Cruz do Escalvado, Rio Doce and Barra Longa, along the Carmo and Doce rivers: (i) recovery programs for the permanent preservation areas and springs affected by the mud that spilled from Samarco s failed dam; and (ii) a database of impacted people and the respective damage, including plans for immediate social assistance and compensation. In other specific areas, the demand was to carry out long-term monthly monitoring and genetic population studies of the rivers aquatic fauna, and then submit an emergency recovery program. A request was also made to force the Defendants to pay compensation to all the people impacted by the accident, as well as environmental compensation, totaling R\$100,000,000. On November 18, 2015, a sentence was issued, assigning the case to the Belo Horizonte Federal Court District. On November 23, 2015, the Plaintiff filed an interlocutory appeal, requesting an injunction against the decision made, a review of the first-instance decision, and the maintenance of the case with the State Courts. In addition, NACAB requested an interim measure to oblige the Defendants to take several measures in order to remedy the damage caused by the accident. This included the submission, within 30 days, of a recovery program for the aquatic fauna of the Doce, Carmo and Piranga rivers in the municipalities of Santa Cruz do Escalvado, Rio Doce, Barra Longa and Ponte Nova, and the provision of social assistance to victims of the accident, among other things.

On November 26, 2015, a decision was issued that postponed the analysis of the request for the injunction until after the analysis of the Defendants challenge.

On December 17, 2015, the rapporteur issued an order convening an extraordinary conciliation session at the Minas Gerais Court of Appeals.

On January 7, 2016, the federal government filed a petition to express its agreement with the decision to transfer the case to the Federal Courts, given its interest in the case.

On February 3, 2016, given the federal government s explicit interest, the case was transferred to the 12th Federal Court, in accordance with article 109, I of the 1988 Federal Constitution.

On February 16, 2016, the case was received by the 12th Federal Court of the Judiciary Section of Belo Horizonte.

On July 22, 2016, a decision was issued, calling for the case to be merged into Public-Interest Civil Action 23863- 07.2016.4.01.3800, and to suspend the process.

On March 27, 2017, a decision was published that, considering the approval granted in cases 697586120154013400 and 238630720164013800, suspended the case until subsequent judgment.

The value of the case demanded by the Plaintiff is R\$100,000,000. However,

the lawsuit is still at a very early stage, which hinders accurate analysis of

Chance of loss

Analysis of impact in event of loss / Reasons this case is significant to the Company

8) Lawsuit n. 0008423-17.2016.8.13.0400 (0146085-58.2015.4.02.5101)

Court	1st Court of Mariana
Instance	1st Instance
Date of institution	11/30/2015
Parties of the lawsuit	Sohumana Sociedade Humanitária Nacional (<u>Author</u>) and Samarco, Vale, BHPB (jointly, <u>Defendan</u> ts)
Values, assets or rights involved	Value of R\$20.000.000.000,00 Brazilian reais attributed to the suit by the Author. Owing to the object and the current stage of the suit, the Company understands that the value involved is inestimable, in an eventual conviction.
Main facts	On November 30, 2015, the Author filed a public civil action intending to convict the Defendants for the payment of an indemnification to the victims of the accident or their family members, as well as to the municipalities, in order to restore the public property, proportionally to the impacts resulting from the accident. For information on the accident, see item 7.9 of this Reference Form. On November 30, 2015, there was sentence rendered transferring the jurisdiction for prosecution of the suit to one of the courts of the State Legal Courts of Mariana (Minas Gerais State).

Possible

the losses if the case should be lost.

On December 11, 2015, Vale entered an appeal moving to reconsider the judgment rendered, so that the Union should manifest itself regarding its interest on the appeal, before the submittal of the records to the Federal Legal Court of Minas Gerais, because if the response of the Union should be positive, the appeal should continue on the federal jurisdiction, according to article 109, I, of the Federal Constitution.

On December 15, 2015, Sohumana, filed an appeal moving the reconsideration of the judgment rendering the transference of jurisdiction, thus asking for the submittal of records to the Federal Court of Minas Gerais, based on the interest and legitimacy of BNDESPAR, which, in its capacity as shareholder of Vale, would have interest on the appeal.

On December 16, 2015, there was a judgment rendered maintaining the establishment of the transference of jurisdiction, reasserting the total lack of jurisdiction of the Federal Court and the unsuitability of notice to any possible interested party, including the Union.

On March 10, 2016, the suit was received by the court of the 1st Court of Mariana.

On April 1st, 2016, there was an order published moving the regularization of the suit representation by the Author.

On April 20, 2016, there was the publishing of a judgment denying the initial appeal, due to lack of correct process representation, thus dismissing the suit without resolution on the merits.

On June 07, 2016, there was the certification of the res judicata of the judgment.

On November 14, 2016, the Author filed an appeal moving the formalization of the suit.

On February 06, 2017, there was a judgment that did not analyze the appeals made since the judgment was already res judicata.

On March 06, 2017, the Author filed an appeal.

On March 14, 2017, there was an order stating that the defendants should file reply briefs.

On March 23, 2017, the Author filed a motion of clarification, moving the cure for alleged omission regarding the term date for the review of the suit from the sector of motions of clarifications, moving that an alleged omission be supplied regarding the term date for the devolution of the suit from the section of da Ordem dos Advogados do Brasil OAB (Brazilian Bar Association).

On March 29, 2017, there was a judgment denying the grant

of the motions lacking to admit the embargoes filed by the Author.

On April 10, 2017, reply briefs were entered to the appeal submitted by

SAMARCO. On April 11, 2017, reply briefs were entered to the appeal submitted by BHP. On July 13, 2017, there was the publication of a judgment not acknowledging the appeal filed by SOHUMANA. On July 24, 2017, reply briefs were entered regarding the appeal submitted by VALE. On August 3, 2017, an internal interlocutory appeal was entered submitted by SOHUMANA, moving the reversal of the judgment that did not acknowledge its appeal. On September 18, 2017, there was the publication of granting the aggravated to see the records so that they could profess on the internal interlocutory appeal entered, within a 30 days term. On September 15, 2017, reply briefs from BHP and SAMARCO were entered. On September 29, 2017, Vale submitted its reply briefs. On 23 de November de 2017, an appellate decision was published denying specific relief of the appeal filed by Sohumana. On January 5, 2018, Sohumana filed motions for clarification against the appellate decision denying its internal interlocutory appeal. On April 6, 2018, there was an appellate decision not acknowledging the motions for clarification filed by Samarco. Chance of loss Possible Impact analysis in the event of loss/ Notwithstanding the entering of the judgment through which the suit was Significant reasons of the suit for dissolved without resolution of merits, the Company considers the suit as the Company. significant on account of the amount involved. 9)Lawsuit n. 0028358-94.2016.4.01.3800 (former number 0426085-72.2015.8.13.0105) Court 12th Federal Court Judicial District of Belo Horizonte (former 7th Civil Court of Governador Valadares TJMG) Instance 1st instance Data of institution 12/14/2015 Parties of the suit MP-MG (Author) and Samarco and Vale (jointly, Defendants) Amounts, assets or rights involved Amount attributed to the suit by the Author of R\$5.100.000.000,00 Brazilian reais. Owing to the object and the current stage of the suit, the Company understands that the value involved is inestimable, in an eventual

conviction.

On December 14, 2015, the PO-MG filed this civil public suit,

through which intends the conviction of the Defendants to adoption of several measures towards the mitigation of impacts resulting from the rupture of the Fundão dam. The Author moves for, in preliminary injunction, under penalty of a daily fine of R\$2.000.000,00 Brazilian reais, that the defendants: (i) take steps to and maintain the measures granted by Civil Public Provisional Remedy n. 0395595-67.2015.8.13.0105, which preceded this suit, therefore presenting the same object (as described below in Observations),(ii) create and implement and executive project to construct collection stations, bombing and adduction of water from Suaçuí Pequeno and Grande rivers up to the stations of the Serviço Autônomo de Água e Esgoto (<u>SAAE</u>) (Autonomous Service of Water and Sewage) within 12 months maximum; (iii) provide regularly to SAAE the necessary polymers to treat the water of Rio Doce until the operation of the installations for collection and adduction above mentioned; (iv) install equipment to provisional water collection and adduction of Suaçuí Pequeno or Grande rivers as to diminish the collection in Rio Doce, within 45 days maximum; (v) install a water treatment station, with treatment capacity of 120 liters per second, (vi) all their accounts are frozen to the minimum amount R\$ 100.000.000,00 Brazilian reais, and (vii) a confirmation of the preliminary injunction and indemnification for collective mental distress claim amounting to R\$ 5.000.000.000,00 Brazilian reais.

On December 17, 2015, there was a judgment partially granting the preliminary injunction to revert the burden of proof and ruling that the Defendants shall bear the expenses for monitoring the quality of the waters of Rio Doce and of the fresh water provided to the population, under penalty of a daily fine of R\$2.000.000,00 Brazilian reais. Furthermore, it was established the compliance to the preliminary injunction granted on the records of suit n. 0395595-67.2015.8.13.0105, including the determination of water supply to residences within 48 hours, as well as the submittal of a logistics plan regarding the water supply to residences, within the term of 10 days.

The PO-MG filed an interlocutory appeal against the preliminary decision, moving the interlocutory relief of appeals, for the adoption of provisional and emergency remedies within the regions impacted by the accident. On February 17, 2016, there was the judgment suspending the processing of the mentioned interlocutory appeal. Thus, the interlocutory appeal was suspended until the entry of the final judgment in the records of the Positive Jurisdiction Dispute filed by Samarco, aiming at pacifying the discussion on jurisdiction of Federal or State Court to judge the issues regarding the city of Governador Valadares. The dispute originated from the fact that there are two Public Civil Lawsuits regarding the distribution and drinkability of the water in Governador Valadares, one pending before federal court and the other before state court. The Jurisdiction Conflict was not judged, however, there is a judgment that as long as there is not a final judgment, urgent measures shall be taken by the federal court.

On May 10, 2016, the following were entered into the records

	(i) a lower court decision, in appellate court, rendered in the records of the interlocutory appeal filed by the PO-MG, from January 28, 2016, establishing the submittal of records, as well as connected appeals to the 12nd Federal Court of the Legal Court of Belo Horizonte; (iii) a motion from the Municipality of Governador Valadares, from February 16, 2016, showing interest in entering into the active pole of the suit; (iii) office from the Court of the 12nd Federal Court of the Minas Gerais moving the entering into the records of an appeal from the Federal Prosecutors Office (MPF) and judgment of its execution, in face of the judgment in the Jurisdiction Dispute that was pending on the STJ.
	On May 24, 2016, was filed at the 12nd Federal Court.
	On July 04, 2016, there was the answer by VALE filed, arguing lack of interest of acting by the MPMG (Prosecutors Office of Minas Gerais) in face of the measures already implemented by the defendants, as well as the fact that the water quality of rivers has already returned to the same status as previous to the accident. Vale also alleged in its defense the legitimacy to be in the passive pole of the suit, in face of the lack of causal nexus between any action of omission on its part and the accident that happened. Vale also maintains the lack of collective mental distress claim and the impossibility of reversion of the burden of proof.
	On July 04, 2016, there was also an answer filed by Samarco, o merits reasons similar to the ones alleged by Vale.
	On March 21, 2017, a joint decision was entered into the records of lawsuits n. 0069758-61.2015.4.01.3400 and 0023863-07.2016.4.01.3800, probating, in part, o The Preliminary Adjustment Term I, only referring to the socio- environmental diagnosis (to be performed by the Instituto de Tecnologia para o Desenvolvimento - LACTEC and diagnosis and monitoring of programs in course (to be performed by Ramboll Brasil Engenharia and Consultoria Ambiental Ltda., granting the suspension of other suits connected to them, in order to avoid conflicting judgments.
	On March 29, 2017, an order was published considering the probate decision rendered in the scope of lawsuits n. 69758- 61.2015.4.01.3400 and 23863-07.2016.4.01.3800, suspending the feat until further legal deliberation.
ance of loss	Possible
alysis of the impact in the event oss/ Reasons for significance he lawsuit for the Company	MPMG attributed the value of R\$5.100.000.000,00 (Brazilian reais) to the suit. However, it should be emphasized that the suit is still on a very preliminary stage, which makes it difficult to perform a more accurate analysis of the damages, in the event of loss.
servations	The Public Provisional Remedy Action n. 0395595- 67.2015.8.13.0105 refers to preparatory provisional remedy for the above described suit 0426085-72.2015.8.13.0105. Such suit was filed on November 10, 2015 by the MPMG against a Samarco, before the 7th Civil Court of Governador Valadares

TJMG. The provisional remedy is currently suspended,

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according to the order by the Superior Court of Justice.

10) Lawsuit n. 0043356-50.2015.8.13.0400 (10264-98.2016.4.01.3800)

Court	2nd Civil Court of the County of Mariana - (returned from the 12d Federal Court of the Judicial Section of Belo Horizonte)
Instance	1st instance
Date of institution	12/10/2015
Parties of the lawsuit	MP-MG (<u>Author</u>) and Samarco, Vale and BHPB (jointly, <u>Defendants</u>)
Values, assets of rights involved	Amount attributed to the suit by the Author of R\$2.000.000.000,00 Brazilian reais. Owing to the object and the current stage of the suit, the Company understands that the value involved is inestimable, in an eventual conviction.
Main facts	On December 10 2015, the PO-MG filed a public civil action, through which it moves, under penalty of a daily fine amounting to R\$200.000,00 (Brazilian reais), the conviction of the Defendants to the (i) adoption of several measures oriented to the mitigation of impacts from the rupture of the Fundão dam, (ii) implementation of a social communication program on the activities executed, (iii) provision of health and education assistance to those impacted, and (iv) support in retrieval of assets, animals and others; retrieval of tombs and mortal remains existing in places impacted, among others.
	The main move aims at the conversion of the preliminary injunction in definite one, as to allow the whole reimbursement of the alleged individual material damages and mental distress claim suffered by those impacted by the accident and payment of a Recovery Plan that allows the social and environmental recovery in face of the damages verified resulting from the accident at the Fundão dam. The PO-MG also moves for the relocation and economic and social reorganization of the impacted families and the effects of the judgment granted as preliminary in the provisional remedy action n. 0039891- 33.2015.8.13.0400, previous to this suit, granting the freeze of the amount of R\$ 300.000.000(Brazilian reais).
	On December 16, 2015, there was an order postponing the appreciation of the preliminary injunction for after the settlement hearing. On the same date, the PO-MG moved for the amendment of the complaint so that it includes new motions, among them: (i) the granting of interlocutory relief, (ii) payment of R\$10.000,00 (Brazilian reais) as a financial contribution to the victims (iii) identification and of the remainder leisure practices developed by the impacted, (iv) increase and pay the value of assistance to the victims, (v) pay a financial support to the victims that have not been directly impacted in their income, and (vi) submit an immediate and concrete actions plan, among other measures.
	On December 23 2015, there was a hearing among the parties, reaffirmed by the judge, with discussion of: (i) the allocation of families in rented houses, observing that, regarding this matter, Samarco said that it had already fulfilled spontaneously part of the referred measure; (ii) emergency support, and Samarco said that it was already paying a minimum wage to each person of the family who loss their income due to the accident, accrued

by 20% by dependent member of the family, besides the amount corresponding to a food parcel per family and having compromised to support the referred monthly amount for twelve months, according to the conditions of the term of the hearing; (iii) payment by Samarco of (a) R\$100.000,00 by family unit that lost family members in the event, and of (b) R\$10.000,00 as indemnification advancement, by family unit, for those families that suffered physical displacement, that is, had their houses destructed, independently of having lost income from such real estate; (iv) accountability by Samarco, submitted to court, on the amount spent on indemnifications and recovery of the area, until January 31, 2016. A permit amounting to R\$5.500.000,00 was issued for the payment of the values above-mentioned, except for the monthly support.

On January 20, 2016, there was a second hearing among the parties, confirmed by the judge, where there was discussion of the following, besides discussion of individual cases: (i) the advancement of R\$10.000,00 to those persons impacted by the accident, and Samarco compromised to advance the indemnification on the mentioned amount, as settled in the previous hearing, for those individuals that lost their real stated erected in their property, which were not used as their regular living place, according to the terms settled in the hearing; (ii) the indemnification for the loss of vehicles, and Samarco compromised to indemnify individuals that lost their vehicles; (iii) the release permit, through which Samarco agreed to release R\$1,0 million to implement the above-mentioned actions.

On February 17, 2016, owing to the express interest of the Union, the records were sent to the 12th Federal Court, according to art. 109, I of the Federal Constitution. Pending trial.

On March 28, 2016, Vale filed an answer, moving for the extinction of the suit, without appreciation of merits, owing to the lack of interest of action by the Author. Considering the hypothesis of non-extinction of the suit without resolution of merits, Vale also moved for the judgment of the inappropriateness of the moves formulated in the complaint; besides the conviction of the Author to pay award of costs and attorneys fees.

On July 15 2016, the Federal Public Ministry filed a motion moving for the decline of the jurisdiction of the Federal Court to the State Court, since: (a) in the Interlocutory Appeal itself, establishing the remittance, and afterwards, the Supreme Court Judge reconsidered his decision; (b) according to decision by the STJ, on June 22, 2016, on the Jurisdiction Dispute n. 144.922/MG, referring to the suit on the accident in Mariana, the Federal Justice would have jurisdiction for the demands of diffuse and transindividual rights, as well as socio-economic and socio-environmental demands, while the State Court would have jurisdiction on individual homogeneous suits, such as the ones of this suit, referring to personal damages of families impacted by the rupture of the Fundão dam.

On 23 de August de 2016, at the 12th Federal Court of the Judicial District of Belo Horizonte/MG, a judgment was awarded establishing the devolution of the records to the Court of the 2nd Civil, Criminal and Criminal Executions Court of the County of Mariana/MG.

On September 5, 2016, there was a determination of devolution of the records to the 2nd Civil Court of Mariana, Minas Gerais.

On 12 de September de 2016, o MP-MG filed a motion, at the 2nd Court of the County of Mariana, moving for the following, among others: (a) the reactivation of the Lawsuit at the State Court; (b) attachment of the technical assistance process to the records of the main lawsuit and to the provisional remedy; (c) release of the amount of R\$3,5 millions, through legal order, to Cáritas Brasileira Regional MG, a non-governmental organization, responsible to start the job of technical assistance to the victims; (d) inclusion in the records of several documents, including the receipt evidencing of the deposit of R\$500 thousand, by Samarco; (and) assignment of a new settlement hearing.

On September 30, 2016, there was an order establishing the attachment of the execution of the sentence into the main records and establishing the remittance of records to the 12th Federal Court of the Judicial District of Minas Gerais, for its appreciation of the motions for clarification filed by Samarco.

On November 11, 2016, Samarco filed a motion informing that it filed motions for clarification against the judgment made by the 12th Federal Court of Belo Horizonte, establishing the remittance of the records to the State Court, reason why it motioned for the devolution of the records to the Federal Court for appreciation of the motions for clarification.

On November 28, 2016, there was a settlement hearing, when there was the ratification of a settlement among the parties.

On February 08, 2017, the records were sent to the 12th Federal Court of Belo Horizonte.

On February 09, 2017, there was a judgment denying the motions for clarification filed by Samarco.

On April 07, 2017, a settlement hearing was held at the 2nd Civil Court of Mariana, Minas Gerais.

On May 15, 2017, The Public Ministry filed a motion for subpoena of the defendants so that they, within 5 days: (i) reply on their agreement regarding the analysis methodology on the events of non-compliance, (ii) included into the records the reply to the events of non-compliance, (iii) included into the records the reply to the events of non-compliance, (iii) included into the records the real estates purchased for the resettlement of Bento Rodrigues and Paracatu, referring to lawsuit n. 0400.15.004335-6.

On June 14, 2017, an order was published subpoenaing the defendants to pronounce themselves on the motions by the Public Ministry on pages 4.659/4.663, as well as regarding the methodology it proposed.

On June 29, 2017, SAMARCO filed a motion reiterating the clarifications made regarding the steps made referring to (i) the answer submitted by SAMARCO on the alleged new cases of non-compliance of Settlements and (ii) on the real estates aimed at the resettlement of Bento Rodrigues and Paracatu, motioning for an additional term date of 20 days for the submittal of an answer regarding the methodology proposed by the MPMG referring to that analysis and answer of the motion made by the impacted.

On July 19, 2017, SAMARCO filed a motion for the proposal of a methodology of submittal of answer to the impact, who should direct their questions to SAMARCO/Fundação.

On September 28, 2017, the Public Ministry was awarded to see the records.

On February 6, 2018, a settlement hearing among the parties was held, where there was an agreement on the reparation guidelines referring to the right of housing of the impacted by the rupture of the Fundão dam, through a partial settlement.

On March 27, 2018, a settlement hearing among the parties was held.

On June 26, 2018, the Public Ministry filed a motion for the establishment of the raising of the amount of R\$5.477.850,04, which shall be used to continue the work of registration of all victims of Mariana, owing to the rupture of Fundão dam.

On May 3, 2018, Vale, Samarco and BHP filed a motion for an answer to the motion for the raising made by the Public Ministry, so that this measure should be bound to the submittal of specific documents by Cáritas report on the progress of the works and accountability.

On May 14, 2018, there was the judgment granting the motion made by the State Public Ministry, to grant the raising of the amount of R\$5.477.850,04 (Brazilian reais), which shall be used on the progress of the work of registration of the victims of Mariana, owing to the rupture of the Fundão dam.

Possible

The amount attributed to the case by the MPMG is of R\$2.000.000.000,00 (Brazilian reais). However, it should be emphasized that the suit is still on a very preliminary stage, which makes it difficult to perform a more accurate analysis of the damages, in the event of loss.

5th Civil Court of Governador Valadares TJMG

1st instance

12/28/2015

Chance of loss

Analysis of the impact in the event of loss/ Reasons for significance of the lawsuit for the Company

11) Lawsuit n. 0273073-38.2015.8.13.0105

Court

Instance

Date of institution

Parties of the lawsuit	MP-MG (<u>Author</u>) and Samarco, Vale, Serviço Autônomo de Água and Esgot <u>o (SAAE</u> , and, jointly with Samarco and Vale, <u>Defendan</u> ts)
Amounts, assets or rights involved	Value attributed to the case by the Author of R\$1.000.000,00. Owing to the object and the current stage of the suit, the Company understands that the value involved is inestimable, in an eventual conviction.
Main facts	On 23 de December 23, 2015, o MP-MG filed a civil lawsuit aiming at the conviction of the Defendants (i)to submit a management plan for the solid residues from the water treatment stations in the municipality of Governador Valadares, with the adequate final destination of those residues; as well as (ii) to abstain from allocating, in any way, residues from the water treatment in any water course or <i>in natura</i> , until the implementation of the management plan.
	On December 25, 2015, there was a judgment granting the motioned preliminary injunction, establishing that the Defendants should submit a solid residues management plan on water treatment stations of the Municipality of Governador Valadares and that those should abstain to allocate residues from the water treatment in any water course <i>in natura</i> or in opencast until the implementation and operationalization of the mentioned plan, establishing a daily fine in the event of non- compliance and establishing the reversion of the burden of proof.
	Against this decision, Samarco and Vale filed an interlocutory appeal, which was granted a partial supersedeas.
	On January 29, 2016, Vale filed the answer alleging being legitimate party to be on the passive pole of the complaint, since SAAE is the single responsible for the public supply of water in Governador Valadares. Owing to this, it moved for the extinction of the suit, without appreciation of merits, owing to the lack of interest of action by the Author. Considering the hypothesis of non-extinction of the suit without resolution of merits, Vale also moved for the judgment of the inappropriateness of the moves formulated in the complaint; besides the conviction of the Author to pay award of costs and attorneys fees.
	On February 22, 2016, SAAE filed a motion for the judgment of inappropriateness of the suit, so that the obligation to give final destination to the mud extracted after the water treatment be attributed to Vale and Samarco.
	On May 05, 2016, o MP-MG filed impeachment to the answers submitted by the defendants.
	On May 17, 2016, there was an order subpoenaing the defendants to indicate the evidences they intend to produce.
	On July 05, 2016, Vale, Samarco and BHPB filed a motion in the records for the production of additional documentary and

expert evidences.

On September 20, 2016, Samarco filed a motion into the records for the submittal of the suit to the 12nd Federal Court of Belo Horizonte.

On November 1st, 2016, the appellate decision was included in the records, accepting the injunction of non-jurisdiction of the 5th Civil Court of the County of Governador Valadares, ordering the remittance of the records to the 12th Federal Court of Belo Horizonte. Then, the PO-MG had rights to see the records.

On December 05, 2016, the PO-MG filed a motion for the pursuance of the feat, since the appellate decision that accepted the injunction of non-jurisdiction has not been *res judicata*.

On March 27, 2017, the appellate decision was included into the records regarding the interlocutory appeal n. 0040043- 83.2016.8.13.0000, filed by VALE, accepting the injunction mentioned, to order the submittal of the records to the 12th Federal Court of the Judicial District of Belo Horizonte.

On May 31, 2017, SAMARCO motioned for the submittal of the records to the Federal Court, notwithstanding the granting of supersedeas to the special appeal submitted by the Public Ministry, motioning for the amendment of the appellate decision that recognized the jurisdiction of the 12th Federal Court of Belo Horizonte to judge the suit.

On March 23, 2018, there was an order granting the motion for production of expert evidence.

Possible

The Public Ministry alleges that the accident of the Fundão dam impacted directly the water supply in the Municipality of Governador Valadares and intends to perform a continuous evaluation of the drinkability of the water supplied in that locality.

The action is still in a very initial stage in order to evaluate the impacts. Notwithstanding the above, the Company also considers the suit relevant on account of the subject discussed.

New York Federal Court

United States District Court for the South District of New York

07/12/2015 (First Complaint) and 29/04/2016 (Amended Complaint).

Alameda County Employees Retirement Association and Orange County Employees Retirement System (<u>Authors</u>) and Vale S.A., Murilo Pinto de Oliveira Ferreira, Luciano Siani Pires and Gerd Peter Poppinga (<u>Defendants</u>).

The authors did not specify the values of the alleged damages.

Chance of loss

Analysis of the impact in the event of loss/ Reasons for significance of the lawsuit for the Company

12) Lawsuit n. 1:15-cv-09539

Court

Instance

Data of institution

Parties of the suit

Main facts

Vale and some of its executives were considered defendants in potential suits referring to securities before the New York Federal Court, moved by investors holding *American Depositary*

Receipts issued by Vale, base of the American federal law on securities (*U.S. federal securities laws*). In legal suits it is alleged that Vale made false and deceitful affidavits or did not divulge the risks and dangers of the operations of the Fundão dam of Samarco and the adequacy of the related programs and procedures. The authors did not specify a value for the alleged damages, in these suits, they have only motioned for the conviction of the defendants in reimbursing the damages suffered, which shall be calculated during the expertise evaluation stage.

On March 7, 2016, the relevant judge in class actions related to securities ordered the consolidation of those actions and assigned lead plaintiffs and attorney.

On April 29, 2016, the leading plaintiffs of the action motioned for a complaint amended and consolidated, which shall be the initial motion in the suit.

On July 25, 2016, Vale filed a motion to dismiss the amended and consolidated motion to dismiss, alleging basically (i) that the cause to ask from the plaintiffs does not justify a *Securities Fraud Claim*; (ii) that the plaintiffs did not identify which omissions had been perpetrated by the defendants; (iii) that the plaintiffs did not demonstrated malice from the defendants in swindling the market; and (iv) that the authors did not impute any illicit act to individual defendants.

On March 23, 2017, The Court issued an order for the extinction of the suit regarding most part of the motions against Vale and the individual defendants, besides judging extinct all motions against the CEO of Vale, at the time, Mr. Murilo Ferreira, and regarding the personal responsibility of the control of the individual defendants. The small part of the suit that remains limited to some declarations regarding the risk mitigation that were part of the Sustainability Report of Vale, in 2013 and 2014, and isolated declarations regarding Vale s liability for the rupture of the Fundão Dam, made during a single telephone conference, in November 2015.

On April 06, 2017, a Vale moved for clarifications/reconsideration asking that other motions made by the plaintiffs shall be considered extinct.

On April 07, 2017, a Vale submitted a schedule proposal for the next measures regarding the action. The parties agreed regarding this schedule and, on April 14, 2017 they had a meeting with the judge in order to establish future term dates.

At end of April 2017, the discovery stage began, during which the authors submitted initial disclosures, asking the submittal of several documents and the referral of persons that may have knowledge of facts or bear documents related to the rupture of the Fundão dam.

On May 05, 2017, Vale submitted its Initial Disclosures, with the referral of persons that might furnish documents or render

declarations regarding to facts alleged in the action.

Presently, the collection and survey of the documents for the evidence production stage is in progress. Concomitantly, it was scheduled for October 04, 2017, an initial hearing with the judge in charge of the case, to discuss the class certification, with the analysis if the Authors have fulfilled the legal requirements for the filing of a class action. Vale intends to continue to defend itself from these suits. Chance of loss As a consequence of the preliminary nature of the suits, it is not possible to assert the extension of results or precise estimates on the potential exposure, on this stage, and no provision to this effect has been made. Analysis of impact in the event of Eventual loss could result in financial damages and in the image and loss/ Reasons of significance of the reputation of the Company. suit to the Company. 13) Case no. 0073114-91.2016.4.01.3800 (old number 0000640-06.2016.8.08.0014) Court 12th Federal Court of Belo Horizonte (origin: 2nd Civil Court of Colatina Court of Justice of the State of Espírito Santo) Instance 1st instance Date of filing 01/15/2016 Parties in the suit (MP-ES) and Samarco Mineração SA (Samarco), Vale S.A. (Company or Vale) and BHP Billiton Brasil Ltda. (BHPB) (together, Defendants) Amounts, goods or rights involved The value attributed to the claim by the Plaintiff is R\$ 2,000,000,000.00. In view of the object and progress of the proceeding, the Company understands that it is the amount involved in an eventual condemnation to be invaluable. On January 15, 2016, the MP-ES filed a public interest civil action seeking Main facts the condemnation of Samarco for the payment of diffuse emotional distress, due to the alleged constraints experienced by the population of the municipality of Colatina, due to the rupture of the tailings dam in the city by Mariana. For information on this accident, see item 7.9 of this Reference Form The plaintiff has filed provisional remedies, through which he intends: (i) to block the amount of R\$ 2 billion in the Defendants accounts, in order to guarantee future execution; (ii) removal of the fiscal confidentiality of the Defendants; (iii) provision of documentation relevant to the accident; and (iv) communication to the CVM regarding this demand. In this sense, the MP-ES requested the disregard of the corporate entity of the shareholders of Samarco, claiming that, although there is no evidence that Samarco, owner and operator of the Fundão Dam, is in a state of insolvency, it could happen. On January 22, 2016, the MP-ES filed an amendment to the complaint, whereby it included as a beneficiary the Municipal Consumer Protection and Defense Fund, in the amount of R\$ 2,000,000.00.

On January 19, 2016, Samarco filed a defense whereby it argued that measures to protect those impacted by the accident had already been implemented and that the financial resources were being fully used to remediate the damages caused by the accident. In addition, Samarco argued that provisional remedies were not useful to justify their acceptance, and that, in addition, they could jeopardize additional efforts to mitigate the impacts caused by the accident.

On February 11, 2016, the decision denying the interlocutory relief requested by the MP-ES regarding the freeze of moneys of the defendants was handed down.

On February 17, 2016, the MP-ES filed an interlocutory appeal (AI) against the decision that denied the provisional remedy, requesting the freezing of R\$ 2.0 billion Reais and disregarding of corporate entity of the Defendants, among other measures.

On March 10, 2016, the decision that postponed the analysis of the active effect sought by the MP-ES was pronounced, so that, before the decision, the Trial Court Judge was notified to provide information, as well as summoned the Defendants to produce a statement.

On March 23, 2016, a decision was pronounced regarding the AI filed by the MP-ES, which maintained the decision that had been appealed. Since it is a decision by the trial court, however, one must await the trial of the appeal by a panel of judges.

On April 19, 2016, Vale filed appellee s brief to the appeal, requesting its rejection.

On April 25, 2016, Vale filed a defense, requesting the judgment of insufficiency of the plaintiff s claims; in addition to the judgment against the Plaintiff for the payment of legal costs and fees, in the absence of collective emotional distress to be indemnified.

On June 16, 2016, the MP-MG filed an objection to the answers presented by the defendants, reiterating in full the terms of the complaint.

On October 3, 2016, an order was issued, attesting to the existence of a positive conflict of jurisdiction regarding claims related to the dispute, and for this reason, determined the subpoena of the MP-MG for statement on the appellate decision.

On November 04, 2016, a decision was rendered determining the remittance of the case to the 12th Federal Court, in compliance with the appellate decision rendered within the scope of the interlocutory appeal No. 000320103.2016.8.08.0014, filed by the MP-MG, which accepted the preliminary argument of lack of jurisdiction raised by the defendants and ordered the remittance of the case to the 12th Federal Court.

	On November 23, 2016, the case was remitted to the 12th Federal Court of Belo Horizonte.
	On March 29, 2017, a decision was published that, considering the confirmatory decision rendered under proceedings Nos. 697586120154013400 and 238630720164013800, suspended the action.
	In the first instance, the Defendants have already filed a defense, requesting the denial of the claim.
Chance of loss	Possible
Analysis of the impact in case of loss / Reasons for the relevance of the proceeding to the Company	The financial impact can reach up to R\$ 2,000,000,000.00, which was the amount in dispute given by the MP-ES. It should be noted, however, that the lawsuit is still at a very early stage, which makes it difficult to analyze damages more precisely in the event of loss.
14) Case no. 0062888-27.2016.4.01.3800 (old number 0016395-6	3.2016.8.13.0521)
Court	12th Federal Court of the Judicial District of Belo Horizonte (origin: 2nd Civil Court of the Judicial District of Ponte Nova Court of Appeals of the State of Minas Gerais (<u>TJM</u> G)
Instance	1st instance
Date of filing	02/18/2016
Parties to the case	Prosecution Office of the State of Minas Gerais (Plaintiff) (<u>MP-M</u> G) e Samarco, Vale e BHP (collectively, <u>Defendants</u>)
Amounts, goods or rights involved	The value attributed to the claim by the Plaintiff is R\$ 600,000,000.00. In view of the object and progress of the proceeding, the Company understands that it is the amount involved in an eventual condemnation to be invaluable.
Main facts	On February 17, 2016, the MP-MG filed a public-interest civil action, whereby it intends to order that Defendants adopt certain measures aimed at recovering the damages allegedly caused to the urban environmental heritage of the Municipality of Barra Longa, District of Gesteira and Village of Barretos. The MP-MG intends to determine the compliance, by the Defendants, of generic obligations to do, as well as the preventive constriction of a sum in order to guarantee the future performance of measures still unknown.
	On February 19, 2016, a decision was rendered by the TJMG, granting the preliminary injunction, in order to (i) partially grant the interlocutory relief determining the fulfillment of the following obligations, under penalty of a daily fine of R\$ 500,000.00: (a) of basic, structural and executive projects for the full recovery of impacted public assets, and (b) to carry out works to contain the entire Rio do Carmo river bed in the necessary stretches, (ii) to determine the blockade of R\$ 500,000,000.00, and (iii) to determine the submission of an agreement proposal, if any.
	On February 18, 2016, Samarco filed a petition, whereby (i) it requested that (a) the case be remitted to the Federal Court, given the lack of jurisdiction of the TJMG to adjudicate the case, (b) the designation of a conciliation hearing between the parties before the examination of a possible preliminary injunction, as

well as (ii) it stated that Samarco has already implemented several supporting measures, in addition to the execution of a preliminary commitment instrument with the Federal Prosecution Office and the MP-MG for the creation of a fund, in the amount of R\$ 1.0 billion, to repair social and environmental damages resulting from the disaster.

Additionally, in the context of the above-mentioned petition, Samarco already clarified that documents that demonstrate the relevant deposits and guarantees have been provided, in the amount of R\$ 2.3 billion, as well as the adoption of measures aimed at repairing alleged social and environmental damages of the Fundão Dam s accident. Furthermore, it argued that the granting of financial constraints could have negative effects on Samarco and on the obligations assumed by it to mitigate the impacts resulting from the rupture of the dam in Mariana. Therefore, it requested the dismissal of the injunction formulated at the initial.

On February 23, 2016, a decision was issued that determined the maintenance of the records in the State Court.

On March 1, 2016, Samarco, on petition, stated its interest in settling on the terms of the claim.

On March 4, 2016, Samarco filed a petition with the purpose of expressing its opinion on the decision that granted the preliminary injunction, in which it stated that it had begun the works for the reconstruction, recovery and repair of the public assets affected by the accident, as well as contracting specialized company, called 3T Construções, to act in this action.

On March 17, 2016, Samarco filed a petition in which it demonstrated the full compliance with the preliminary injunction, and it is certain that all necessary emergency measures are already being executed.

On March 18, 2016, Vale filed a petition with the purpose of evidencing compliance with the preliminary injunction, stating that Samarco hired specialized companies to start the Barra Longa infrastructure reconstruction activities, and the projects are in the elaboration phase.

Against the injunction, Vale, BHP and Samarco filed an interlocutory appeal, to which a suspensive effect was granted.

On April 8, 2016, Vale filed an answer in order to demonstrate that the measures pleaded by the Plaintiff have already been spontaneously complied with by Samarco. As a result, it requested the dismissal of the case, without prejudice, given the Plaintiff s lack of interest in acting. Considering the hypothesis of the case not being dismissed without solving the merits, Vale also requested the judgment for the defendant of the requests formulated at the initial pleading, by means of the revocation of the granted injunction, in addition to the conviction of the Plaintiff for the payment of attorneys fees and costs.

	On May 11, 2016, the plaintiff challenged the arguments presented by the defendants, reiterating the reasons stated in the initial pleading.
	On March 30, 2016, a permit was issued for the withdrawal of the blocked amounts in Samarco s accounts.
	On June 8, 2016, a permit was issued for the withdrawal of the blocked amounts in Vale and BHPB s accounts.
	On June 27, 2016, the parties were summoned to indicate the evidence they intended to produce.
	On July 5, 2016, Vale filed a petition stating that it intends to produce oral evidence, complementary documentary evidence, expert evidence and judicial inspection. Similarly, Samarco and BHPB have manifested themselves.
	On October 11, 2016, a decision was issued that determined the submission of the case to the 12th Federal Court of Belo Horizonte.
	On October 25, 2016, the records were received at the 12th Federal Court of Belo Horizonte.
	On March 29, 2017, a decision was published that, considering the homologation decision issued in the scope of cases No. 697586120154013400 and 238630720164013800, suspended the act until further decision.
	On July 6, 2017, SAMARCO filed a petition requesting the issuance of a permit to collect the amounts still uncompleted in an account linked to the proceeding.
	On September 15, 2017, the permit for the withdrawal of the amounts in favor of SAMARCO was issued.
Chance of loss	Possible
Analysis of the impact in case of loss / Reasons for the relevance of the proceeding to the Company	The financial impact can reach up to R\$ 600,000,000.00, which was the value of the cause given by the MP-MG. It should be noted, however, that the lawsuit is still at a very early stage, which makes it difficult to analyze damages more precisely in the event of loss.
15) Public-Interest Civil Action no. 23863-07.2016.4.01.3800	
Court	12th Federal Court of Belo Horizonte
Instance	Trial court
Date of filing	03/05/2016

The Federal Prosecution Office (<u>MP</u>F <u>or Plaintiff</u>) and Samarco, BHPB, Vale, the Union, Minas Gerais and Espírito Santo States, the Brazilian Water Agency (<u>AN</u>A), the Brazilian Institute of Environment and Renewable Natural Resources (<u>IBAM</u>A), the Brazilian Department of Mineral Production (<u>DNPM</u>), the Chico Mendes Institute of Biodiversity (<u>ICMBio</u>), the Brazilian Indian Foundation (<u>FU</u>NAI), the

Parties to the case

	Brazilian Health Surveillance Agency (<u>ANVISA</u>), the Brazilian Institute of Historic and Artistic Heritage (<u>IPHAN</u>), the Brazilian Bank of Economic and Social Development (<u>BNDES</u>), the State Forestry Institute (<u>IEF</u>), the Minas Gerais Water Management Institute (<u>IGAM</u>), the State Foundation of the Environment (<u>FEAM</u>), the Minas Gerais State Institute of Historic and Artistic Heritage (<u>IEPHA</u>), the State Institute of Environment and Water Resources (<u>IEMA</u>), the Espírito Santo Institute of Agricultural and Forestry Defense (<u>IDAF</u>) and the State Agency for Water Resources (<u>AGERH</u>) (together, <u>Defendants</u>).
Amounts, assets or rights involved	The amount attributed to the cause by the Plaintiff is R\$ 155,052,000,000.00. In view of the object and progress of the proceeding, the Company considers the amount involved in a possible conviction to be inestimable.
Main facts	On May 03, 2016, the MPF filed a public-interest civil action, through which it requires (i) the adoption of measures aimed at mitigating the social, economic and environmental impacts resulting from the rupture of the Fundão dam, as well as other emergency measures; (ii) judgement against the Defendants for the payment of compensation to the community for the time in which it would have been impossible to enjoy a balanced environment; and (iii) judgement against the Defendants for the payment of collective personal injury. The following are among the requests made: that (i) the Defendants, mutually, within 30 days, deposit in their own private fund, under their own management and inspection by independent auditors of a specialized company, the initial value of R\$ 7,752,600.000,00, which will be intended for the execution of the socio- environmental and socio-economic initial and emergency programs; (ii) the defendant companies, mutually, within 30 days, present adequate bonds in the amount of R\$ 155,052,000,000.00; (iii) the defendant companies, mutually, in the event of a blocking or restrictive measure on the values of the fund, pay, within 5 business days, an amount equivalent to the amount blocked, in order to recover the minimum available net balance; (iv) a determination of the prohibition of encumbrance or alienation of the fixed assets of the Defendant companies, and the measure shall include, but not limited to, real estate, mining rights and equity interests held in the national territory; (v) the profibit of the companies that have not been distributed to date be ordered; (vii) the defendant companies, mutually and, in a subsidiary manner, the public entities: a) present a plan for the recovery, mitigation and social and environmental compensation of the entire environmental impact occurred as a result of the rupture of the Fundão dam, within 90 days; (viii) the defendant companies and sea aresult of the rupture of the Fundão dam, within 90 days; (viii) the defendant companies and; in a subsidiary m

environmental reparation measures, especially in the intermediation and interlocution with the affected communities; (ix) the defendant companies start and implement, as soon as the technique permits, the necessary actions to reestablish the environmental balance, restoration of the environment affected by the rupture of the Fundão dam, and recovery, compensation and indemnification for socioeconomic damages, through the programs, projects and actions comprised in the environmental recovery plan of the entire environmental impact and in the socioeconomic recovery plan previously expected and duly approved by the Government, and this obligation must fall mutually between the defendant companies, and in a subsidiary manner to the public entities; (x) the Defendants adopt effective measures capable of permanently interrupting the dragging of mining tailings still retained in the Germano Complex or accumulated on the banks of the Gualaxo do Norte, Carmo and Doce rivers to their water bodies; (xi) the Defendant companies adopt effective measures capable of ensuring the stability and safety of the remaining structures used by Samarco in the city of Mariana and, within 30 days, present: a) proof of the adoption of measures to ensure the stability of the Germano Dam, the Santarém Dam and the other structures remaining in the Fundão (Dykes 2, Sela, Tulipa and Selinha); b) plan of emergency actions to be adopted in case of rupture of structures; c) systematized update of the existing Emergency Action Plan based on a new Dam Break study of the Germano Dam, Santarém Dam and other remaining structures of Fundão; d) improvement of the roads indicated for the displacement of the population potentially affected in the event of a new rupture, including by paving the expected escape route for the population of Barra Longa, which connects this municipality to that of Ponte Nova (MG); (xi) the companies, within 10 days, submit a detailed plan of short-term actions, without harm to the subsequent presentation of a definitive plan, for the management of the tailings from the Fundão dam; (xii) the Defendant companies carry out the environmentally appropriate disposal of mining waste that is removed from the area affected by the rupture of the Fundão dam, with its introduction into another production chain; (xiii) the defendant companies, within 10 days, submit a detailed short-term action plan, without harm to the presentation of a subsequent definitive plan, for emergency actions for revegetation, reforestation and restoration of permanent preservation areas; (xiv) the defendant companies present, within 60 days, a preliminary diagnosis of all permanent preservation areas degraded along the marginal riverbanks of the Doce River Hydrographic Basin and, based on the diagnosis, elaborate a plan of emergency actions of its full recovery; (xvi) the defendant companies, within 30 days, initiate the execution of a plan of emergency actions for the recovery and conservation of the aquatic fauna, which must contain at least the following lines of action: a) schedule of actions for temporary restocking of affected native species; b) measures to support entities that have conserved specimens collected in the Arca de Noé Operation for the conservation of genetic material and the development of research; (xvii) that, within 30 days, the defendant companies submit and initiate the execution of a

plan of emergency actions for the recovery of cultural assets of material nature and preservation of the cultural heritage of the districts of Bento Rodrigues, Paracatu de Baixo and Gesteira, as well as the Municipality of Barra Longa, following at least the following parameters: a) development and implementation, through authorized professionals, of archaeological project of the affected sites; b) dissemination of the scientific knowledge already produced regarding the archaeological heritage of the affected region, which access and continuation of research was made unfeasible by the changes in relief caused by the rupture; c) execution of works of recovery of the affected cultural heritage, preferably by means of school-sites that favor the use and training of local labor; d) actions for the rescue, the generational transmission and the promotion of the cultural activities of the communities, such as parties and celebrations, traditional knowledge and techniques, workmanship and cooking; (xviii) to the defendant companies that, within 30 days, complete the process of registration of all those affected, considering for this purpose all entities, individual or legal, and communities that have suffered material or immaterial impacts as a result of the rupture of the Fundão dam, located in the municipalities bathed by the Doce, Gualaxo do Norte, Carmo Rivers, Santarém creek and estuarine, coastal and marine areas between the municipalities of São Mateus (ES) and Aracruz (ES), among others.

According to MPF s request, the values indicated therein were not determined by reason of Samarco s dam accident, but by an unsubstantiated comparison of oil spills in the Gulf of Mexico.

On May 9, 2016, the records were withdrawn by the Office of the General Counsel for the Federal Government, for statement purposes. Then, the Federal Government filed for the denial of the preliminary injunction claims.

On June 03, 2016, a petition was filed by BHPB without prejudice to the filing of an answer within the legal term, requesting the denial of the MPF s preliminary injunctions without first hearing the defendants. It was basically alleged: (i) the absence of *periculum in mora* (danger of delay); (ii) the absence of *fumus boni iuris* (appearance of truth); and (iii) the existence of significant reverse risk.

On June 21, 2016, the State of Minas Gerais filed a petition requesting the denial of the claims for interlocutory relief made by plaintiff and requesting the dismissal of the case without prejudice due to the lack of interest in the suit by the MPF.

In July 2016, the Court excluded all government authorities and BNDES as defendants in this proceeding. In addition to it, the decision postponed the examination of preliminary injunctions for after the preliminary conciliation hearing and gave Samarco a notice to clarify, within 30 days, the issue of containment of the mud carried by the rains, specifying the emergency measures to be adopted.

On July 26, 2016, a decision was rendered granting the motion for clarification from MPF to institute a fine of R\$ 150,000.00 against defendants on the ground of failure to comply with the preliminary injunction.

On August 10, 2016, Samarco filed a petition stating that it would comply with the preliminary injunction and take all necessary measures to reinforce the remaining structures, in addition to the containment and management of the Fundão tailings. However, it stated that, given the complexity of the necessary measures, the definitive solutions take time, so that it would be unreasonable to comply with the MPF s preliminary injunction requesting that the defendants be ordered to pay a fine and to dredge and dry the tailings existing in the region.

In September 2016, a preliminary conciliation hearing was held.

On October 05, 2016, a hearing was held among the parties and their lawyers to determine how to hire the firms specialized in expert evidence. Moreover, the compensation program developed by the companies was submitted and will be assessed by the MPF. A new meeting was held on October 28, 2016, in which the same topics were addressed.

On November 11, 2016, a decision was rendered shifting the burden of proof and notifying the experts to submit their fee proposals. In addition to it, the decision gave the defendants notice to file their defenses.

In January 2017, Samarco, Vale and BHPB entered into two preliminary agreements with the Federal Prosecution Office regarding this public-interest civil action and the public-interest civil action under No. 0023863-07.2016.4.01.3800 filed by the Brazilian government and others.

The Preliminary Consent Decree I, already partially ratified, has the purpose of defining the procedures and the negotiation schedule for the execution of a final consent decree, expected to occur by June 30, 2017. This Preliminary Consent Decree I creates the basis for the conciliation of two public-interest civil actions that seek to establish socio-economic and socio- environmental reparations and compensations for the impacts of the rupture of the Fundão Dam: (i) the Public-Interest Civil Action No. 0023863-07.2016.4.01.3800, filed by the MPF (the amount indicated by plaintiff of R\$ 155 billion), and (ii) the Public-Interest Civil Action No. 0069758-61.2015.4.01.3400, filed by the Federal Government, by the States of Minas Gerais and Espírito Santo, and other government officials (R\$ 20.2 billion). Both actions are pending before the 12th Federal Court of the Judicial District of Belo Horizonte.

The Preliminary Consent Decree I further provides: (a) the hiring of experts chosen by the MPF and paid for by the companies to perform a diagnosis and monitor the progress of the 41 programs of the TTAC signed on March 2, 2016 between the companies, the Federal Government and the governments of Minas Gerais and Espírito Santo and other governmental

authorities; and (b) the holding of at least 11 public hearings by April 15, 2017, 05 being in Minas Gerais, 03 in Espírito Santo, and the others in the indigenous lands of Krenak, Comboios and Caieiras Velhas, with the purpose of allowing the participation of the communities in the definition of the content of the final consent decree.

Additionally, a second Preliminary Consent Decree was executed, which establishes a timetable for the availability of funds for the programs of reparation of the socio-economic and socio-environmental damages caused by the rupture of the Fundão Dam in the municipalities of Barra Longa, Rio Doce, Santa Cruz do Escalvado and Ponte Nova, worth R\$ 200 million (<u>Preliminary Consent Decree II</u>). This Preliminary Consent Decree II was ratified by the Judge of 12th Federal Court on March 23, 2017.

On January 24, 2017, Vale filed an interlocutory appeal against the decision that shifted the burden of proof, alleging, among other things, the inapplicability of the precautionary principle to the case, violation of the principle of legality, and the inconsistency of the shifting of the burden to the hypothesis.

On January 26, 2017, a decision was rendered suspending the course of the procedural deadline for the deposit of R\$ 1.2 billion and opened a five-day deadline for the plaintiffs to express their opinion on the Preliminary Consent Decree I, executed between the defendants and the MPF.

On March 16, 2017, a decision was rendered which (i) partially ratified the Preliminary Consent Decree I and II, determining the suspension of the case until further judicial deliberation, (ii) accepted, for the time being, the guarantees provided for in the Preliminary Consent Decree I, with the caveat that they do not replace or modify the preliminary injunction order for cash deposit.

On May 15, 2017, a joint petition was filed by the defendants, requiring an additional 30 days to define the entity that will carry out the socio-economic diagnosis of those affected.

On May 15, 2017, a decision was rendered granting the delay of the term required by the defendants.

On June 13, 2017, a petition of the defendants was inserted in the record requesting an additional 30 days to conclude the negotiations on the definition of the company that will carry out the socio-economic diagnosis, upon which the Federal Prosecution Office agreed by means of a petition filed on June 26, 2017.

On July 6, 2017, a joint petition of Samarco, Vale and BHP was filed requesting the extension of the term of suspension of the case until October 30, 2017.

On July 17, 2017, a decision was rendered which (i) reiterated the suspension of the case to safeguard the term for

Currently, the parties remain in negotiations for the final consent decree, and the action is suspended until June 25, 2018, prevailing the effects of the decision rendered on March 16, 2017.
On May 4, 2018, Samarco filed a motion for clarification on the decision that authorized the hiring of the Getúlio Vargas Foundation to act in the socio-economic diagnosis of the impacts resulting from the rupture of the Fundão Dam, so that a material mistake could be remedied, clarifying that it will act as technical assistant to the Federal Prosecution Office. On May 8, 2018, a decision was rendered granting the motion for clarification filed by Samarco, to
On May 3, 2018, a decision was rendered authorizing the hiring of the Getúlio Vargas Foundation to act in the socio-economic diagnosis of the impacts resulting from the rupture of the Fundão Dam.
On April 24, 2018, Samarco, Vale and BHP filed a petition, requesting authorization to hire the Getúlio Vargas Foundation to act in the socio-economic diagnosis of the impacts resulting from the rupture of the Fundão Dam.
On November 20, 2017, a decision was rendered which, by granting a request submitted by Samarco, Vale, BHP and the Federal Prosecution Office, ratified a partial amendment to the Preliminary Consent Decree, granting the deadline until April 20, 2018 for the submission of the terms of the final agreement (TACF). The same decision extended the legal and procedural effects of the Preliminary Consent Decree and of the confirmatory decision dated March 16, 2017.
On October 31, 2017, a decision was rendered which, by granting the request submitted by Samarco, Vale, BHP and the Federal Prosecution Office, ratified a partial amendment to the Preliminary Consent Decree, granting the deadline until November 16, 2017 for the submission of the terms of the final agreement (TACF). The same decision extended the legal and procedural effects of the Preliminary Consent Decree and of the confirmatory decision dated March 16, 2017.
On August 28, 2017, a petition was filed by the Municipality of Mariana requesting its acceptance as an assistant co-party or, alternatively, as a simple assistant.
challenging the Federal Prosecution Office s answer, and (ii) failed to examine the request filed by the Public Defender s Office for the Federal Government, towards joining the suit, as it will be the object of deliberation in the record of the ACP (Public-Interest Civil Action) of 20 Bi.

the relevance of the proceeding to	lawsuit is still at a very early stage, which makes it difficult to analyze damages more precisely in the
the Company	event of loss.

16) Case No. 16-CV-8800

Court	Nova York Federal Court
Instance	United States District Court for the Southern District of New York
Filed on	3/6/2017
Parties:	Holders of debt securities issued by Samarco Mineração S.A. (Hereinafter referred to as the <u>Plaintiffs</u>) and Samarco, Vale e BHPB (hereinafter collectively referred to as <u>Defendants</u>)
Amounts, assets or rights involved	Amount to be assessed during the pre-trial phase.
Main facts	In March 2017, the Plaintiffs filed a collective action claiming indemnification for alleged violations of bond laws and other credits related to the purchase and sale of debt securities issued by Samarco.
	The Plaintiffs claim that Vale would have made false and misleading representations or omitted disclosures on the risks and hazards of the operations at Samarco s Fundão dam and the adjustment of related programs and procedures.
	After the Fundão dam rupture incident that took place in November 2015, the Plaintiff state that the bonds suffered a severe devaluation, so that the investors who had mistakenly purchased them should be indemnified.
	On April 4, 2017, the Plaintiffs filed a petition voluntarily waiving any suits that had been raised against individual Defendants.
	On June 26, 2017, Vale and the other Defendants collectively filed a motion to dismiss the suit.
	On August 1, 2017, the motion to dismiss was disputed by the Plaintiffs.
	On August 31, 2017, Vale and the other Defendants collectively filed a reply against the dispute filed by the Plaintiffs.
	In March 2018, the judge handed down a decision that rendered the motion to dismiss as extinct without prejudice and determined that the Plaintiffs should submit an amendment of the complaint. The Plaintiffs have already submitted the amendment and on April 30, 2018 the judge defined a new schedule for the lawsuit, according to which a new motion to dismiss should be submitted on May 21, 2018 against the group of Defendants. On May 21, 2018 the Defendants submitted a motion to dismiss.
Chances of loss	Possible
Impact analysis in case of	An ultimately unfavorable decision in the lawsuit could cause

loss/ Reasons of the relevance of the lawsuit for the Company

financial losses to the Company, as well as damage to its image.

17) Case no. 0033942-91.2016.8.13.0400

Court	1st Civil Court of Mariana/MG
Instance	1st instance
Filed on	9/28/2016
Parties	Public Prosecutor s Office of the State of Minas Gerais (Plaintiff) (hereinafter referred to as <u>MP-MG</u>) and Samarco, Vale and BHP (hereinafter collectively referred to as <u>Defendants</u>)
Amounts, assets or rights involved	Amount attributed to the lawsuit by the Plaintiff: R\$1,394,308.39. Considering the subject matter and the progress of the lawsuit, the Company understands that the amount of a final sentence could be incalculable.
Main facts	On August 29, 2016, the Public Prosecutor's Office of the State of Minas Gerais filed this public civil action claiming that the suspension of Samarco's activities might have prevented the City of Mariana from receiving the Financial Compensation for the Exploitation of Mineral Resources' CEFEM, which proceeds would be usually destined to health and education expenditures. This is the reason why it asks for the Defendants to be preliminarily required to make a monthly payment to the Government of the City of Mariana in the amount of R\$ 1,394,308.39, corresponding to the monthly average amount of the City is revenue from Samarco's activities.
	On September 12, 2017, a decision was handed down rejecting the temporary restraining order requested by the Public Prosecutor s Office of the State of Minas Gerais.
	Against that decision, the Public Prosecutor s Office lodged a bill of review, the temporary restraining order of which was rejected (case no. 0766492-37.2016.8.13.0000)
	On December 6, 2017, Samarco filed an objection stating that Public Prosecutor s Office s request was unreasonable, since the Public Prosecutor s Office was not entitled to do so. Moreover, Samarco states that the payment of such compensation is not due, since its operations have been stopped.
	On August 31, 2017, Vale submitted its objection, where it requested the litigation to be extinct, since the Public Prosecutor s Office is not entitled to claim any ownership rights inherent to the City of Mariana; and the requests to be judged with prejudice, as the payment of a compensation would not be applicable given the suspension of Samarco s operations.
	On November 7, 2017, an order was handed down summoning the parties and asking them to point out any questions of fact and law that they regarded as relevant to the judgment of the case.
	On November 20, 2017, the petitions were filed in accordance with the order dated November 7, 2017.
Chances of loss	Possible

Impact analysis in the event of loss/ Significant reasons of the suit for the Company.

The financial impact may reach R\$1,394,308.39, which was the value in dispute as determined by the Minas Gerais Public Prosecutor s Office. However, it should be noted that the lawsuit is still at a very early stage, which prevents us from providing a more precise analysis of the losses in the event the Defendant is not successful in the litigation.

18) Case no. 0019601-77.2017.4.01.3800 (formerly case no. 0041994-76.2016.8.13.0400)

Court	12th Federal Court of Belo Horizonte/MG
Instance	1st instance
Filed on	10/26/2016
Parties:	Public Prosecutor s Office of the State of Minas Gerais (Plaintiff) (hereinafter referred to as <u>MP-MG</u>) and Samarco, Vale and BHP (hereinafter collectively referred to as <u>Defendants</u>)
Amounts, assets or rights involved	Value in dispute: R\$150,000,000.00. Considering the subject matter and the progress of the lawsuit, the Company understands that the amount of a final sentence could be incalculable.
Main facts	On October 26, 2016, the Public Prosecutor s Office of the State of Minas Gerais filed this public civil action in an attempt to have VALE, SAMARCO and BHP sentenced to recover any damages allegedly caused to speleological assets, such as shelters, grottoes, and caves.
	On November 22, 2016, the pre-trial conference was held; however, the parties failed to reach an agreement.
	On February 8, 2017, SAMARCO filed its opposition asking for the lawsuit to be dismissed, as virtually all of the cavities identified by the Plaintiff as challenged are not legally protected. As for the other points, SAMARCO demonstrated the lack of evidence of the alleged damages as claimed by the
	Plaintiff. Moreover, Samarco asked the records to be sent to the 12th Federal Court, given the interest of the Federal Government in this litigation.
	On February 16, 2017, the oppositions submitted by VALE and BHP were adjoined, both of which requested the lawsuit to be dismissed.
	On April 7, 2017, the case records were definitely sent back to the 12th Federal Court of Belo Horizonte.
	On September 6, 2017, an order was published granting the MPF access to the records, so that the MPF could submit its position on its entitlement to file this lawsuit. On October 30, 2017, an order was published determining a stay of proceedings considering the decision handed down in cases no. 23863-07.2016.4.01.3800 and no. 69758- 61.2015.4.01.3400.
Chances of loss	Possible

Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company The financial impact may reach R\$150,000,000.00, which was the value in dispute as determined by MP-MG. However, it should be noted that the lawsuit is still at a very early stage, which prevents us from providing a more precise analysis of the losses in the event the Defendant is not successful in the litigation.

19) Case no. 1009492-23.2017.4.01.3400

Court	22nd Federal Court of the Federal District Chapter	
Instance	1st instance	
Filed on	8/9/2017	
Parties	Max Mauran Pantoja da Costa, Antonio Augusto de Miranda e Souza, Ronaldo Tedesco Vilardo, Silvio Sinedino Pinheiro, and Délvio Joaquim Lopes de Brito as the Plaintiffs, and Vale S.A., Valepar S.A., Banco Nacional do Desenvolvimento Econômico e Social BNDES, BNDES Participações S.A. BNDESPAR, Fundação dos Economiários Federais FUNCEF, Fundação Petrobrás de Seguridade PETROS, Caixa de Previdência dos Funcionários do Banco do Brasil PREVI and the Federal Government, as the Defendants	
Amounts, assets or rights involved	Incalculable amount.	
Main facts	 This citizen suit was filed by some FUNCEF executives and oil workers against Vale, Valepar, BNDES, BNDESPAR, the Federal Government, FUNCEF, PETROS and PREVI, with a request for an injunction, so that a suspension would be granted for: i) the conversion of Vale preferred stocks into common stocks; ii) the extinction of the existing control block; iii) the merger of Valepar by Vale; and iv) all other acts and deliberations made at the Special General Meeting held on June 27, 2017, where the acts required for Vale to have access to the B3 New Market were approved. As for the merits, the annulment of said General Meeting was requested pursuant to the allegation that Vale s new corporate structure and its access to the New Market would cause damage and losses to the Federal Government and the respective entities and controlled companies. The injunction was rejected by the Court and as no appeal was lodged against it, it is now stabilized. On January 22, Vale, on its own behalf and as a successor to Valepar, objected to the action. The defense of the other Defendants is still being awaited. 	
Chances of loss	Possible.	
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	The lack of success in such lawsuit may cause relevant financial and reputational losses to the Company.	

20) Case no. 0024916-76.2013.8.08.0024

Court	10th Civil Court of Vitória/ES
Instance	2nd instance
Filed on	4.20.2005 (Labor Court) and 7.10.2013 (State Court)
Parties	Sindfer Union of Railway Company Workers of the States of Espírito Santo and Minas Gerais X Vale S.A. and Fundação Vale

do Rio Doce de Seguridade Social Valia

Amounts, assets or rights involved Value of the matter in controversy as attributed by the Union: R\$ 18,000.00. The amount involved, according to an analysis of the Company as of December 31, 2017 was R\$ 1,092,996,403.81. Main facts This lawsuit was filed on April 20, 2005 with the Labor Court under no. 0045300-92.2005.5.17.0007, where the Union appeared as a procedural representative and the substituted parties were workers admitted before April 30, 2005 who continued with a valid employment relationship. In this action, the workers claim that at their admission they automatically adhered to the Private Retirement Plan maintained by Vale with VALIA, whereby they regarded such plan as an integral part of their employment agreement for all legal purposes. In this action, the workers claim: •The nullity of the agreement regarding the migration from the Valia Supplementary Retirement Plan to Vale Mais, with a return to the previous plan; •That the Defendants should be ordered to maintain all the conditions and advantages of the existing plan when each of the workers was admitted, provided that any more beneficial conditions that may have occurred after the migration are preserved; •That the Defendants should be ordered to proceed with the collection of any differences in contributions in favor of Fundação Valia since the date of the undue migration to the Vale Mais Plan, namely from 5.1.2000 until the date of the actual full payment, as well as with the collection of any amounts to establish the mathematical reserve, in accordance with the rules in force at the admission of each of the workers, duly adjusted; •Indemnification for pain and suffering to be paid to each worker, in an amount equal to 10 basic wages earned by such worker, plus any legal advantages as in force at the time when the lawsuit was initiated; and •Payment of any differences related to any benefits that may have been granted after this action was filed and as granted under the Vale Mais Plan rules. On October 8, 2010, the sentence dismissing the action was published. The Union and Plaintiff lodged an appeal against the first-instance judgment and, on November 12, 2011, a court decision was published admitting the ordinary appeal lodged by the Plaintiff and, as for the merits, the appeal was partially granted so as to admit the preliminary allegation claiming non- adjudication based on the lack of analysis and judgment of the request for pain and suffering; as well as it partially accepted the preliminary allegation of nullity of the judgment based on the curtailment of the right of defense to declare the nullity of the judgment and determine that the court records should return to the court of origin, in order to resume the pre-trial phase.

	After the records were returned to the court of origin, a new pre- trial phase began with expert evidence proceedings. However, on March 18, 2013 a new first-instance decision was handed down, where the judge understood that, as the lawsuit involved a complementary allowance to the retirement plan from a non- profit retirement entity, based on the interpretation of the Brazilian Supreme Court - STF, Labor Courts would not have material jurisdiction, which is granted to the State Courts.
	After the parties were summoned, no appeals were lodged, and the case was sent ex officio on July 8, 2013 to the State Court of Vitória/ES under no. 0024916-76.2013.8.08.0024. Then, the judgment dismissing the claim was handed down. The Union and Plaintiff lodged an appeal and we filed our answer brief. At the session held on March 13, 2018, the lodged appeals were judged so as to unanimously accept VALIA s Consolidated Appeal to declare the forfeiture of the request for nullity of the migration to the Vale Mais Plan, considering the expiration of the deadline for filing an action. The court decision has not been published yet.
Chances of loss	Remote
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	The relevance of the action is due to the adjusted amount of the remote loss forecast (as of December 31, 2017), that is, R\$ 1,092,996,403.81.

(iv) Environment

The tables below contain an individual description of the environmental lawsuits regarded as relevant for the businesses of the Company and/or its controlled companies.

1) Case no. 0317.02.002974-8

Court	2nd Civil Court of the Court District of Itabira - Minas Gerais
Instance	1st instance
Filed on	9/26/1996
Parties	Government of the City of Itabira (Plaintiff) and Vale (Defendant)
Amounts, assets or rights involved	R\$5,761,357,466.09 (as of December 2017)
Main facts	The city of Itabira claims indemnification for the expenditures it might have incurred with public services rendered as a consequence of Vale s mining operations. The proceedings were stayed until the writ of mandamus filed by Vale claiming that favorable evidence used in another lawsuit (item 2 below) should be used in this action was judged. In January 2012, the writ of mandamus was judged to the detriment of Vale. However, these proceedings have been stayed, since the first- instance court still has not received any information from the Court of Justice of Minas Gerais related to the judgment of the writ of mandamus. The proceedings will only be able to resume its normal flow after such communication. Furthermore, the parties filed a joint petition on March 12, 2013 asking for the action to be put in abeyance until an agreement was reached. On March 27, 2014, the proceedings were stayed by an agreement between the parties, but it was later resumed as the parties failed to reach an agreement. On November 19,

2015 an order was published asking the City of Itabira to inform of

	Mandamus no. 1.0000.07.4 produce an expert testimon records were returned with remained at this status since	mandamus. On March 29, 2016, the City of Itabira informed that Writ of 65984-8/000 was denied and summoned the already appointed Expert to y. The records have been ready for a decision since March 31, 2016. The out an order and was prepared for judgment on February 8, 2017, which have e that date.
Chances of loss	Total amount as split between a possible loss (15%) and a remote loss (85%).	
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	An occasional unfavorable decision in the lawsuit would cause significant financial losses to the Company, but there is no risk that the operations might stop.	
2) Case no. 0317.02.007032-0		
Court		1st Civil Court of the Court District of Itabira - Minas Gerais
Instance		1st instance
Filed on		8/22/1996
Parties		Government of the City of Itabira (Plaintiff) and Vale (Defendant)
Amounts, assets or rights involved		R\$4,947,896,892.14 (as of December 2017)
Main facts		The action initiated by the City of Itabira, in the State of Minas Gerais, claiming that the operations in the iron mines at Itabira caused environmental and social damages and demanding the restoration of the location and the conduction of environmental recovery programs in the region. An expert examined was made for this action and the expert report jointly issued by the Brazilian Environment and Natural Resources Institute (<u>IBAMA</u>) and the State Environment Foundation (FEAM) was favorable to Vale. However, the City requested new expert evidence to be produced, which was accepted by the judge. For this purpose, a multidisciplinary from the Lavras Federal University was designated. On November 6, 2012 a conciliation hearing was held, where the request for staying the proceedings until May 6, 2013 was accepted so that the parties would try to reach an agreement. Considering the expiry of the stay term, the City was summoned to express its opinion on the amount of the expert s fees. In February 2014, the City of Itabira submitted its declaration regarding the proposal of expert s fees and asked the amount of R\$1,604,000.00 to be reviewed, considering that the City may provide some inputs, such as accommodations, meals and the plants, maps or sketches.
		On May 7, 2015 a judicial order was published summoning the appointed expert to express himself and inform on the possibility of reducing the expert s fees within ten (10) days. On January 19, 2016, the declaration petition was filed by Vale, which confirmed that the expert examination to be prepared for this action had been requested by the City of Itabira and, for that reason, the Company is not responsible for paying the expert s fees, in accordance with Article 33 of the Brazilian Code

	Itabira for filing its declaratio another expert was appointed t pending. On January 30, 2017	ry 15, 2016 it was informed that the deadline for the Plaintiff the City of n had expired without any declaration being submitted. On June 6, 2016 to replace the former one and the presentation of the respective fees is still the case records were sent to the City Treasury Attorney s Office. On were prepared for a judicial order.
Chances of loss	Total amount as split between a possible loss (7%) and a remote loss (93%).	
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	An occasional unfavorable decision in the lawsuit would cause significant financial losses to the Company, but there is no risk that the operations might stop.	
3) Case no. 5087538-63.2016.8.13.00	24	
Court		st Court of the State Public Treasury and Instrumentalities of he Court District of Belo Horizonte - Minas Gerais
Instance	1.	st instance
Filed on	6,	/17/2016
Parties:	v	vale and MBR (Plaintiffs) and the State of Minas Gerais (Defendant)
Amounts, assets or rights involved	R	\$101,126.99 (as of December 2017)
Main facts	M w m	This is an Annulment Action filed by Vale and MBR against the State of Minas Gerais seeking the annulment of Tax Assessment no. 88525/2016, which determined the embargo of all the operations carried out within 250 meters from the natural underground cavities existing at the Jangada and deijão mines.
	T re en	n June 2016, an interim protection was granted to suspend the effects of the ax Assessment referred to in the complaint, thus allowing the companies to esume their operations at the embargoed areas, provided that no nvironmental impact occurs that may be regarded as a violation pursuant to ne law.
	si	The State lodged a Bill of Review, which was partially granted, for the ingle purpose of determining the penalty guarantee, and the injunction that ad been granted was maintained.
	А	The amount of R\$ 83,074.72 related to the penalty imposed at the Tax assessment was judicially deposited as determined by the Court of Justice f Minas Gerais.
		fter the arraign and objection was submitted, the main case is now at vidence specification phase.
Chances of loss	Р	ossible
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	sı P ir	f the precautionary measure is revoked, then Vale may be required to uspend approximately 50% of its operations at the affected mines, with otential consequences to the production volumes, costs or reserves in its ron ore business. The total production in the Jangada and Feijão mines was 9 thousand metric tons and 7.8 million metric tones, respectively, in 2017.

4) Case no. 26.295.47.2012.4.3700

Court

Instance

8th Federal Court of São Luís - Maranhão

1st instance

Filed on	7/22/2012
Parties:	Sociedade Maranhense de Direitos Humanos, Conselho Indigenista Missionário (CIMI), Centro de Cultura Negra do Maranhão - CNN (Plaintiffs) and IBAMA and VALE (Defendants).
Amounts, assets or rights involved	Incalculable.
Main facts	The aim of a public civil action is to suspend the licensing process for the expansion of the Carajás railway. For that purpose, the Plaintiffs claim that the environmental licenses granted by IBAMA were based on an environmental study that was insufficient to characterize globally - the impacts caused by the works, in addition to fragmenting the environmental licenses in order to replace the company s obligation with the environmental compensation due as a consequence of the installation of the site. Finally, after some criticism against the required licensing model, the Plaintiffs required a declaration of invalidity of the licensing process.
	In July 2012, the court granted the requested injunction by determining the suspension of all the building works and operations related to the expansion of the Carajás railway. Both Vale and IBAMA lodged appeals (bills of review) intending to revert the judicial decision, as well as submitted to the President of the TRF (Regional Federal Court) of the 1st Region (DF) a request for an injunction suspension by claiming (i) the risk of serious, irreversible economic losses that might occur if said injunction remained in force, as well as (ii) the fact that the environmental study prepared by Vale fully complied with CONAMA Resolution 237, so that there was no justification for the Plaintiff s request related to the risk of a serious social and environmental unbalance. The request for suspension was accepted by the President of the TRF of the 1st Region and the Plaintiffs lodged an appeal against that decision. However, they were not successful in it and the decision in favor of Vale was maintained.
	At the first instance, both Vale and IBAMA submitted their defenses claiming (a) the regularity of the licensing process, (b) that the study clearly defined all the diagnoses as to the impacts on the areas and communities under direct or indirect influence of the works (including traditional communities), and (c) the need for respecting the competence and technical discretion of IBAMA to conduct and complete the environmental study. In a recent decision, a federal judge has accepted the Federal Public Defender s request to become a Plaintiff in the action. Vale lodged an appeal against that decision, which was in line with the opinion issued by the Federal Prosecutor Office (MPF), by stating that the Public Defender s Office lacked legitimacy to appear in the action. The appealed decision was maintained, and the succession term was re-established for the Public Defender s Office, IBAMA and VALE to submit their oppositions. The Public Defender s Office corroborated the annulment of the Licensing and IBAMA was requested to submit new information on the operation of the railway and how the families would be removed from the area. After IBAMA declaration on August 12, 2014, the records were sent to the judge s analysis. The injunction was rejected on September 15,

	2014, and the State of Pará stated that it had no interest in the lawsuit. On February 27, 2015, an order was published informing the beginning of the term for Vale to submit its declaration on the licensing process produced by IBAMA.	
	On March 17, 2016 the production of expert evidence was accepted, as requested by Vale, which presented requisites and technical assistants on April 5, 2016.	
	On December 5, 2016, the MPF filed a petition opposing to the requisites presented by Vale.	
	On May 23, 2017, the records were prepared for the judge to decide on the acceptance of the requisites presented by Vale and the opposition submitted by the MPF.	
	The parties are still awaiting the above-mentioned order to be handed down and the requested expert examination to be provided.	
Chances of loss	Possible	
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	A decision against Vale may affect the licensing process for the EFC expansion, as well as impact VALE s logistic operations for the implementation of the distribution plan for the production originated from the S11D Project.	
5) Case no. 0013741-46.2017.8.08.002	24	
Court	5th State Court of the Treasury, City, Public Registers, Environment and Health	
Instance	1st instance	
Filed on	5/25/2017	
Parties	Associação Juntos SOS ES Ambiental (Plaintiff) and Vale (Defendant)	
Amounts, assets or rights involved	Loss and/or limitation of the right to exploit artesian wells, payment of damages (without liquidation at the complaint), material (without liquidation at the complaint) and moral losses (without liquidation at the complaint) due to the claim of diseases caused by an alleged contamination, as well as the payment of collective moral or material indemnification resulting from an alleged violation of diffuse rights (as liquidated at the complaint in the amount of R\$ 10,000,000.00). The value of the litigation is set in R\$ 100,000,000.00.	
Main facts	This Public Civil Action was filed by the Associação Juntos SOS ES Ambiental against Vale with a preliminary request for an urgent relief and a penalty involving an obligation to act, where the exploitation of artesian wells is question and the contamination of the Greater Vitória aquifers by Vale is claimed, as well as its operation of the Tubarão Complex. The urgency relief was requested for Vale to (i) suspend the exploitation of artesian wells, (ii) take measures to eliminate the alleged contamination of tanks, reservoirs and ponds of its industrial complex, (iii) submit evaluations at all water collection wells, tanks, reservoirs and ponds, (iv) implement an	

improvement plan for the sanitary treatment systems, (v) submit/execute implementation or expansion projects for high environmental risk undertakings and any other sources of great environmental impact

(vi) submit a hydrological

	authorization for using under the merits, the Plaintiff required those resulting from pain and contamination, as well as to of the alleged violation of di	lability and non-impact on the Greater Vitória aquifer, and (vii) submit an orground water. The requests for an urgency relief were not granted. As for ests that Vale should be sentenced to pay damages, property damages and d suffering, to those who suffered from any diseases caused by the alleged pay an indemnification for personal or property damages, as a consequence iffuse rights, in the amount of R\$ 10,000,000.00. The amount in controversy ,000.00. Vale was served process on October 10, 2017.
Chances of loss	Remote.	
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	In an event of a negative outcome, the Company will suffer expressive losses and inestimable damages to its reputation.	
6) Case no. 0002505-76.2015.4.02.50	001	
Court		1st Federal Criminal Court of the Federal Justice of Espírito Santo
Instance		1st instance
Filed on		12/4/2015
Parties		Federal Police of Brazil (Plaintiff) and Vale (Defendant)
Amounts, assets or rights involved		Suspension of Vale s operations at Pier II and the Coal Pier at the Port of Tubarão due to potential environmental damages resulting from the fall of iron ore and the emission of particulate materials into the atmosphere and at the marine area around Pier II and the Coal Pier.
Main facts		On January 21, 2016, the Federal Justice of Espírito Santo ordered the suspension of the Company's operations at Pier II and the Coal Pier at the Port of Tubarão due to potential environmental damages resulting from the fall of iron ore and the emission of particulate materials into the atmosphere and at the marine area around Pier II and the Coal Pier. Vale's operations at Pier II and the Coal Pier at the Port of Tubarão were stopped for four days until the Regional Federal Court of the Second Region (TRF) suspended the effects of the injunction. TRF granted Vale 60 days for it to implement certain actions to monitor, control and attenuate the fall of iron ore and the emission of particulate materials into the atmosphere and the ocean. This 60-day term expired on March 25, 2016, and the Company understands that it is compliant with the requirements imposed by the TRF. At the first instance, an expert was appointed by the judge, and both Vale and the Public Attorney's Office (MPF) submitted their requisites. The expert examination determined at the judgment of the writ of injunction had been suspended and ordered an expert examination to confirm whether Vale had properly implemented the actions to monitor, control and mitigate the release of iron ore at the terminal. Vale lodged an appeal against a portion of the TRF order. However, such action will not impact the performance of such expert examination, which

began in April 2018.

		Company will be required to meet certain additional requirements to stop on ore and emissions of particulate materials into the atmosphere and the
	reported and suggested that to to the filing of a criminal acc the future and request injunc whether the MPF will adhere against Vale, including some	ice Investigation no. 523/2014 (IPL), which caused the injunction, was Vale should be charged. The IPL records were sent to MPF for a decision as cusation against Vale. The MPF may initiate other actions against Vale in tions to suspend operations at the Port of Tubarão. We cannot estimate to the recommendations of the Federal Police or initiate other actions that may result in an additional suspension of our operations at the Port of ppose to any action initiated against Vale resulting from any conclusions of by the Federal Police.
Chances of loss	Possible.	
Impact analysis in case of loss/ Reasons of the relevance of the lawsuit for the Company	In an event of a negative outcome, the Company will suffer expressive losses and inestimable damages to its reputation.	
7) Proceeding no. 0002383-85.2012	4.01.3905	
Court		Federal Court of the Judiciary Subsection of the City of Redenção
Instance		1st Instance
Opening date		05/28/2012
Parties to the proceedings		Federal Government Attorney s Office (<u>M</u> PF in Portuguese) (plaintiff); Kakarekré Indigenous Association of Defense of the Xikrin People of the Djudjeko, Tuto Pombo Indigenous Association, Porekro Indigenous Association of Defense of the Xikrin People of the Cateté, Pore Kayapó Indigenous Association, Bayprã Indigenous Association of Defense of the Xikrin People of the Oodja (Associate Co-plaintiffs); Vale, National Indian Foundation (<u>FUNA</u> I) and the State of Pará (<u>Defend</u> ants).
Values, goods or rights involved		The value is undefined, taking into consideration that it is a claim involving (i) indemnity value, which will depend on the expert examination for definition, as well as (ii) the request to stop the nickel operations of the Onça Puma Company, in the State of Pará.
Main facts		In 2012, MPF filed a Public Civil Action (PCA) against Vale, the State of Pará and FUNAI, pursuing the suspension of the nickel Company operations at the Onça Puma mine, in the State of Pará, due to the alleged impact over the Xikrin of the Cateté and Kayapó indigenous communities located near the mining site. MPF argues (i) that the Company's operations would be contaminating the waters of the Cateté River which crosses the Xikrin indigenous land (IL), (ii) that the Company failed to meet certain conditions originating from the environmental licensing of the Onça Puma mine undertaking and (iii) that the State of Pará should not have granted an environmental license

for said undertaking. Additionally, MPF has claimed the payment of indemnity in favor of the Indians and a monthly deposit of the amount of BRL 1.0 million, until the final and unappealable decision of the suit, in favor of the Xikrin and Kayapó indigenous villages.

On October 18, 2012, the court did not recognize the urgency of the preliminary injunction entered in the sphere of the PCA, having denied said injunction requested by MPF.

On May 25, 2015, past three years after the denial of the injunction, MPF filed a request for reconsideration by the court of Redenção, claiming that the operations of the Onça Puma mine undertaking would be contaminating the Cateté river, causing health damage to the indigenous tribes and, therefore, it reiterated the request to stop the undertaking and start payment of a monthly indemnity in the amount of BRL 1.0 million for the benefit of the Xikrin and Kayapó indigenous villages.

On June 02, 2015, the court of Redenção partially accepted MPF plea, determining that Vale would monthly deposit the approximate amount of BRL 400 thousand, to be received and divided proportionally among the villages integrating the Xikrin IL.

In June, 2015, Vale and the indigenous associations appealed against the preliminary injunction. Vale rose up against the obligation to pay a monthly sum, and the indigenous associations, for their turn, spoke out concerning the monthly amount defined by the court (BRL 400 thousand).

On June 25, 2015, the Appellate Judge-Rapporteur denied the injunction to Vale s request and granted the injunction to the plea of the indigenous associations, increasing the monthly deposit amount to BRL 1.7 million, to be received and divided proportionally among the villages integrating the Xikrin IL. On July 09, 2015, Vale entered a Writ of Mandamus (\underline{WM}) addressed to the President of the Federal Regional Court of the 1st Region ($\underline{TRF} 1$), requesting the suspension of the effects of the preliminary injunction which had increased the monthly deposit amount. In view of the delay in the analysis of the proposed WM and the possibility of expiry of the deadline to comply with the preliminary injunction approved by the Federal Appellate Judge, Vale deposited in court the amount of BRL 1.7 million, which had been defined through an injunction, having said amount already been released to the Indians.

On July 20, 2015, TRF 1 Disciplinary Board Appellate Judge accepted the WM entered by Vale and approved preliminary injunction, suspending the effects of the decision which increased the amount of the deposit and even the obligation to make the deposits.

On July 14, 2015, MPF filed another appeal, claiming the increase of the obligation to a monthly deposit initially determined by the judge of Redenção, requesting that Vale would have the duty to deposit the monthly amount of BRL 1.0 million per village affected by the undertaking, as well as the immediate stoppage of the Onça Puma mine undertaking. In a new decision, the same Appellate Judge which had approved the first increase, totally accepted the request made by MPF.

On August 21, 2015, Vale entered a new WM, addressed to the President of TRF 1, against this new injunction for compensation increase and stoppage of the undertaking activities.

In view of the delay in the analysis of the proposed WM and the possibility of expiry of the deadline to comply with the preliminary injunction approved by the Federal Appellate Judge, Vale deposited in court the amount of BRL 7.0 million, being that, from said amount, BRL 3.0 million would be designated to the Xikrin IL villages and BRL 4.0 million to the Kayapó IL villages.

On August 28, 2015, the Disciplinary Board Appellate Judge once again accepted the WM entered by Vale, and granted the injunction in favor of the Company, determining the suspension of the effects of the order which had decided for the stoppage of the Onça Puma mine undertaking and the (second) increase of the monthly amount to be deposited.

On September 16, 2015, on account of this new decision regarding the WM, MPF filed a claim for stay of preliminary order before the President of the Superior Court of Justice (STJ in Portuguese), claiming a public order and health nature risk. After gathering the manifestation of all the interested parties (Vale, the State of Pará and the Indigenous Associations), the STJ Chief Justice Minister recognized the risks presented by MPF and granted an injunction, determining the suspension of the effects of the previous one obtained by Vale in a WM, deciding for a new stoppage of the Onça Puma mine and the resuming of the monthly BRL 7.0 million deposits.

Due to the delay in analyzing the proposed appeal and the possibility of expiry of the deadline to comply with the preliminary injunction, Vale deposited in court the amount of BRL 7.3 million.

On October 29, 2015, the State of Pará filed an appeal to suspend the injunction before the Federal Supreme Court (STF in Portuguese) Chief Justice, arguing that the paralysis of the undertaking would bring a series of damages to the State. The STF Chief Justice determined all the interested parties to manifest themselves about the request made by the State of Pará. In this opportunity, Vale complemented the information presented by the State.

On November 11, 2015, Vale entered a manifestation to the STF Chief Justice, clarifying that (i) as determined by FUNAI,

the fulfillment of mitigation and compensation of impact actions turned to be made by means of Environmental Basic Plans (EBPs) and not through management plans anymore; (ii) the Kayapó EBP was implemented and was in full execution concerning the actions therein outlined; and (iii) the Xikrin EBP was partially implemented since, up to that date, Vale had not yet been authorized to enter in the IL to execute the EBP actions.

On November 12, 2015, Vale and the State of Pará filed an appeal against said decision before the STJ Plenary and, in parallel, entered a request before the STJ Chief Justice for non- release of the amounts, until the final judgment of the mentioned appeals.

On December 16, 2015, STF suspended the effects of the injunction granted by STJ, thus releasing the operation of the Onça Puma mine undertaking, also determining the implementation, in up to 120 days, of the Management Plan and the remaining mitigating and compensatory measures regarding the impacts of the Onça Puma undertaking over the ILs.

During the 120 days time, Vale held a series of meetings with MPF and the Indians, with the intention of enabling the access to the IL to execute the EBP actions, as well as formulated, and subsequently increased, an economic compensation proposal. However, the Indians kept denying access to the IL, and did not accept the proposal.

In view of the time elapsed without the execution of the actions defined in the preliminary injunction decision approved by the STF Chief Justice, the Plaintiffs entered a request to release the resources deposited in court (BRL 14.3 million) under the argument that Vale was not interested in complying with the decision.

In decision issued in April, 2016, the STF Chief Justice understood that the determination to release or not the deposits would be the Redenção court s. The parties have manifested themselves in relation to this decision.

On May 05, 2016, Vale presented a manifestation opposing the allegations, requesting the amounts to be kept in the court s account.

On May 18, 2016, the Federal Court of Redenção partially accepted the request made by Vale and rejected the requests made by the Associations and MPF, keeping the resources deposited in court blocked.

In the same month of May, the Indigenous Associations filed an Appeal addressed to TRF 1 (AI no. 0027838- 88.2016.4.01.0000) against the decision of the Federal Court of Redenção, which denied the release of resources. When becoming aware of this new appeal, Vale petitioned to the AI Rapporteur,

requesting that the injunction be analyzed only

after Vale s manifestation, which was accepted.

On June 15, 2016, started the STF judgment of the appeals entered by VALE (ED (motion for clarification)) and by MPF (Interlocutory Appeal AGR) against decision issued by the STF Chief Justice in the case records of the SL no. 933-PA/2016, which had released the operation of the Onça Puma undertaking and determined the implementation of the management plan and remaining mitigating measures within the 120 days time, under penalty of return of the monthly deposits. On account of some doubts from the part of the other participating ministers, especially Min. Barroso, which requested to see the records, the judgment was suspended.

In view of the judgment suspension and the denial to release from the part of the court of Redenção, the Indigenous Associations filed a Complaint (RCL) at STF, proceeding no. 24.179-PA/2016, pleading the release of the resources. In a preliminary analysis, STF Chief Justice denied the Associations request, due to the danger of irreversibility of the measure.

Still in the month of June, 2016, Vale entered its manifestation in the AI (AI no. 0027838-88) presented by the Associations, reiterating the impossibility to fulfill the obligation of implementing the impact mitigating actions, due to the denial to have access to the Xikrin IL, despite the commitment undertaken with MPF and the Indians, of funding a technician to follow the actions on their behalf, and the fact that the Kayapó EBP was in full implementation. After Vale s manifestation, the appeal Rapporteur requested the Associations and MPF to manifest themselves. The Associations reaffirmed their request and denied to have prevented the access to the IL. MPF, on its turn, reiterated the arguments previously presented for the release of the resources, and informed the Rapporteur that it was already negotiating with the Associations the signature of a Conduct Adjustment Agreement (CAA), to regulate the use of the resources released. After acknowledging the manifestations of all the parties, the Appellate Judge-Rapporteur decided to deny the request to release the amounts, arguing that STF had already analyzed the same request (RCL no. 24.179-PA/2016) and that he could not overrule the STF decision.

In the month of July, 2016, the Indigenous Associations filed a request for the STF Chief Justice to reconsider the decision issued in the case records of RCL no. 24.179-PA/2016, which was once again denied.

On August 12, 2016, MPF filed a petition to reconsider in the AI no. 0027838-88 presented by the Associations, arguing that, after analysis made by an MPF anthropologist and technicians that support the Indians, the impacts and the need for the resources by the Indians were proven. In the same request, MPF informed the signature of the CAA with the Associations, which handled the way to use the resources to be released.

In parallel, MPF entered a new AI against the decision of the

Court of Justice of Redenção, which denied the release of the amounts deposited, the one numbered 0042307- 42.2016.4.01.0000.

On June 15, 2016, Vale pleaded in the AI no. 0042307-42, requesting the preliminary injunction to be analyzed only after its manifestation, which is pending analysis from the part of the Rapporteur.

On the same day, the Appellate Judge-Rapporteur ruled over the reconsideration request made by MPF, deciding that he would only analyze the preliminary injunction after manifestation by the parties, starting with FUNAI. In spite the fact that FUNAI and the State of Pará have been summoned and that they have taken the case records for analysis, until now the requested manifestations were not presented.

On July 08, 2016, Vale registered its manifestation against the reconsideration request presented by MPF in the case records of the AI no. 0027838-88, pleading the non-release of any amount in favor of the Indians, arguing that it was prevented by the Indians (denial to enter the IL) from complying with the decision issued by the STF Chief Justice; that the Kayapó EBP was implemented and is in progress; and that the study prepared by the MPF anthropologist is unilateral, not submitted to the adversary proceeding.

On September 09, 2016, the Appellate Judge-Rapporteur of the AI no. 0027838-88 issued a decision, partially accepting the reconsideration request made by MPF, under the argument that it was proven the non-compliance by Vale of the STF decision (implementation in up to 120 days of the Management Plan and remaining mitigating measures) and determined the release of the resources deposited in favor of the Xikrin, to be used according to the conditions specified in the CAA signed with MPF, and enforced over the company the obligation to deposit BRL 3 million/month, as of 09/19/2016, in favor of the Indians of the Xikrin IL, until proof of compliance with the decision issued by STF, under penalty of a BRL 50 thousand fine per day of delay.

On account of the obscurities verified in the reconsideration decision issued in the AI no. 0027838-88, especially the total release of the amounts deposited to the Xikrin Community, since part of the amount deposited would be intended to the Kayapó Community, Vale presented an ED (motion for clarification). The same action was taken by the Associations representing the Indians integrating the Kayapó IL.

On September 15, 2016, Vale filed a new WM, no. 1004020- 90.2016.4.01.0000, addressed to the same Appellate Judge- Rapporteur that had analyzed the previous WM s (MS no. 1001236-77 and MS no. 1001616-03), once again pleading the suspension of the effects of the decision issued in the AI no. 0027838-88, arguing a series of irregularities, highlighting the impossibility to reverse the effects of the injunction in case it was revoked, since, once the amount deposited in court was

withdrawn and spent by the Indians, they would not have the conditions to reimburse Vale.

In parallel, Vale filed at STF, on September 16, 2016, an RCL (CLAIM) request, number 25.225-PA/2016, pleading once again the suspension of the effects of the decision issued in the AI no. 0027838-88, arguing another series of irregularities, with emphasis in the usurpation of the decision power, since it would be up to STF and not the Appellate Judge-Rapporteur of the AI no. 0027838-88 the decision to release or not the resource.

On September 19, 2016, the Appellate Judge-Rapporteur of the WM no. 1004020-90, partially accepted the request made by Vale and, based on the argument of irreversibility of the measure, partially suspended the effects of the decision issued in the case records of the AI no. 0027838-88, denying the release of the resources deposited. On the same day, the ACP Instance (Federal Court of Redenção) was notified to cancel any action aimed at releasing the resources deposited.

On September 20, 2016, the STF Minister present issued a preliminary injunction in the case records of the RCL no. 25.225-PA/2016, accepted the claim made by Vale and, preliminarily recognizing the competence usurpation from the part of the Appellate Judge-Rapporteur of the AI no. 0027838- 88, totally suspended, also for this reason, the effects of the decision issued in the referred to AI (no. 0027838-88), denying the release of the resources deposited, as well as the obligation to deposit the amount of BRL 3 million/month. On the same day, the ACP Instance (Federal Court of Redenção), as well as the one of the AI no. 0027838-88, were notified about the STF decision, with the recommendation to cancel any action in the sense of releasing the resources deposited and the requirement of new deposits by Vale.

On October 10, 2016, the Associations which represent a part of the Kayapó IL, filed in the case records of the Claim an Interlocutory Appeal against the decision issued by STF Chief Justice, arguing, in summary, the inexistence of competence usurpation that would justify the proposal of the deed and made the request to reconsider the decision or suspend its effects.

On December 14, 2016, MPF presented a manifestation, requesting the reconsideration of the preliminary injunction, in order to have the withdrawal authorized, in favor of the three Associations which represent the Xikrin communities, in the amount equivalent to 60% (sixty per cent) of the total currently existing deposits, which would have to be applied in accordance to the agreed by in the CAAs signed with the Federal Attorney General s Office.

On December 15, 2016, the indigenous Associations filed an incidental request for urgent protection, pleading the release of the resources deposited by Vale, arguing that the community was in a needy situation, as a consequence of the damages caused by the Onça Puma undertaking operation.

On December 19, 2016, the indigenous Associations filed a request for reconsideration of the decision which had suspended the release of resources, arguing that the Xikrin indigenous community was in a needy situation and was manifesting itself about the Onça Puma undertaking.

On January 16, 2017, the Porekrô Indigenous Association filed an appeal in the case records of the RCL no. 25.255/2016, arguing, in summary, Vale s failure to comply with the decision of Min. Lewandowski, since it had not implemented the determined management program, reiterating the request for release of the resources deposited.

On January 27, 2017, the Kakarekré and Bayprã Indigenous Associations filed appeals in the case records of the RCL 25.225/2016, with the same arguments displayed by the Porekrô Association, as well as the same request for release of the resources.

On March 24, 2017, the indigenous Associations reiterated the requests to reconsider the decision which had suspended the release of the resources deposited by Vale for the Xikrin. Such request, as well as the other ones, is pending analysis and judgment by the STF Chief Justice.

On April 25, 2017, representatives of the indigenous Associations met with the STF Chief Justice and reiterated the requests for agility in processing the pending deeds in the court, arguing, once again, the needy situation through which the Xikrin are passing, as well as the diseases they are suffering.

On May 08, 2017, an order was issued in the case records of the ACP (2383-85.2012), denying the injunction pleaded by Vale for a forced access to the Xikrin IL, with the intention of implementing the EBP. In the same order, it was accepted the attachment of the air inspection report made by Vale, as well as it was determined the replacement of the social assistant expert.

On May 31, 2017, the judgment of SL no. 933/PA-2015 was resumed, and Min. Barroso presented his vote upon further review, in disagreement with the initial reporting judge of the proceeding (Min. Ricardo Lewandowski), revoking the decision which suspended the effects of the injunction which ordered the interruption of the undertaking and payment of BRL 1,000.00/month/village, thus returning the issue to the ordinary instances, for understanding that it was not the STF s role to evaluate factual matters. The STF judgment has not been published, yet.

On June 01, 2017, the Constitutional Complaint no. 25.255 loss of the object was deemed to be impaired, in view of the recent decision issued by STF in the case records of the SL 933/PA-2015.

On June 02, 2017, a request for action, in an urgent basis, was presented to the STF Chief Justice, in the case records of the SS no. 5115/PA-2015, asking for extinguishment of the SS for equality of effects, and thus eliminate the element which suspended the effects of the decision favorable to Vale, obtained through the WM.

On June 15, 2017, the STF Chief Justice requested information to the Appellate Judge-Rapporteur of the WMs, which are in progress at TRF 1st R, about the preliminary injunction which suspended the effects of the decision, which determined the stoppage of the undertaking, the execution of the monthly deposits and the release of resources to the Indians.

On July 06, 2017, the ACP (0002383-85.2012) Instance provided information to the rapporteur of the WM (1004020- 90.2016) in progress at TRF 1st R, informing the stage of the proceeding, especially the expert examination designated, which is in the phase of manifestation by the parties about the expert fees proposed. On the same day, FUNAI s Attorney s Office received the case records of the proceeding and started to count the time for the manifestation about the value of the expert fees presented, questioning the amount attributed by the mineral-metallurgy expert.

On September 13, 2017, the judgment of the AI no. 0042106- 84.2015 took place, where the 5th Panel of the TRF 1st Region decided to partially accept the vote of the Appellate Judge-Rapporteur and, as a support to the Principles of Precaution and Prevention, determined the stoppage of the Onça Puma undertaking and decreased the amount of the compensatory sum of BRL 1 million/month/village to 1 minimum wage/Indian/month, until Vale implemented the PGE.

On September 15, 2017, Vale was summoned of the court decision issued by the 5th Panel of the TRF 1st Region and, in compliance with the decision, suspended the activities of the Onça Puma mines operations.

On September 22, 2017, Vale entered a Motion to Clarify (MC) against the decision issued by the 5th Panel of the TRF 1st Region, indicating its obscurities, since the 5th Panel failed to analyze several arguments displayed by the company, as well as the emphasized contradictions.

On September 25, 2017, a motion to clarify was entered by the Bayprã and Porê Kayapó indigenous Associations.

On September 29, 2017, Vale made the payment of the approximate amount of BRL 35 million, being 2/3 for the Kayapó and the rest to the Xikrin, as a monthly compensatory sum.

On October 02, 2017, the first degree Instance denied the execution of control and safety activities, under the argument that Vale wanted to reassess the matter already decided by the 5th Panel of the 1st Region, as well as denied the request to

anticipate the expert work, under the argument that the State of Pará, FUNAI and MPF had not accepted the value of the expert fees. Vale has attached copies of the payment slips to the case records and reiterated the request not to release the amounts while the obligation to render account is not fulfilled. The State of Pará entered motions to clarify against the decision issued by the 5th Panel of the TRF 1st Region.

On October 03, 2017, MPF entered motions to clarify against the decision issued by the 5th Panel of the 1st Region. The indigenous Associations entered a request to issue a permit for the release of the amounts deposited by Vale.

On October 03, 2017, the Appellate Judge-Rapporteur issued decision determining the sealing of the Onça Puma undertaking, in view of the complaint filed by the Indigenous Associations that the undertaking was in operation and that Vale was failing to comply with the decision.

On October 06, 2017, the first degree Instance, complying with the decision issued by the Appellate Judge-Rapporteur in the case records of the Appeal no. 0042106-84.2015, determined the issuance of a sealing warrant of the gates of the Onça Puma undertaking.

On October 07, 2017, Vale filed a Writ of Mandamus against the Appellate Judge-Rapporteur s decision, which had determined the sealing of the gates of the undertaking.

On October 08, 2017, the Appellate Judge-Rapporteur approved an injunction in the case records of the Writ of Mandamus, determining the suspension of the effects of the decision issued in the case records of the Appeal and that a communication should be sent to the first degree Instance to suspend the order.

On October 09, 2017, Vale communicated to the first degree Instance the filing of a Writ of Mandamus and the attainment of an injunction. It has attached to the case records of the public civil action a letter issued by the Appellate Judge-Rapporteur, forwarding the preliminary injunction issued. The first degree Instance, in view of the injunction approved in favor of Vale, determined the removal of the warrant for compliance. An internal appeal was filed at the TRF 1st R against the decision of Appellate Judge Souza Prudente that determined the sealing of the gates of the Onça Puma undertaking. Vale communicated in the case records of the Writ of Mandamus the filing of an internal appeal in the case records of the Appeal no. 0042106-84.2015.

On October 10, 2017, Vale filed a motion to reconsider at the first degree Instance, in face of the waiver to review the amount paid as expert fees in case it is the winner of the suit, and reiterated the request for anticipation of the expert works.

On November 13, 2017, Vale entered a Writ of Mandamus

before Appellate Judge Souza Prudente, so that he would abstain from practicing any and all deeds regarding the temporary fulfillment of the urgent protection approved in the Appeal decision, also suspending any act in the sense of authorizing the withdrawal of the monthly deposits.

On November 21, 2017, the Bayprã Indigenous Association entered the Constitutional Claim no. 29162-PA at STF, arguing that the Writ of Mandamus Appellate Judge-Rapporteur had usurped the powers of Appellate Judge Souza Prudente and issued a decision contrary to the judgment of the Supreme Court.

On December 07, 2017, there was an MPF plea to the Appellate Judge Rapporteur of the Appeal, presenting the copies of the CAAs entered with the indigenous communities of the Kayapó IL and requesting the release of the amounts deposited.

On December 11, 2017, the Appellate Judge Rapporteur of the Appeal accepted the joint claim made by MPF and the Associations and determined the release of the amounts deposited in court. On the same date, the Coordinated Judicial Expert petitioned to the Instance of the Court of Redenção, informing the date of January 30, 2017 as the start of the designated environmental expert examination Onça Puma undertaking, Cateté and Branco rivers, Xikrin IL.

On December 12, 2017, the Instance of the Court of Redenção issued a decision, denying the entering of the Municipality of Ourilândia do Norte, accepted the claim made by the Associations and MPF, and determined the issuance of a permit for release of the amounts deposited 50% for each indigenous community. On the same date, the indigenous Associations received the judicial orders and made the withdrawal of the amounts deposited in court, of approximately BRL 40 million.

On December 14, 2017, a preliminary injunction was issued in the case records of the Writ of Mandamus, accepting Vale s claim and determining Appellate Judge Souza Prudente to abstain from practicing acts of execution. On the same date, the Instance of the Court of Redenção received, through e-mail, from the Specialized Panel Secretariat of the TRF 1st R, copy of the preliminary injunction issued in the case records of the Writ of Mandamus. On the same date, Vale petitioned in the case records, requesting the first degree Instance to block the indigenous Associations accounts and return of the existing amounts to the judicial account.

On December 15, 2017, the Instance of the Court of Redenção informed the Writ of Mandamus Appellate Judge Rapporteur the receipt of the letter with the decision issued in the referred to Writ of Mandamus and that the amounts deposited had already been released to the Indians.

On December 18, 2017, MPF removed the proceeding of the

public civil action under examination, what made it impossible for Vale to analyze the claim presented.

On December 20, 2017, the STF Chief Justice denied continuation to the Constitutional Claim made by the Indians.

On January 16, 2018, an alignment meeting was held with Vale s assistant experts and preparations were made for the expert examination to start on January 30, 2018.

On January 18, 2018, the case records were returned by MPF. A meeting was scheduled with the Judge of the Court of Redenção for January 26, 2018, to align the matters pertained to the expert examination; follow-up of the order for the claim entered by Vale and rendering of accounts of the amounts withdrawn by the Associations and their application, in accordance to the provisions of the CAAs entered with the MPF; and request of authorization to get access to the areas of the Onça and Puma mines, in order to implement corrective environmental measures.

On January 28, 2018, an expert examination was carried out at the Onça Puma undertaking, in the specialties of Civil Engineering, Forest Engineering, Metallurgy, Limnology, Ichthyology, Geology and Social Assistance.

On February 06, 2018, Vale filed a claim refuting the information of the Notice of Contestation drafted by a court official that inspected the area of the Onça Puma undertaking, and reiterated the request to access the area of the mines, in order to execute the environmental maintenance and safety activities.

On February 20, 2018, a claim was filed by Vale, attaching a certificate issued by DNPM (National Department of Mineral Production), informing that the Onça mine does not pour its drainage into the Cateté river, and requesting the suspension of the undertaking stop order or the release of the Onça mine only.

On March 09, 2018, an order was issued by Appellate Judge Neviton Guedes, in the case records of the Writ of Mandamus, to partially reform the decision of Appellate Judge João Batista Moreira, just to align it to the terms of the requested, modifying the provision which granted the preliminary injunction in general terms, to: (a) restrict the preliminary decision in the current mandamus action, to subsequently suspend only the part of the decision which prevented the operation of the facility of the Onça Puma undertaking, remaining therefore whole the decision issued in the part which suspended the exploitation activities of the mine itself; (b) seal any kind of contamination or residues deposit in the waters of the rivers, resulting from the facility activities, under penalty of immediate stoppage of its operation; (c) delegate to the original Instance the inspection of compliance with the decision.

	On March 19, 2018, a meeting was held with the judge of the Federal Court of Redenção to present the decision issued in the case records of the Writ of Mandamus and, based on the specified in its item c , reiterate the demands made in the last four claims filed by Vale (i) blockage of the Associations accounts, in view of the decision issued in the Writ of Mandamus and access authorization to the Onça and Puma mines, to execute corrective measures; (ii) disregard the information included in the notice of contestation drafted by the court official, on account of the inconsistencies indicated by Vale; (iii) presentation of the environmental risks report and reiteration of the claim to get access to the areas of the Onça and Puma mines, in order to execute corrective and environmental prevention measures and; (iv) request to release the mineral exploitation activity of the mines of the Onça mine has no drainage to the Cateté river. The magistrate informed that he would expedite the analysis of the requests, but has already anticipated that he would not take any decision about the release of the mineral activity without hearing the other parties and the TRF 1st Region.
	On the same date, FUNAI s Attorney s Office entered a petition in the case records of the WM 1010592-20.2017, requesting the return of the deadline to manifest about the claims filed by Vale, since the court s summons had been sent to a different location.
	On March 22, 2018, MPF petitioned in the case records of the Writ of Mandamus, manifesting itself regarding the rejection of the mandamus, under the argument that the teratology mentioned by Vale was not configured and that the procedural acts performed by Appellate Judge Souza Prudente are in accordance to what is provisioned in the TRF 1st R Internal Regulation.
	On April 02, 2018, the indigenous Associations petition in the case records of the Writ of Mandamus, informing the correct address of the Attorney s Office of the State of Pará.
	On April 13, 2018, Vale entered a petition in the case records of the Writ of Mandamus, showing some irregularities in the use of the resources withdrawn by the Indians and the failure to comply with some obligations defined in the CAA entered with MPF.
	On April 30, 2018, the motions to clarify presented by Vale and the State of Pará against the decision issued by the 5th Panel of the TRF 1st R were included in the agenda, being the session of May 16, 2018 designated for judgment of the appeals.
	On May 14, 2018, the motions to clarify were removed from the agenda by decision of the Appellate Judge Rapporteur.
Chance of loss	Possible loss, since the proceeding is still in the instruction phase, being that the technical expert examination requested

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by the parties is not yet concluded.

case of
ance ofPossibility of considerable financial impact in case Vale is convicted, as well
as in case of stoppage of the operations in the Onça Puma Mine.

2nd Federal Civil Court of the Judiciary Subsection of Marabá

1st instance

05/12/2016

Associação Indígena Bayaprã Indigenous Association for the Defense of the Xikrin de O-Odja People and Porekro Indigenous Association for the Defense of the Xikrin do Catetê People (<u>Plaintiffs Associations</u>) and Company, FUNAI, IBAMA e BNDES (jointly <u>Defendants</u>)

The value of the claim attributed by the Plaintiffs Associations is R\$ 72,385,600,000.00. Having in mind the object and the case progress, the Company considers being the value involved in a likely conviction invaluable.

The Plaintiffs Associations filed a public civil action requesting (i) suspension of the environmental licensing process of the S11D project, (ii) settlement of pecuniary damages and emotional distress to be ascertained, and (iii) settlement of a monthly allowance of R\$ 2,000,000.00/per village, by failure of performing the Indigenous Component Study (ECI) and the prior consultation with the indigenous Xikrin community.

A preliminary manifestation on the injunction was submitted on May 13, 2016.

On May 16th, 2016, FUNAI presented its manifestation stating that (i) it has nothing to oppose regarding the preliminary request for the suspension of the implantation works of the S11D enterprise; (ii) that is against the granting of the preliminary request regarding fixing a monthly allowance in the benefit of the indigenous, since the associations cannot claim such request on behalf of the indigenous population, and; (iii) that it claims ineptitude of the initial because of the non- participation of the Associação Kakarekré in the active pole of the claim.

On July 5, 2016, the Associations filed a petition challenging the statements made by the defendants, reiterating the arguments recorded in the initial petition. On the same date, Vale filed a petition challenging stating that the S11D enterprise is in fact only a Vale establishment and does not constitute a different legal entity, so it would not be case for a manifestation of this enterprise, and reiterates that Vale has already presented its manifestation.

On September 8, 2016, the Associations filed a petition contesting the manifestation of the MPF and FUNAI regarding the defect in the representation, reiterating the arguments described in the initial petition.

Analysis of the impact in case of loss/ Reasons of the relevance of the process to the Company

8) Process no. 0001254-18.2016.4.01.3901

Instance Date of filing Parties in the suit

Amounts, goods or rights involved

Main facts

Court

On September 22, 2016, an order was filed in the records (i)

designating November 7, 2016 for judicial inspection to superficially verify the alleged impacts; (ii) that Vale should provide the means necessary to transport representatives of the plaintiffs, the defendants and their respective attorneys and the Federal Attorney to the indicated site, and; (iii) certify the exclusion of lawyers.

On November 7, 2016, the judicial inspection of the S11D enterprise was carried out.

On January 8, 2017, the Bayprã Association filed an interlocutory appeal to the 1st Region TRF (0005755-44.2017), arguing that the absence of studies of the indigenous component, the adoption of measures and plans necessary for mitigation of the impacts caused by the enterprise were necessary, requesting preliminary injunction to suspend the operation of the S11D Mine and to determine the payment of a monthly allowance of R\$ 2 million/month until the final case decision.

On January 24, 2017, the decision of the judge who accompanies the case denying the preliminary injunction, arguing, in a very brief summary, that at least in this preliminary phase it is not proven that the S11D enterprise causes any impact on the Xikrin indigenous lands.

On February 13, 2017, the Bayprā Association informed the trial court the filing of an interlocutory appeal challenging the decision that denied the S11D enterprise suspension injunction, requesting the reconsideration of the refusing decision of the pleaded injunction, alleging the new fact of Vale having received from IBAMA the Operating License of the S11D Mine. The Reporting Justice of AI (5755-44.2017) denied the preliminary injunction formulated by the Indigenous Associations.

On February 15, 2017, the BNDES presented a challenge to the case, arguing, preliminarily, the excess value assigned to the claim; its inclusion in the passive pole of the action, considering that its action in analyzing the S11D Project does not have any relation with the claim, and, in the merit, the impossibility of accountability of the enterprise financing agent.

On February 16, 2017, it was published the decision of the AI s Reporting Justice presented by the indigenous associations (0005755-44.2017) denying the preliminary injunction and affirming the trial court judgment.

On March 14, 2017, Vale filed its answer, restating the points presented in the preliminary manifestation and, complementing, emphasized the importance of the enterprise for the region and for the country, and lack of interest in the suit of the indigenous. On the merits, highlighted the absence of the impact alleged by the indigenous, as well as the presumption of legality and legitimacy of the administrative acts executed during the licensing. Lastly, required the termination of the case.

On March 17, 2017, the indigenous associations presented in the files of AI (0005755-44.2017) Internal Interlocutory Appeal against the decision that denied the preliminary suspension of the operation and payment of a monthly allowance, by the same facts and grounds presented.

On April 18, 2017, the Bayprã and Porekrô Associations filed a petition requiring the attachment of documents extracted from the ACP case that the MPF/Redenção files against Vale on account of the operation of the Mina de Onça Puma, specially the Anthropological Statement made by the MPF/Redenção, highlighting the need for a synergistic evaluation of the environmental impacts caused by the Vale enterprises in the region, as well as the evaluation reports of the quality of the Cateté river, made by UFPA.

On June 14, 2017, the MPF/Marabá filed to the ACP court a motion for rehearing of the adverse decision of the preliminary injunction filed.

On June 20, 2017, the MPF/Marabá filed an Interlocutory Appeal against the adverse decision of the ACP court, requiring the granting of a preliminary injunction to make Vale to carry out the study of the indigenous component of the S11D enterprise.

On June 22, 2017, the records of the Interlocutory Appeal were concluded to the Reporting Justice, for analysis of the preliminary injunction request formulated by the MPF/Marabá.

On July 12, 2017, the MPF/Marabá inserted in the record the petition of interlocutory appeal against the decision that denied the preliminary injunction filed by the indigenous associations.

On July 18, 2017, the case court partially reconsidered the disallowance of the initial request, under the argument that the performing of the study in nothing would impair the procedural relation, as well as the enterprise operation, and determined that Vale executed and presented in court within 180 days the indigenous component study of the S11D enterprise, keeping the disallowance of the standstill of the mine and of the payment of the monthly indemnification.

On July 20, 2017, Vale was given notice of the decision of the partial reconsideration of the refusing order of the preliminary injunction and went aware of the obligation to execute and present the indigenous component study of the S11D enterprise.

On August 8, 2017, the case was concluded for the judge of the case to decide about the amendments of judgment presented by Vale.

On August 10, 2017, the claim judge decided to call up FUNAI to manifest about the allegations posed in the amendments of judgment presented by Vale, especially on the impossibility of

executing the studies in the deadline established by the court.

On August 16, 2017, the Attorney s Office of FUNAI withdraw the files of the public civil action for the fulfillment of the decision pronounced by the court and presentation of the manifestation related to the amendments of judgment presented by Vale.

On September 21, 2017, the Attorney s office of FUNAI presented a petition with its manifestations about the amendments of judgment presented by Vale.

On September 22, 2017, the files were withdrawn by MPF/Marabá, and it was not possible to obtain a copy of the petition presented by FUNAI and, consequently, know the manifestation terms of this foundation in relation to the amendments of judgment presented by Vale.

On November 05, 2017, there as a petition of the indigenous associations requiring FUNAI to be determined to issue a new Reference Term, as well as, the determination that the study to be executed evaluate the synergistic impacts of the S11D enterprise and remaining enterprises installed in the region.

On November 28, 2017, there was a manifestation of the MPF suggesting the holding of a conciliation hearing for alignment of the questions related to the execution of the study determined.

On February 5, 2018, Vale presented a petition not opposing to the holding of the conciliation hearing to be assigned by the court.

On February 15, 2018, it was scheduled a conciliation hearing for alignment of the actions for execution of the study determined and of its extension to March 4th, 2018.

On February 19, 2018, it was presented the Vale s counter- arguments to the internal appeal presented by the indigenous associations against the decision that denied the requested injunction.

On February 22, 2018, it was rescheduled the conciliation hearing for alignment of the actions of execution of the study determined and of its extension to March 6, 2018.

On April 6, 2018, it was held the conciliation hearing for the definition of the representations for the accomplishment of the decision that determined the execution of the study of the indigenous component by Vale. The court accepted the arguments of the amendment of judgment presented by Vale and rejected those presented by the Associations, as well as the reconsideration request presented by those. Vale will have to present in 60 days the work plan and technical team for execution of the study. It was established the period of 15 days for FUNAI to approve or require complementation to the work plan. Once approved the plan, it will be submitted to the

indigenous for analysis and approval. The community does not have a deadline for this analysis. On April 23, 2018, the Association presented instrument appeal against the decision that rejected the reconsideration request and postponed the decision for determination or not of the hiring of the technical team to assist the indigenous in the analysis of the study. On April 27, 2018, Vale presented an appeal of instrument appeal against the decision that determined the company to execute the study of the indigenous component of the S11D enterprise. On May 2, 2018, it was denied the preliminary injunction pleaded by the indigenous and kept the effects of the first instance decision that denied the stoppage of the enterprise and the payment of the monthly amount as Indemnification. On May 5, 2018, it was presented an internal appeal by the Associations against the decision that denied the preliminary injunction pleaded by the indigenous. Chance of loss Remote. Analysis of impact in the case of In case of loss or preliminary decision, there is a risk of suspension of the installation process of the S11D, in addition to financial impact. losing the suit / Reasons this case is Significant to the Company 9) Process no. 0151584-90.2015.4.02.5111 Only Court of Angra dos Reis Instance 1st instance Date of filing 12/09/2015 Parties in the suit Public Federal Ministry X VALE S.A., Petróleo Brasileiro S.A.; ICMBio; IBAMA; Estaleiro Brasfels LTDA; Technip; Petrobras Transporte S/A; INEA. Invaluable Involved values, assets or rights Main facts Action assigned on December 9, 2015 by the Public Federal Ministry in face of the Defendants, with a request for adoption of measures for mitigation and control of the Sun Coral (Coral Sol), species alleged as invasive in Ilha Grande Bay, which would have been introduced in the region due to the operation of the defendants. On 16, June 2017, it was published a preliminary decision through which the court determined the adoption of the following measures: a) that the defendants PETROBRAS - PETRÓLEO BRASILEIRO S/A, TRANSPETRO, PETROBRAS TRANSPORTE S/A, ESTALEIRO BRASFELS LTDA, VALE S/A, TERMINAL ILHA GUAÍBA (TIG) and TECHNIP OPERADORA PORTUÁRIA S/A, present within 60 days, inspection report of the respective terminals, and in all the ships, platforms, floating devices and underwater

Court

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structures that might serve as substrate for the fixation of the Sun Coral, which are directly or indirectly related with the respective business activities, as well as emergency plan and execution schedule, for control of the presence of the invasive exotic species of the Tubastraea (Sun Coral) genus in the respective structures, having the referred plan to foresee the monitoring and periodical control of the species, with follow-up and supervision by IBAMA, technical support by the Instituto Brasileiro de Biodiversidade (Projeto Coral-Sol) and scientific support by the Departamento de Ecologia - Instituto de Biologia Roberto Alcântara Gomes (UERJ), with presentation of quarterly reports on the progress of the situation;

b) that the defendant PETROBRAS - PETRÓLEO BRASILEIRO S/A, under supervision of IBAMA, technical support by the Instituto Brasileiro de Biodiversidade (Projeto Coral-Sol) and scientific support by the Departamento de Ecologia - Instituto de Biologia Roberto Alcântara Gomes (UERJ), present, within 90 days, complete diagnosis on the establishment of invasive species of the Tubastraea (Coral-Sol) genus in the Ilha Grande Bay and execution schedule for local eradication, control and extraction of the species in the maximum deadline of 2 years;

c) that the defendants PETROBRAS - PETRÓLEO BRASILEIRO S/A, TRANSPETRO -PETROBRAS TRANSPORTE S/A, ESTALEIRO BRASFELS LTDA, VALE S/A - TERMINAL ILHA GUAÍBA (TIG), TECHNIP OPERADORA PORTUÁRIA S/A and IBAMA, establish, within 15 days an inspection method for all the embarkations and platforms that come to transit in the area and have any relation with the exploitation and/or prospection of oil (even after its entrance), including those destined only to provide support to the referred activities, aiming to prevent new introductions of the invasive organism; proceed to the preparation of a program for information/education on the areas already infested by the Coral-Sol, until its total eradication, in accordance with the Programa de Educação Ambiental executed by the Instituto Brasileiro da Biodiversidade (Projeto Coral-Sol);

d) that the defendants INEA and IBAMA proceed to the revision, within 90 days, of all the Studies of Environmental Impact related to activities in the Ilha Grande Bay which are under licensing of the above referred agencies and that imply in movement of ships and oil platforms, to foresee specific obligation of prevention and control of the sum Coral, in addition to include the same prevision in the EIA presently under analysis and in future ones.

Still, the Court established daily fine in the amount of 50,000.00 (fifty thousand reais), in case of a justified noncompliance of the deferred preliminary injunction.

The parties presented Instrument appeals, being Vale appeal distributed on June 30th. 2017. On July 13, 2017, the Reporting Justice of the Instrument Appeal assigned to operate as supersedeas to the Appeal, to supersede the injunction decision. On October 17th, 2017, the case was suspended by request of the parties, for an attempt of the composition. Chance of loss Possible Analysis of impact in the case of In case of loss of the action, being the injunction kept, it is possible that losing the suit / Reasons this case is there will be an impact in the operation conditions of the Terminal Ilha significant to the Company Guaíba (TIG), a maritime terminal located in the Rio de Janeiro State. 10) Process no. 5154226-70.2017.8.13.0024 Court 1st Court of the State Treasury and Autarchies of the Judicial District of Belo Horizonte - Minas Gerais Instance 1st instance Date of filing October 2017 Parties in the case MPMG (author) Vale and Minas Gerais State (defendants) Involved values, assets or rights INVALUABLE VALUE Main facts It is about a Public Civil Action filed by the MPMG against Vale and Minas Gerais State aiming not granting the environmental licenses for construction of the dam Barragem Maravilhas III. Regardless of having been granted by the State the Installation License and Operation License, it was granted a preliminary injunction determining that the Company does not do any act tending to the installation of the enterprise. The Company obtained a favorable decision in a review by the first-degree court, allowing the Company to proceed with the construction of the dam. It was interposed an appeal by the MPMG, without the concession of active effect, pending of judgment. It was assigned a conciliation hearing for June 8th, 2018. In the main case, the MP/MG presented a challenge to the contestation. Chance of loss Possible Analysis of impact in the case of If the preliminary injunction is revoked or the case judged rightfully, the losing the suit / Reasons this case is Maravilhas III dam cannot be installed. It is highlighted that the tailings significant to the Company dam Maravilhas III will support Company operations in the Vargem Grande mining complex in the South System. If the construction of this dam is stopped, the Company operations in the Vargem Grande mining complex can be negatively affected.

1) Process no. 0002725-15.2016.4.01.3822	
Court	Only Court of Federal Justice of Ponte Nova
Instance	1st instance
Date of filing	10/20/2016

Parties in the case	Public Federal Ministry (<u>Author</u>) and Samarco, Vale, BHPB, VogBr Recursos Hídricos e Geotecnia Ltda. and some individuals who were employees of Samarco or members of the governance departments or consulting councils of Samarco (jointly <u>Defendants</u>)
Involved values, assets or rights	Not applicable
Main facts	On October 2016, the MPF filed a criminal action against the Defendants, accusing them of murder, bodily injury and various environmental crimes due to the rupture of the Samarco s dam.
	Together with the accusation, the MPF is seeking a precautionary measure for seizing assets of the three companies and warrant the payment of the R\$20 billion as indemnification for the damages caused by the rupture of the Fundão dam and is also seeking the imposition of external monitoring of the ethical and socioenvironmental practices of the companies for 10 years. The decision is still pending in the files of the assertory measures.
	On November 2016, the denunciation was received by the judge, commencing the criminal case.
	On March 2017, Vale presented its answer to the accusation.
	On July 2017, the court of Ponte Nova determined the suspension of the case and the sending of official notices to the telephone providers for them to inform the periods in which occurred the calls interception deferred during the police investigations, so as to check for eventual nullity due to the non-observance of the legal period for that.
	Presently, the files wait for the analysis by the court of the ex officio answers of the providers.
Chance of loss	Possible
Analysis of impact in the case of losing the suit / Reasons this case is significant to the Company	In case of loss or preliminary injunction, there is a risk of conviction of the individuals and legal entities to the sentences provided for by the Law n° . 9.605/98 with consequent financial and image impact to the legal entities and to the individuals.
2) Process no. 0004766-45.2016.8.19.0030	
Court	Only Court of the County of Mangaratiba/RJ
Instance	First Degree of Jurisdiction
Date of filing	Order of receipt of the complaint dated 12/06/2016.
Parties in the case	Active Pole: Public Ministry Passive Pole: Ex MBR directors
Involved values, assets or rights	It is about a criminal prosecution. It imputes the crimes established in the items II and V, of the art. 1st c/w art. 12, I, both of the Law 8.137/90, for 7 times, in the form of the art. 71, of the Criminal Code.
Main facts	The denunciation refers to the imputation of the alleged conduct of tax evasion to the company administrators, as a consequence of notice of violation issued by the Rio de Janeiro State for the demand of supposed debts of Value-added Tax on Sales and Services (ICMS), due in the ore

resifting activity

	in its harbor installations. The amount involved in the tax case is of about R\$ 11 million (December 2017), dully warranted in the corresponding tax execution.	
	The defense in the criminal case was timely presented.	
Chance of loss	Possible	
Analysis of impact in the case of losing the suit / Reasons this case is significant to the Company	In case of loss of the tax case, the company will pay the debt. Such settlement eliminates the criminal punishability, leaving no risks or impacts for the Company and its administrators.	

4.3.1. Indicate the total amount for this provision, if any, of the cases described in item 4.3

As of December 31st, 2017, the total amount for this provision, considering the individually relevant cases described in the subitems (i), (ii), (iii), (iv) and (v) of item 4.3 above, was of approximately R 2,301 million.

(i) Labor

As of December 31st, 2017, the total amount for this provision, considering the labor cases described in the subitem (i) of item 4.3 above, was of approximately R\$7.7 million.

(ii) Taxes

As of December 31st, 2017, the total amount for this provision, considering the cases described in the subitem (ii) of item 4.3 above, was of approximately R\$ 2,294 million.

(iii) Civil

As of December 31st, 2017, there was no amount for this provision, in the civil cases described in the subitem (iii) of item 4.3 above.

(iv) Environmental

As of December 31st, 2017, there was no amount for this provision, in the environmental cases described in the subitem (iv) of item 4.3 above.

(v) Criminal

As of December 31st, 2017, there was no amount for this provision, in the criminal cases described in the subitem (v) of item 4.3 above.

4.4 - Judicial, administrative or arbitral non-confidential cases whose opposing parties are administrators, ex-administrators, controllers, ex-controllers or investors

The tables below present an individual description of the administrative or arbitral nonconfidential cases whose opposing parties are administrators, ex-administrators, controllers, excontrollers or investors of the Company:

1) Process no. 0079940-46.2010.4.01.3800

Court	18th Federal Court of Belo Horizonte Minas Gerais
Instance	1st instance
Date of filing	02/18/2004
Parties in the case	Transger S/A (author) and Ferrovia Centro Atlântica S/A, Mineração Tacumã Ltda., KRJ Participações S/A, CPP Participações S/A, Carmo Administração e Participações Ltda., Fundação Vale do Rio Doce de Seguridade Social - Valia and Companhia Siderúrgica Nacional - CSN (defendants)
Involved values, assets or rights	Invaluable Request for annulment of assembly.
Main facts	The author filed an action requiring, in addition to the indemnification, the annulment of the assembly which authorized the capital increase of the Ferrovia Centro-Atlântica S.A FCA (FCA) in 2003, on account of the supposed practice of unlawful acts by the controlling group of FCA. The sentence that had upheld the action was annulled by the Court of Law of Minas Gerais, who determined the execution of new expert evidence. During the new expertise, the Agência Nacional de Transportes Terrestres (ANTT) manifested interest in participation of the claim and, for this reason, the competence for judgment of this case was moved to the Minas Gerais Federal Justice.
	opened a deadline for final allegations. All the parties presented its final allegations, including ANTT, without prejudice of appealing (amendments of judgment and appeals held) in function of the decision which declared concluded the procedural instruction of the case.
	New decisions were rendered keeping this position, as well as that the discussion about the necessary active co-parties of two shareholders who are

not parties in the dispute (Sérgio Feijão and Associação da Preservação da

Memória Ferroviária) is already precluded. This last understanding was the object of the interposition of the bill of review and appeal held considering that the decision was uttered before the validity of the CPC/15 by the involved societies.

On November 10, 2016, it was held a conciliation hearing, deciding for the concession of time for Transger to bring agreement proposals. Two were presented, and both were

refuted, in petitions recorded on January 23, 2017, by the demanded societies, in reason of the lack of reasonableness and for being based in the expert report produced in the files. Only VLI (Mineração Tacumã) made a counterproposal, which was refuted by Transger on February 6, 2017. On the same occasion, the Author made a request for an interlocutory injunction, aiming to anticipate the effects of the possible favorable sentence. Additionally, on March 31, 2017, Transger petitioned an injunctive relief aiming to suspend deliberations on the possible grouping of FCA stocks in OGM/EGM assigned for April 28, 2017.

On April 20, 2017, The Judge rendered decision highlighting the impossibility of agreement and determining the conclusion of the files for sentence. In that opportunity, she consigned that the injunctive relief would be appreciated in the own sentence. However, on September 20, 2017, she delivered judgment opening view to the demanded on the requirement of an interlocutory injunction. The deadline for manifestation ended on October 10, 2017.

After the record of the manifestations on October 10, 2017, the files were sent to ANTT, who presented manifestation on October 16, 2017. On October 5, 2017, FCA spontaneously attached to the files statement prepared by Nelson Eizirik dealing on the legitimacy of the request for annulment of the deliberation that approved, on May 14, 2003, the increase on the share capital of FCA . In face of the statement, the Judge returned the files in diligence for attachment of the petition with the statement and consequent opening of successive view to the parties about the statement within 5 days, in accordance with a decision published on January 12, 2018. Transger presented its manifestation to the statement on January 29, 2018 and, therefore, the manifestation of the Company to the statement was on February 8, 2018. In the sequence the view was opened to ANTT, who manifested on April 3, 2018, having reiterated the legality of the capital increase questioned by Transger. On April 6, 2018 the files returned for the conclusion, and so, a new decision is awaited.

Possible

Invaluable value. The case is relevant in reason of the request for annulment of the Extraordinary General Meeting which authorized the capital increase of FCA on 2003.

2) The originating case was referred to the County of Juiz de Fora/MG and for having been accepted the alleged objection to the jurisdiction, the case was referred to the 2nd Business Court of Rio de Janeiro, receiving the n° 0203958-80.2015.8.19.0001.

Jurisdiction	2nd Business Court of Rio de Janeiro District
Instance	1st Instance
Date of filing	12/10/2012 (original date 08/20/2010)
Parties in the suit	SUDFER (pleintiff) and MRS Logística S.A., Companhia Siderúrgica Nacional S.A., Minerações Brasileiras Reunidas S.A MBR, Usiminas Usinas Siderúrgicas de Minas Gerais, Gerdau S.A. and Vale S.A. (defendants)
Amounts, goods or rights	Invaluable value.

Chance of loss

Analysis of impact in the case of losing the suit / Reasons this case is significant to the Company

involved

Main facts

Remedial action filed by the Sudfer Club, alleging that the controlling shareholders of MRS Logística SA (MRS), including Vale, are acting with misuse of power, causing direct damages to MRS and, indirectly, to minority shareholders. It claims that, since the privatization of the former Rede Ferroviária Federal SA (RFFSA), when the concession for the exploration of the Southeast grid was granted to MRS, whose controlling shareholders were then (and still are) customers of the railroad, it adopted a tariff policy for self-favoring and not equitable, since, for captive clients, the average tariff would be half (50%) of the maximum tariff authorized by the Agência Nacional de Transportes Terrestres (ANTT), while for non-captive customers it was charged the maximum rate. It affirms that the adoption of the aforementioned tariff policy would have caused damage to MRS, since the company would have lost its profit - by charging a reduced rate to the captive customers - as well as allegedly causing indirect damage to minority shareholders, since they would not have received dividends. Based on these allegations, the following lawsuits were filed: (i) the conviction of the controlling shareholders to pay, until the improper practice is terminated, any direct material damage imposed on MRS (i) by the decrease of the company s profit; (ii) the non- distribution of dividends; and (iii) the distribution of smaller dividends, due to the collection of reduced rates for the controlling shareholders; (ii) the controlling shareholders being compelled to contract with MRS in fair conditions, taking into account the maximum value of the tariff authorized by the Granting Authority; and (iii) the conviction of the defendants to pay the 5% premium provided for in article 246, paragraph 2 of Law 6,404, dated December 15, 1976, in addition to the claims expenses.

In January 2011, Vale and MBR presented their defenses. Along with the defense, procedural incidents of incompetence and impugnation were presented to the case. The exception of incompetence managed by Vale was rejected. Against this decision, Vale filed an instrument appeal, received in the suspensive effect until its judgment. In January 2012, the complaint was granted to determine the decline of jurisdiction for the district of Rio de Janeiro. Against that judgment, the Sudfer Club lodged a Special Appeal, inadmissible by the original court. Unsatisfied, the investment club filed an appeal in a Special Appeal addressed to the STJ. Against that decision, the Sudfer Club opposed a regimental grievance, to which Vale and other aggravated parties objected. Currently, the regimental grievance has been pending in the STJ since May 2014. The main proceeding has already been distributed to the Rio de Janeiro Court, and is pending before the 2nd Business Court of Rio de Janeiro, having received the number 0203958- 80.2015.8.19.0001. After the presentation of a replicate and the manifestation of the parties regarding evidence, the court ordered the CVM to be summoned to appear. With CVM s manifestation, Vale petitioned on February 4, 2016, reiterating the defense arguments, which were ratified in the CVM s response. On March 7, 2016, the sanctioning order was published, which (i) established as a controversial issue the existence of abuse of power of the controllers, given the

difference in consideration for the service provided to non- captive customers and captive customers that are part of the controlling group the company; (ii) dismissed the preliminaries raised by the defendants; (iii) rejected the production of oral proof required by another party; (iv) granted the production of additional documental evidence required by Vale and other parties. Contrary to this decision, appeals were filed, which are still pending. In relation to the embargoes, the omission of the judgment was not to appreciate the incidents of impugnation to the value of the cause. In August 2016, the records were sent to the Judicial Expert, and were returned on March 31, 2017, with a fee proposal. On July 11, 2017, the parties challenged questions of SUDFER and, consequently, the proposal of fees by the expert. The deadline has not been defined for the expert to express their views on the allegations presented by all the defendants.

At the same time, an injunction (Agravo de Instrumento) 0029853-93.2016.8.19.0000 had been filed against the TJRJ for the reform of the decision of the judge of first degree who dismissed the preliminary injunction raised in defense. The appeal (Agravo de Instrumento), when appraised by the Rapporteur, by a monocratic decision, was accepted. As a result, the Internal Appeal for the TJRJ Chamber was filed, and it was judged on March 14, 2018, the prescription argument was unanimously approved and thus expressly acknowledged/accepted. Against the judgment of the Agravo de Instrumento , SUDFER filed foreclosure, which is still pending judgment. On May 3, 2018, a decision was published in the main proceedings requesting that information be provided on the status of the abovementioned Agravo de Instrumento , which deadline was fulfilled on May 9, 2018.

Chance of loss

Analysis of impact in the case of losing the suit / Reasons this case is significant to the Company Possible.

Any unfavorable decision on the lawsuit would generate financial losses and image losses for the Company.

3) The original case was referred to the County of Juiz de Fora/MG and by having been accepted the alleged objection to the jurisdiction, the case was referred to the 7th Business Court of Rio de Janeiro, receiving the n° 0354058-47.2015.8.19.0001

Court	7th Business Court of Rio de Janeiro District
Instance	1st Instance
Date of filing	01/24/2013
Parties in the case	SUDFER (author) and Júlio Fontana Neto, Henrique Aché Pillar, José Paulo de Oliveira Alves, Pablo Javier de La Quintana Bruggemann, Lauro Henrique Campos Rezende, Wanderlei Viçoso Fagundes, Hugo Serrado Stoffel, Guilherme Frederico Escalhão, Delson de Miranda Tolentino, Marcus Jurandir de Araújo Tambasco, Chequer Hanna Bou-Habib, Roberto Gottschalk, Joaquim de Souza Gomes, Luiz Antônio Bonaguara, Company Siderúrgica Nacional S.A., Minerações Brasileiras Reunidas S.A MBR, Usiminas Usinas Siderúrgicas de Minas Gerais, Gerdau S.A. and Vale S.A. (defendants).
Involved values, assets or rights	Invaluable.

Main facts

The Clube Sudfer, in the condition of a minority shareholder of MRS Logística S.A. (MRS), filed suit against the directors, the members of the Administration Council and the controller shareholders of MRS (among them, Vale). It alleges that the directors and counselors would have incurred in the practice of mismanagement by approving harmful tariff model to MRS, which was in force in the period from 1998 to 2002. They allege that there as a conflict of interests between the controller shareholders and MRS, as long as, in the condition of captive customers of the railroad network, it was profitable for such customers the establishment of rates below the value practiced in the market. As a consequence of the adoption of the tariff model, MRS would have had losses, without the distribution of dividends to the shareholders. As no dividends were distributed, they allege that they would not have honored their financial commitments with third parties and, in addition, could not obtain financing from BNDES to participate in the second offer of MRS stocks, within the privatization process. Based in such allegations, pleads: (i) the conviction of the defendants to the payment of indemnity for moral damages in the amount of R\$ 150.0 thousand; (ii) the conviction of the controller shareholders to the obligation of doing, consisting in the sale, proportionally to the participation of each one, of 3,744,440 stocks of MRS, by the same price and in the same conditions established in the privatization Notice; and (iii) considering the stock sharing pleaded, requires the conviction of the defendants to the payment of all the differences related to the non paid dividends.

On March 15th, 2012, Vale, MBR, and the ex-administrators of MRS, Mrs. Chequer Hanna Bou-habib, Guilherme Frederico Escalhão, Hugo Serrado Stoffel and Roberto Gottschalk presented their defenses. Vale raised, yet, procedural issues, aiming to have the action sent to the District of Rio de Janeiro. It was uttered decision accepting this allegation and determining the remittance of the files to the Justice of Rio de Janeiro. Against the referred decision, the Clube Sudfer interposed instrument appeal, which was not accepted on July 2012. Against the negative, the Clube Sudfer interposed Special Appeal, which is in STJ pending of judgment since February 2013. On August 2015 the case was sent to Rio de Janeiro, after res judicata of the decision that accepted the procedural issue presented by Gerdau. The demand was sent to the 7th Business Court of Law of Rio de Janeiro State/RJ, having the notary certified the existence of negative citations of some of the defendants. SUDFER was called up on November 16th, 2015, to manifest on the pending summons, the summons is not concluded so far. There was not yet the complete summoning of all the defendants in this suit. By the way, on 07.05.2017, it was published an announcement for the summoning of the Spoil of Wanderlei Viçoso Fagundes and Lauro Henrique Campos.

On January 8, 2018, it was decreed the default of the Defendants who were summoned by notice, however, it was granted them a Special Curator, as per Law. On 9, April 2018, it was published by decision for the parties to manifest if they have interest in the holding of a conciliation hearing, in addition, to specifying the evidence they intend to produce. On April 24, 2018, Vale

recorded petition informing that does have interest in a conciliation hearing,

as well as has no more evidence to be produced, as it is a matter of rights. On May 2, 2018, it was published decision determining the author part to manifest on the allegations presented by the defendants and is still within the term. Chances of loss Possible. Analysis of impact in the case of The eventual unfavorable decision in the case would bring to the company losing the suit / Reasons this case is financial losses and losses to its image. significant to the Company 4) Origin: process no. 0102696-23.2015.4.02.5101 Jurisdiction 32nd Federal Court Rio de Janeiro Instance 1st instance Date of filing 08/20/2015 Parties in the suit SUDFER (plaintiff) versus CVM, Vale S.A., Companhia Siderúrgica Nacional, Minerações Brasileiras Reunidas S.A. MBR, as well as some MRS officers and directors at the time of the events. Invaluable. Amounts, goods or rights involved Main facts SUDFER filed this suit with the purpose of declaring a mistrial in CVM case in the Administrative Process Involving Sanctions no. 14/2005 (related to the determination of supposed irregularities in the MRS tariff model and supposed abuse of monopoly power by the MRS controlling shareholders), which after being mistrialed will imply the prompt reopening of the said administrative process with CVM so that a new decision shall be rendered by the Board of the institution. The suit was filed in the year of 2015 only against CVM, however, on November 2016, the Judge ordered the inclusion of all legal and persons and entities involved as parties in CVM s administrative process as defendants in this suit. As a result, the process is currently in its stage of summons upon defendants. On September 21, 2017, a total of 18 defendants had already been served, with 15 defendants left to be served. As a result, SUDFER filed, and it was granted by the court, as per decision of February 06, 2018, the it should be supplied with new addresses resulting from searches at the INFOJUD/BACENJUD systems, due to the negative feedback of the service of process of several defendants. On March 06 and 07, 2018, the information withdrawn from the systems was rendered, but since then there has been no movement of the process by the Plaintiff. Chances of loss Invaluable. The prognostic is still under discussion. Analysis of impact in the case of Any unfavorable decision in the lawsuit would generate financial losses for losing the suit / Reasons this case is the company and its image. significant to the Company

5) Process no. 1:15-cv-09539

Notes

The said proceeding is already described in item 4.3 above. For information, see process information on Table 12 of subitem (iii) Civil of item 4.3 of this Reference Form.

4.4.1. Indicate the total amount provisioned, if any, of the proceedings described in item 4.4

On December 31, 2017, there was no amount provisioned for the proceedings mentioned on item 4.4 above.

4.5 Relevant confidential claims

1) Process no. 0393909-98.2012.8.19.0001

Amounts, goods or rights involved

Amount involved in the process according to the Company analysis of December 31, 2017: R\$119 million.

Discussion regarding the maturity of specific debentures. The claim was granted, against Vale s interests, the appellate decision was affirmed. An appeal was submitted to the appellate court.

Analysis of impact in the case of losing the suit

Any adverse decision in the process would generate financial loss for the Company.

4.6 - Publicly known and relevant repeated or related in-court, administrative or arbitration proceedings

The items below show a description of publicly known and relevant or related in-court, administrative or arbitration proceedings started until December 31, 2017. For information about relevant proceedings started after the aforementioned date, see item 4.7 in this Reference Form.

(i) Labor

In this section 4.6 in the Reference Form, the amounts of the proceedings of repeated or related in-court nature are highlighted. Considering the size of the Company, the number of employees and service providers and the number of employment claims, repeated proceedings were those that represent more than 5% of the total claims against the Company on December 31, 2017, which are described in the table below, namely: joint and several / secondary liability (12%); overtime (9%); hazard pay and premium for dangerous work (8%); commuting hours (8%); emotional distress (6%); injunction (6%) and penalties (5%).

Legal fact and/or cause	The most recurrent objects are secondary / joint and several liability, overtime, premium for dangerous work, hazard pay, commuting hours and penalty.
Amounts involved	R\$ 13.0 billion.
Company or its controlled company practice that caused such contingency	Difference of interpretation given by the Company, employees and unions to various facts, legal and regulatory instruments concerning the issues above.
(i) Tax	
Legal fact and/or cause	Collection of isolated penalties in the amount of 50% in the undue deduction of federal taxes.
Amounts involved	R\$ 408.8 million
Company or its controlled company practice that caused such contingency	In 2017, the Company received several Federal Revenue Service tax assessments imposing penalties for a supposed undue deduction of tax credits of our income tax payments (IRPJ) and contribution on net income (CSLL).
	In such cases, the Federal Revenue Service defended the Company s right to compensate such debts with certain tax credits and issued assessments imposing a penalty of 50% of the amount that was unreasonably deduced. On December 31, 2017, the total amount of the penalties imposed in these assessments was of R\$ 408.8 million, and new assessments are expected. The Company is challenging these assessments in administrative proceedings. These assessments encompass only the penalties resulting from the supposedly undue deductions, since the principal amount of unpaid taxes, interest, and other penalties for payment delay are being discussed in separated administrative proceedings. If the Company if recovers these separated administrative proceedings, the penalties shall be cancelled. The legal grounds for these penalties are being discussed by another company before the Federal Supreme Court (STF), and a favorable decision to this other company shall be applied to all other taxpayers, including the Company.

Discussion about the taxable base for the calculation of the Financial Compensation for the Exploration of Mineral Resources CFEM

Amounts involved	R\$ 7.3 billion (including interests and fines by December 31, 2017).
Company Practice or of its controlled company that caused such contingency	Vale is involved in several administrative and legal proceedings concerning the collection of CFEM credits. The proceedings have origin in notices of violation admitted by the National Department of Mineral Production - DNPM, a government agency under the control of the Ministry of Mines and Energy and involve discussions on the alleged difference in values resulting from tax deductions and travel expenses, arbitration and prescription term for collection, incidence of CFEM on pellets and on final client sales invoicing abroad and irretroactivity of IN 6/00.
	The collections of DNPM encompassed the collection period of up to 20 years before its issuances, under the interpretation that the applicable preemptive period for CFEM would be the one settled by the former Civil Code. The Company challenges all the collection on grounds that the applicable preemptive period would be 5 years.
	In the year 2012, the amounts analyzed by the Workgroup (composed of members of Vale and DNPM) went down, and in the year 2013, the Company paid values related to external transportation, not highlighted in the notes and not preempted, having been considered, at that time, the preemptive period of 5 years. In 2014, the Company withdrew from the provision the remaining discussed thesis (pellets, taxes, etc.), keeping only the external transportation not highlighted in notes and considered not preempted, this time considering the term of 10 (ten) years.
	On December 2015, the Federal Attorney General s Office (AGU) issued legal advice accepting recent decisions of the Superior Court of Justice (STJ), establishing that the CFEM charges are subject to the preemptive period of 10 years. The Company expects that DNPM revises all the ongoing charges, to exclude the preempted values, in accordance with this legal advice. This opinion is in compliance with recent decisions of the Superior Court of Justice (STJ) and the Company expects that the DNPN revises all the assessments to exclude the charges that preempted according to this opinion.
	Starting from 2016, Vale provided the payment of the difference of values relative to external transportation not highlighted in notes and not preempted, in view of the AGU opinion regarding the preemptive period of 10 years.
Fact and/or judicial cause	Debate about the taking of PIS and COFINS credits, in the years 2008, 2009, 2010 and 2011.
Amounts involved	R\$ 3.8 billion (December 31, 2017).
Company or its controlled company practice that caused such contingency	PIS and COFINS are social contributions of a tax nature due over the gross revenues of companies in general, which may be partially offset by credits resulting from PIS and COFINS payments made by the suppliers. The tax authorities claim that (i) some credits that the companies have deducted from their payments of PIS and COFINS were not deductible and that (ii) the right of use of tax credits was not properly shown. In this

	sense, tax assessment notifications that totaled R\$ 3.2 billion (Dec/17) to wrongly claim tax deductions of PIS and COFINS against Vale S.A. The RFB also demands the amount of approximately R\$ 600.00 million (Dec/17) in relation to the supposed PIS and COFINS debts of the further companies of the group (controlled or disinvested, whose liability remain under the responsibility of Vale S.A.).
Fact and/or judicial cause	ICMS charge in own transportation and penalty
Amounts involved	R\$ 917 million
Company or its controlled company practice that caused such contingency	Vale contests the charging of Tax on the Circulation of Goods and on Services (ICMS) and fine, supposedly due to Minas Gerais State, as applicable on the transportation of iron ore by Vale itself.
	Vale had a favorable decision, related to the charging of taxable events of 2009 and 2010, in the total amount of R\$ 608 million. The discussion continues regarding the fiscal years of 201 to 2013, in the total amount of R\$ 917 million In August 2017 a decision in favor of Vale regarding this proceeding was entered.
	In all cases, Vale defends that ICMS is not due since there is no provision of services to itself.
Fact and/or judicial cause	ICMS charge and fine
Amounts involved	R\$ 2.1 billion
Company or its controlled company practice that caused such contingency	Vale contests the charging of Tax on the Circulation of Goods and on Services (ICMS) and fine in several States. In these proceedings, the main claims of the tax authorities are: (i) undue credit of the tax (ii) non-compliance with accessory obligations (iii) tax charge in the acquisition of electrical energy and (iv) tax rate Differential (DIFAL).
(ii) Civil	
Fact and/or judicial cause	Twelve pension funds claim receipt of purges made because of inflation arising from economic plans called Plano Verão and Plano Collor on amounts paid under contracts for buying and selling gold concluded with Vale as of 1988. Today Vale lost 2 of these claims and has already paid terminating these claims, however, 10 (ten) claims are still active in the Brazilian courts.
Amounts involved	R\$ 213,737,677.97, corresponding to the total amount involved in the 10 ongoing claims in 12.31.2017.
Company or its controlled company practice that caused such contingency	The contingency has been generated according to the edition of economic plans called Plano Verão and Plano Collor, both created by the Federal Government, between 1989 and 1991. The contracts in discussion around these disputes were all paid by Vale and considered to be settled by the plaintiffs at the time. However, the plaintiffs filed a suit aimed at extending application of the decision on a matter judged in the STJ for saving accounts to contracts concluded with Vale. The Company maintains that repayment of inflationary purges is not due.

Fact and/or judicial cause	The demands refer to emotional distress and pecuniary damages resulting from the rupture of Barragem de Fundão, located in the Municipality of Mariana.
Amounts involved	Until December 31, 2017, Vale had been summoned in 8,598 demands fit in this category, and the amount involved is invaluable.
Company or its controlled company practice that caused such contingency	The demands plead emotional distress and / or pecuniary damages originated from Barragem de Fundão, located in the Municipality of Mariana, Minas Gerais State, property of Samarco Mineração S.A., company in which Vale holds 50% of capital share, with the remaining 50% held by BHP Billiton Brasil Ltda. (<u>BHPB</u>).

4.6.1. Indicate the total amount provisioned, if any, of the proceedings described in item 4.6

On December 31, 2017, the total amount provisioned, taking into consideration the proceedings described in subitems (i), (ii) and (iii) of item 4.6 above, was of R\$ 48.0 million.

(i) Labor

On December 31, 2017, the total amount provisioned, considered the labor processes that are relevant together, described in subitem (i) of item 4.6 above, was of R\$ 929 million.

(ii) Taxes

On December 31, 2017, there were no amounts provisioned to the taxes processes that are together relevant, described in subitem (ii) of item 4.6 above.

(iii) Civil

The total amount provisioned, considered the civil processes that are relevant together described in subitem (iii) of item 4.6 above, was approximately R\$ 48.0 million.

4.7 - Other relevant contingencies

Additional Clarifications to items 4.3 to 4.7

Vale is a defendant in several public interest civil actions filed by district attorneys in Minas Gerais and Espírito Santo by other authorities or civil associations that claim compensation for environmental damage as a result of the rupture of the Samarco dam. The relieves requested in these proceedings are generally similar to the complaints made in the public interest civil action filed by the Brazilian government (process No. 0069758-61.2015.4.01.3400) and by others and similar to the public interest civil action filed by the MPF (process No. 0023863-07.2016 .4.01.3800).

In 2017, the Superior Court of Justice (STJ) decided that the 12th Federal Court of Belo Horizonte is the court of competent jurisdiction to rule on all these public interest civil actions. All of these public interest civil actions were suspended while negotiating an agreement with the MPF, as discussed in item 4.7 below.

Vale has been appointed as defendant in several private actions, which are filed before different state and federal courts in the states of Minas Gerais and Espírito Santo, filed by individuals, legal entities, municipalities and other entities that seek remediation and compensation for environmental damages, pecuniary damage and emotional distress resulting from the rupture of the Fundão dam. These lawsuits include requests for significant amounts in damages, injunctions, confiscation of property, and freezing of our bank accounts. Vale has reconciled some of these cases and continues to defend itself in several others.

Samarco is involved in several other investigations and actions seeking compensation for damages resulting from the rupture of the dam. Immediately after the rupture in the dam, the environmental organ of the state of Minas Gerais and the DNPM (currently, ANM) began an investigation of the causes of rupture in the dam and determined the suspension of operations of Samarco, subject to the conclusion of these investigations.

Proceedings commenced after December 31, 2017

Fact and / or legal cause	Demands refer to emotional distress and / or pecuniary damages arising from reflexes caused by the rupture of the Fundão Dam located in the Municipality of Mariana.
Amounts involved	After December 31, 2017, Vale was summoned in 6,245 lawsuits in this category, also invaluable.
Practice of the Company or its subsidiary that caused such contingency	The lawsuits claim emotional distress and / or pecuniary damages arising from the Fundão Dam located in the Municipality of Mariana, in the State of Minas Gerais, owned by Samarco Mineração SA, a company in which Vale owns 50% of the capital stock, the remaining 50% held by BHP Billiton Brasil Ltda.

Terms Relating to the Rupture of the Samarco Dam

Term of Consent Decree within the scope of Public Interest Civil Action 0069758-61.2015.4.01.3400 (TTAC)

(a) Signatories

Samarco Mineração SA, Vale SA, BHP Billiton Brasil Ltda. (BHPB), Federal Union, States of Espírito Santo and Minas Gerais, Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), Chico Mendes Institute, National Water Agency (ANA), (FUNAI), State Forestry Institute

	(IEF), Mining Institute of Water Management (IGAM), State Environmental Foundation (FEAM), and State Institute of Environment and Water Resources, Institute of Agricultural and Forestry Defense of Espírito Santo and State Agency of Water Resources.
(b) Date of execution	03/02/2016
(c) Description of the facts that led to the execution of the term	The signatory authorities filed a Public Interest Civil Action (Process No. 0069758-61.2015.4.01.3400) against Samarco and its shareholders seeking compensation for alleged socioeconomic and socio- environmental damages resulting from the rupture of the Samarco tailings dam, as well as the adoption of a series of measures by Samarco and its shareholders in order to mitigate, repair and compensate for the damages allegedly arising from the said accident. For information on said Public Interest Civil Action No. 0069758-61.2015.4.01.3400, see item 4.3 of this Reference Form and for additional information regarding the accident, see items 4, 7.9 and 10.1 of this Reference Form.
	The value of the Public Civil Action set by its plaintiffs was R\$ 20,204,968,949.00. Following a series of negotiations between the authorities, Samarco, Vale and BHPB, the parties entered into TTAC, which provides for a long-term compensation and compensation plan in response to the event.
(d) Obligations assumed	According to the TTAC, on June 24, 2016, Samarco, Vale and BHPB established a Foundation, called Renova Foundation , which will develop and implement environmental and socio-economic programs to repair and compensate damages caused by the rupture of the Samarco dam (Foundation).
	The TTAC includes two broad types of programs:
	• Repair programs to restore the environment, local communities and social conditions in affected regions;
	• Compensation Programs to make up for damages in cases where redress is not possible and to provide funds for certain special projects, always acting in good faith.
	In addition, the activities of the Foundation are monitored by an independent external auditor.
	Samarco will fund the Foundation with contributions as follows (calendar year):

	• R\$ 2 billion in 2016, less the amount of funds already spent on or allocated to, remediation and compensation activities;
	• R\$ 1.2 billion in 2017; and
	• R\$ 1.2 billion in 2018.
	Samarco agreed on approved annual contributions necessary to carry out the repair and compensation projects for each fiscal year, and for the years 2019 to 2021 these contributions will be from R\$ 800 million to R\$ 1.6 billion.
	As of the signature of the TTAC, the Foundation will allocate an annual amount of R\$ 240 million, for a period of 15 years, for the execution of repairs and compensation projects. These annual amounts are already included in the contributions for the first six years. In addition, a contribution of R\$ 500 million will be made for the basic sanitation of the affected regions.
(e) Deadline, if any	The term of the TTAC is 15 years, renewable for periods of one year, successively, until all the obligations provided for in that term are fulfilled.
(f) Information on the conduct that is being adopted to comply with the obligations assumed in the term	Data and studies are already being evaluated and developed to comply with the TTAC.
(g) Consequences in case of noncompliance	Should Samarco fail to fulfill its obligation to provide resources to the Foundation, Vale and BHPB are required to provide resources to the Foundation in proportion to their 50% interest in Samarco.
(h) Other observations	Status of the Current Stage of TTAC s Proceedings
	The TTAC was approved by the Federal Regional Court of the 1st Region on May 5, 2016, and suspended the Public Interest Civil Action (Process No. 0069758-61.2015.4.01.34) highlighted above.
	Nevertheless, against the decision that approved the TTAC, the Federal Public Prosecution Office has filed foreclosure, questioning the jurisdiction of the Federal Regional Court of the 1st Region to approve the TTAC. In addition, the Federal Prosecution Office questioned the terms of the TTAC signed, regarding the adequacy of the measures established therein, as well as the legitimacy of the parties agreeing to the conclusion of the TTAC. It required, at this point, the granting of appeal against a nonunanimous appellate decision to the appeal and the suspension of the effectiveness of the decision.
	The Federal Prosecution Office also filed a complaint before the Superior Court of Justice (STJ)

against the decision of the Federal Regional Court of the 1st Region that approved the TTAC.

On June 30, 2016, the Justice-rapporteur of the complaint filed a preliminary injunction to suspend, until the final judgment of the complaint, the decision of the Federal Regional Court of the 1st Region (TRF), dated May 5, 2016, which approved the TTAC.

On August 17, 2016, the Fifth Panel of the Federal Regional Court of the 1st Region declared null and void the decision that approved the TTCA and denied the interlocutory appeals filed by Vale, BHP and Samarco, and maintained the preliminary decision rendered by the Court of the 12th Federal Court on December 18, 2015 in Belo Horizonte, which includes the unavailability of the Defendants mining concessions for the mining of ore, without, however, limiting its production and marketing activities.

The TTAC remains valid and the parties will continue to fulfill their obligations already provided for.

For information on Public Interest Civil Action No. 0069758-61.2015.4.01.3400, see item 4.3 of this Reference Form.

The TTAC does not automatically cover private civil actions, other public civil actions, or criminal charges.

Source: Public Interest Civil Action No. 0023863-07.2016.4.01.3800 Preliminary Consent Decree I (Preliminary Adjustment Term I)

(a) Signatories	Federal Prosecution Office, Samarco, Vale and BHPB
(b) Date of execution	January 18, 2017
(c) Description of the facts that led to the execution of the term	The Federal Prosecution Office filed the public interest civil action no. 0023863- 07.2016.4.01.3800, ongoing before the 12th Federal Court of Belo Horizonte against Samarco and its shareholders seeking compensation for alleged socioeconomic and socioenvironmental damages resulting from the rupture of the Samarco s tailings dam, as well as the adoption of a series of measures by Samarco and its shareholders in order to mitigate, repair and compensate for the damages allegedly arising from said accident. The value of the Public Interest Civil Action set by its plaintiffs was R\$ 155,052,000,000.00. After a
	series of negotiations among the authorities,

	Samarco, Vale and BHPB, the parties entered into the Preliminary Consent Decree I, whose purpose is to establish conditions and parameters for the hiring of a body of technical assistants who will assist the Federal Prosecution Office in a socio- environmental and socioeconomic diagnosis, as well as defining a specific timetable for holding public hearings and prior consultations with traditional populations. Financial guarantees were also provided to comply with the court order issued under the case no. 0069758-61.2015.4.01.3400.
	This Term of Commitment was approved on November 16, 2017, with MPF and MPMG, in order to include the hiring of Experts from the area of socioeconomics to: (i) elaboration of a socioeconomic diagnosis by Fundação Getúlio Vargas, (ii) provision of technical advisory services to those affected and coordination of public hearings by the Brazilian Fund for Human Rights and (iii) definition of mechanisms for participation and social control. All other clauses of the Preliminary Adjustment Instrument, including the guarantees, remained unchanged.
	Based on the addendum and the progress of the negotiations, the Parties requested the extension of the deadline for the conclusion of the Final Commitment Term and the hiring of Experts.
	On April 20, 2018, the trial of the case granted a new extension of time for conclusion of the Term of Final Commitment and hiring of Experts until the date of June 25, 2018.
(d) Assumed obligations	It was assumed by the contracting companies the obligation of fully funding the activities to be executed by the experts, advisors/technical assistants, as well as financing the socio- environmental and socio-economic reparation programs of the impacts resulting from the rupture of the Fundão dam.
	It was also assumed the obligation of promoting, at least, 11 public hearings, being 5 in the State of Minas Gerais and 3 in the State of Espírito Santo and one for each Indigenous Territory involved in the TTAC (Krenak, Comboios and Caieiras Velhas).
	The companies have committed to giving to the 12th Federal Court of Belo Horizonte guarantees for the accomplishment of the funding and financing obligations of the Programs for Socio- Environmental and Socio-Economic Reparation of the impacts resulting from the rupture of the Fundão dam, in the amount of R\$ 2.2 billion.

(e) Deadline, if any

See below the main deadlines:

• January 30, 2017 The companies will make available to the experts all the studies and research carried out so far for the evaluation of the impacts.

• Until February 10, 2017: Petitioning for requests of suspension in Court

• Until February 17, 2017: Completion of the hiring of the experts.

• Until March 15, 2017: Definition of schedule, technical support and methodology of public hearings and previous consultations.

• Until April 15, 2017: Conclusion of hearings and previous consultations.

• Until May 31, 2017: Meetings and diligences to define the final consent decree including the Government and, when possible or applicable, other branches of the Public Prosecutor s Office.

• Until November 27, 2017: Deadline for the execution of the final consent decree with the Getúlio Vargas Foundation and the Brazilian Fund for Human Rights.

• Until June 25, 2017: Deadline for the execution of the term of adjustment of final conduct and hiring of Experts of Socialeconomics.

Pursuant to this Preliminary Consent Decree, the schedule is subject to modifications, by reason of the negotiations with the Federal Prosecution Office.

This Preliminary Consent Decree I is being duly accomplished in the agreed form. The negotiations have been executed towards the signing of a final agreement.

Failure to comply with the deadline for concluding the hiring of experts, due to the exclusive fault of the companies, will imply a daily fine of R\$ 100,000.00, to be reverted to the hiring of the referred to experts.

The Preliminary Consent Decree I was ratified by the Judge of the 12th Federal Court of the Judicial District of Belo Horizonte on March 16, 2017.

(f) Information on the actions adopted to comply with the obligations assumed in the term

(g) Consequences in case of noncompliance

(h) Other observations

Origin: Public-Interest Civil Action no. 0010263-16.2016.4.01.3800

Preliminary Consent Decree for the Creation of the Reserve and Implementation of Socio-Economic and Socio-Environmental Measures in the area of Barra Longa (<u>Preliminary Consent Decree II</u>)

(a) Signatories	Federal Prosecution Office, Samarco, Vale and BHPB
(b) Date of execution	January 18, 2017
(c) Description of the facts that led to the execution of the term	The Public Prosecutor s Office of the State of Minas Gerais filed a public-interest civil action under no. 0010263-16.2016.4.01.3800, before the 2nd Civil Court of the Judicial District of Ponte Nova, later remitted to the 12th Federal Court of the Judicial District of Belo Horizonte, claiming for the adoption and funding, by Samarco, Vale and BHPB, of a series of measures to repair damages caused by the rupture of the Fundão Dam in the municipalities of Barra Longa, Rio Doce, Santa Cruz do Escalvado and Ponte Nova.
	Considering that Samarco, Vale and BHPB have agreed with the Public Prosecutor's Office of Minas Gerais to adopt certain measures to mitigate the impact of Fundão's rupture in the municipality of Mariana, the Federal Prosecution Office understands that the same measures should be implemented, as applicable, in Barra Longa and adjacent areas. In view of the foregoing, the signatory companies have agreed to adopt the measures described below in Barra Longa and adjacent areas.
(d) Assumed obligations	• Payment of emergency financial aid to the affected families, to be deducted from a possible future indemnity. In the event that a family unit has more than one economically active member, who is unable to continue his/her work, due to the rupture of the Fundão Dam, the amount will be paid to each one of them;
	• Payment of expenses related to residential rental for the dislodged families, as well as the providing of furniture, bedding, household appliances and utensils needed to maintain a decent life. This obligation shall survive until the final relocation;
	• Establishment of a communication channel that allows access to information in an assertive and agile manner;
	• Provision of health assistance to the affected families, providing, immediately, a team of health professionals, including medical doctors, nurses, psychologists and social workers, to provide care on all days of the week, in liaison with the Municipal Health Departments of the elected municipalities, as well as dispensing medicines and supplies necessary to the medical care, in accordance with the medical prescription

	of the above-mentioned health team, in a form supplementary to the Brazilian Universal Healthcare Program SUS;
	• Promote the rescue of assets, animals and other, including those belonging to the affected persons, that could be given back;
	• Hiring independent multidisciplinary advisory services, with recognized experience and reputation in the area, chosen by the community and with the participation of the Public Prosecution Office, with the aim at monitoring the implementation of the programs and providing the affected families with technical and legal support;
	• Reconstruction of rural infrastructure; and
	• Registration of those affected, subject to review, in case of failures or gaps identified by the technical advisors and agreed by the parties.
	The companies have committed to creating a reserve in the amount of R\$ 200 million on behalf and under the management of the companies or of third parties freely identified by them, with the purpose of funding and financing the Socio- Economic and Socio-Environmental Reparation Programs in Barra Longa and adjacent areas.
(e) Deadline, if any	The companies agreed, within a maximum period of 15 days, counted from the signature of this Preliminary Consent Decree II, to start the necessary provisions for the execution of the measures.
	The amounts of R\$ 200 million will be contributed, in advance, with information to the Federal Prosecution Office, by the companies within 90 days after acceptance of the guarantees provided for in the Preliminary Consent Decree I signed with the Federal Prosecution Office, on the same date.
	The amounts of R\$ 200 million will be contributed according to the following schedule: (i) R\$ 50 million until February 28, 2017; (ii) R\$ 100 million until March 31, 2017; and (iii) R\$ 50 million until April 30, 2017.
	Failure to comply with the deadlines defined herein shall imply a daily fine of R\$ 100,000, to be reverted to the accomplishment of the purpose of this Term of Commitment Agreement.
	The companies will submit to the Federal Prosecution Office, within 30 days, a detailed report

of the measures that are planned or being implemented in Barra Longa and its adjacent areas.

This Preliminary Consent Decree II is being duly accomplished in the agreed form.

Failure to comply with the defined deadlines shall imply a daily fine of R\$ 100,000.00, to be reverted to the accomplishment of the purpose of this Preliminary Consent Decree II.

The Preliminary Consent Decree II was ratified by the Judge of the 12th Federal Court of the Judicial District of Belo Horizonte. The confirmatory decision was published on March 23, 2017.

Consent Decrees and Relevant Terms of Commitment Agreement

(f) Information on the actions

obligations assumed in the term

(g) Consequences in case of non-

adopted to comply with the

(h) Other observations

compliance

1) Term of Cooperation not arising from Legal / Administrative Proceeding

Origin: Terms of Commitment Agreement signed with the Indigenous Land Community (TI) Mãe Maria

(a) Signatories	Mpakwyri Mpawor Indigenous Association, Gaviao Je Amjip Indigenous Association, Parkrekapare Association, Je Jokrityiti Association, Te Mempapytarka Indigenous Association, Parkateje Amjip Indigenous Association and Vale
(b) Date of the execution	05/19/2015; 05/29/2015; 05/26/2015; 05/07/2015; 04/01/2015; 05/01/2015.
(c) Description of the facts that led to the execution of the term	Based on its social responsibility policy, Vale already had Terms of Commitment Agreement signed with the indigenous people who live in TI Mãe Maria, whose validity expired in 2012. So, due to the influence of the Carajás Railroad (<u>EFC</u>) on this community, Vale decided to keep the transfer of funds intended to meet the emergency needs of the members of the community, ensuring the execution of the study of the Indigenous Component and of the Basic Environmental Plan (<u>PBA</u>), documents required for the licensing process of the Carajás Railroad expansion, now counting on the participation of FUNAI, which is assisting the communities in the management of the funds.
(d) Assumed obligations	Make financial transfers for the support of the actions of health, education, productive activities, territory surveillance and administration. In exchange, the indigenous communities undertook not to stop any productive activity or to invade Vale s properties, in particular EFC, as well to authorize the study of the Indigenous Component and of the PBA, documents required for the approval of the licensing process of the EFC expansion project.
(e) Term, if any	Various deadlines, due in 2020, at which time the Study of the Indigenous Component and the PBA would be concluded.
(f) Information on the actions being adopted to comply with	The Community Relations Board has focal points that monitor compliance with the obligations

the obligations assumed in the established in the Terms of Commitments, in particular the transfer of financial resources. term

(g) Consequences in case of noncompliance Non-compliance with the indigenous part may result in the suspension of the transfer of resources and health care. If Vale is responsible for the non- compliance, this creates the risk that the indigenous people will promote actions that may stop or interfere with the activities of the Company or its subsidiaries, such as demonstrations that imply the stoppage of the EFC, adversely affecting the EFC s rail operations. These demonstrations also tend to have repercussions on the lack of liberation, by the indigenous people, of the access of Vale s teams or contractors who carry out studies related to the environmental licensing processes and the execution of actions related to the fulfillment of conditions, and may be characterized as a failure to comply with the environmental licenses granted by the environmental body and weaken the position of Vale or its subsidiaries at an institutional level, without mentioning the executive measures to be taken by MPF, IBAMA, FUNAI and other entities involved in the protection of indigenous rights.

2) 2nd Amendment to the Term for the Promotion of Sustainable Development, formalized with FUNAI and the Krenak People, effective from 2011 to 2019, this term being an addendum to the Agreement that finalized Public Civil Action no. 2006.38.13.009676-0

Source: Authorized agreement that extinguished the Public Civil Action filed by MPF and FUNAI against CEMIG - Companhia Energética de Minas Gerais, CVRD - Companhia Vale do Rio Doce and CHA - Aimorés Hydroelectric Consortium (<u>Public Civil Action</u> and <u>Agreement</u>), respectively). Following the termination of the Agreement, on November 30, 2011, the Company freely offered to formalize the following documents: (i) Term to Promote the Sustainable Development of the Krenak Indigenous Land (<u>Term of Development</u>), (ii) First Amendment to the Term of Development and (ii) Second Amendment to the Term of Development.

(a) Signatories	 a) Agreement - MPF, FUNAI, CEMIG - Companhia Energética de Minas Gerais, CVRD - Companhia Vale do Rio Doce and CHA - Aimorés Hydroelectric Consortium;
	b) Term of Development - Vale, Krenak Indigenous People, FUNAI and MPF;
	c) First Amendment to the Term of Development - Vale, Krenak Indigenous People, FUNAI and MPF;
	d) Second Amendment to the Term of Development - Vale, Krenak Indigenous People and FUNAI
(b) Date of execution	(a) Agreement - executed on 07/18/2008 - effective from 07/18/2008 to 11/30/2011
	(b) Term of Development - executed on 10/24/2011 - effective from Dec/01/2011 to Jun/01/2012
	(c) First Amendment to the Term of Development - executed on May/03/2012 - effective from Dec/01/2011 to Dec/01/2013*

	(d) Second Amendment to the Term of Development - executed on 03/27/2015 - effective from Dec/01/2011 to Dec/01/2014 *
	*The amendments above change clauses of the original Term of Development, producing retroactive effects. Therefore, their respective validity should be considered as of Dec/01/2011, the effective date of the Term of Development.
(c) Description of the facts that led to the execution of the term	The homologation of the Agreement terminated the Public Civil Action, filed by the MPF and FUNAI, the objective of which was to implement measures to mitigate and compensate for the implementation of the Aimorés Hydroelectric Power Plant. The objective of the formal Agreement was to provide environmental, social and economic assistance through the recuperation of 54 hectares of green area, the construction of 5 cultural centers and the implementation of a dairy cattle project. After the termination of the Agreement, at the free will of the Company, and to maintain the support of and Vale s relationship with the Krenak People, new terms were formalized, maintaining the Company s assistance to the ethno-development of the indigenous people. The instrument currently in force is the Second Amendment to the Term of Development.
(d) Obligations assumed	Provide financial and technical support for a dairy farming project.
(e) Deadline, if any	(a) Agreement - 07/18/2008 to 11/30/2011 - executed on 07/18/2008
	(b) Term of Development - Dec/01/2011 to Dec/01/2012 - executed on 10/24/2011
	(c) First Amendment to the Term of Development - Dec/01/2011 to Dec/01/2013* - executed on May/03/2012
	(d) Second Amendment to the Term of Development - Dec/01/2011 - Dec/01/2019* - executed on 03/27/2015
	*The amendments above change clauses of the original Term of Development, producing retroactive effects. Therefore, their respective validity should be considered as of Dec/01/2011, the effective date of the Term of Development.
(f) Information on the actions adopted to comply with the obligations assumed in the term	The Community Relations Board has a focal point that monitors compliance with the obligations established in the Second Amendment to the Term of Development.
(g) Consequences in case of non- compliance	Non-compliance by the indigenous people of the Second Amendment to the Term of Development may result in the suspension of the transfer of resources. If the non-compliance is attributed to Vale, there is a risk that the indigenous people may promote actions that stop or interfere with the activities of the Company or its subsidiaries, such as demonstrations that imply the stoppage of the

Vitória-Minas Railroad (EFVM), adversely affecting the EFVM railway operations. These demonstrations also tend to have repercussions on the lack of liberation, by the indigenous people, of the access of Vale s teams or contractors who carry out studies related to the environmental licensing processes and the execution of actions related to the fulfillment of conditions, and may be characterized as a failure to comply with the environmental licenses granted by the environmental body and weaken the position of Vale or its subsidiaries at an institutional level, without mentioning the executive measures to be taken by MPF, IBAMA, FUNAI and other entities involved in the protection of indigenous rights.

3) Judicial Agreement	
Origin: Case no. 21337.52.2011	
(i) Signatories	Vale, MPF, Palmares Cultural Foundation, National Institute of Colonization and Agrarian Reform and IBAMA.
(ii) Date of execution	Mar/08/2012
(iii) Description of the facts that led to the execution of the term	Complaint from the MPF regarding the insufficiency of Vale s environmental study, which subsidized the licensing process for the Carajás Railroad expansion project, alleging a lack of effective diagnosis of the impacts upon the two quilombola communities (descendants of Afro-Brazilian slaves) located in the State of Maranhão.
(iv) Obligations assumed	(i) The transfer of the amount of R\$ 700,000.00, in favor of the Palmares Foundation, to enable the construction of health and educational centers; and (ii) Preparation of a study on local environmental impacts, recovery of water courses and installation of viaducts in the next four years, according to a schedule defined in a legally binding agreement.
(v) Deadline, if any	Sparse deadlines, with obligations to be met until the end of the installation project for the expansion of the Carajás Railroad. Among them, we may highlight (i) the transfer of R\$ 700,000.00 in favor of the communities, which is necessary to pay for the acquisition and construction of social devices by the community and the Palmares Foundation; (ii) performance of an environmental study already carried out and adoption of measures to mitigate the impacts generated by the Company s works and operations in the region; (iii) construction of four viaducts in favor of the communities involved in the agreement, which construction deadlines will unfold over four years and (iv) improvement of current level crossings, until all viaducts planned for construction in the region are consolidated. These commitments are being executed.
(vi) Information on the behaviors that is being adopted to comply with the obligations assumed	The General Management of Project Relations, subordinated to the North Logistics Projects Office DIPL , has focal points in the areas of

in the term	engineering and relations with communities that monitor the fulfillment of the activities developed by Vale. The obligations and deadlines involved are duly related in the item above.
(vii) Consequences in case of non- compliance	The MPF may request that the Company be compelled to comply with the assumed obligations, under penalty of fine to be defined by the competent federal court.
(viii) Other observations	Vale has already deposited the amount established in the agreement, as well as completed the construction of two viaducts, which were passed on to the Municipal Governments. The two other viaducts are underway and scheduled for delivery in 2017 and 2018.

4) Term of Cooperation not arising from Legal / Administrative Proceeding

Origin: Terms of Commitment signed with Indigenous Communities in Maranhão.

(i) Signatories	Vale, Guajajara Indigenous Community of the Caru Indigenous Land, Guajajara Indigenous Community of the Rio Pindaré Indigenous Land, Ka apor Indigenous Community of the Alto Turiaçu Indigenous Land, Awá Indigenous Community of the Caru, Awá and Alto Turiaçu Indigenous Lands and Brazilian Indian Foundation FUNAI.
(ii) Date of Execution	20/02/2017
(iii) Description of the facts that led to the execution of the term	Based on its social responsibility policy, Vale already had Terms of Commitment entered into with the indigenous peoples whose indigenous lands are close to the Carajás Railroad (EFC). Due to the influence of the railroad on these communities, Vale decided to maintain the transfer of financial resources destined for the application in strategic actions of territorial protection, preservation and conservation of natural resources, economic sustainability and income generation, cultural strengthening, institutional strengthening, health, education, citizenship, basic sanitation and infrastructure, with observance of what was approved by the Fiscal Council constituted to monitor the application of the resources, counting on the participation of FUNAI, which is assisting the communities in the administration of the amounts received.
(iv) Assumed obligations	Transfer of financial resources destined for the application in strategic actions of territorial protection, preservation and conservation of natural resources, economic sustainability and income generation, cultural strengthening, institutional strengthening, health, education, citizenship, basic sanitation and infrastructure, with observance of what was approved by the Fiscal Council constituted to monitor the application of the resources.
(v) Deadline, if any	Deadline of 10 years.
(vi) Information on the behaviors that is being	The Community Relations Board has focal points that monitor compliance with the obligations

adopted to comply with the obligations assumed in the term

(vii) Consequences in case of non-compliance

established in the Terms of Commitments, in particular the transfer of financial resources.

Non-compliance with the indigenous part may result in the suspension of the transfer of resources. If Vale is responsible for the non-compliance, this creates the risk that the indigenous people will promote actions that may stop or interfere with the activities of the Company or its subsidiaries, such as demonstrations that imply the stoppage of the EFC, adversely affecting its rail operations. 5) Term of Environmental Commitment: TCA of Itabirito Peak Source: Public Civil Investigation no. 319.02.0001-8 MPMG

(a) Signatories	Minerações Brasileiras Reunidas S.A. MBR, Vale SA, State Prosecution Office MG, State Forestry Institute, Minas Gerais State Secretariat for the Environment and Sustainable Development, and Anglogold Ashanti Brasil Mineração Ltda.
(b) Date of the execution	09/07/2010
(c) Description of the facts that led to the execution of the term	Term signed for the environmental and landscape rehabilitation of the Itabirito Peak protection of cultural heritage area and the area covered by the Trincheira e Mina Velha waste dumps. Adoption of measures to preserve the Cata Branca Historic and Archaeological Site.
(d) Assumed obligations	i) Execute a Rehabilitation Project according to the environmental agencies;
	ii) Perform the continuous follow-up and monitoring of the implementation of the Project;
	iii) Develop a Heritage Education Project;
	iv) Carry out the enclosure of the Cata Branca Mine Archaeological Site and indicative, and interpretative signaling of the area;
	v) Present the enclosure and signaling project to the IEF and IPHAN for approval;
	vi) Prepare the geo-referencing of the area;
	vii) Allow the IEF unrestricted access without cost and without any encumbrance to the area mentioned in item (iv) above, as well as authorize the interventions and constructions intended for the implementation, construction and maintenance of the Conservation Unit, free of charge of any burden, provided that such interventions do not imply, in any way, the restriction of the use of their mining rights, observing the provisions of the agreement.
(e) Deadline, if any	The maximum deadline for the total execution of the rehabilitation project, which may be extended by submitting technical justifications accepted by the Federal Prosecution Office or in case of force majeure or fortuitous event, was 5 years, counted from September 1, 2010, having been met by the Company.
(f) Information on the actions being adopted to comply with the obligations assumed in the term	Procedures for the recovery of the areas in progress, with execution of enclosure and signaling of the archaeological site, environmental and heritage education programs, and execution of environmental rehabilitation project of the Itabirito Peak area. The TAC has been fully complied with.
(g) Consequences in case of non-compliance	Fine of R\$ 2,500.00/day of delay and execution of the agreed and non-complied part.
(a) Signatories	Minerações Brasileiras Reunidas S.A. MBR, Vale SA, State Prosecution Office MG, State Forestry Institute, Minas Gerais State Secretariat for

the Environment and Sustainable Development, and Anglogold Ashanti Brasil Mineração Ltda.

6) Consent Decree Term no. 118/2015

Origin: Public Civil Investigation no. 3212.2014.03.000/9-12	Regional Labor Attorney of the 3rd Region / MG Minas Gerais
(a) Signatories	Labor Federal Prosecution Office and Vale S.A.
(b) Date of the execution	31/07/2015
(c) Description of the facts that led to the execution of the term	The alleged work practice to analogous that of slave work practiced by Vale s contractor, Ouro Verde Locação e Serviços S/A. For further information, see sub-item (i) of item 4.3 of this Reference Form.
(d) Assumed obligations	The preventive and corrective measures have been adjusted to guarantee the labor rights of the employees of the service providers, especially regarding the sanitary conditions of their facilities, and to promote decent work, and elimination of all forms of forced labor or labor that is analogous to slave labor. The commitments undertaken have been properly implemented.
(e) Deadline, if any	Undetermined term in the absence of a different provision.
(f) Information on the actions being adopted to comply with the obligations assumed in the term	From the second half of 2015, Vale promoted several training sessions with the company s managers, in the same State, in order to inform them of the obligations assumed by Vale. There was guidance for the inclusion of a specific standard clause in the contracts signed by the company, providing for its resolution in the event of the use of child labor or slave labor by the contractor or any situation that may characterize an attack on human dignity.
(g) Consequences in case of non-compliance	R\$ 20,000.00 per item not complied with, up to the limit of R\$ 500,000.00
(h) Other observations	The Consent Decree Term, in addition to avoiding a possible lawsuit by the Federal Prosecution Office, allows Vale to objectively demonstrate the adoption of preventive and preventive measures to exploit degrading or slave-like labor in its productive chain, proving the fulfillment of the National Pact to Combat Slave Labor signed by it.

7) Camburi Passive Term of Environmental Commitment (TCA)

(a) Signatories	Vale S.A., Federal Prosecution Office (MPF), Prosecution Office of the State of Espírito Santo(MP/ES), State of Espírito Santo, State Secretariat for the Environment and Water Resources (SEAMA) and State Institute of Environment and Water Resources (IEMA), Vitória Municipality and Vitória Municipality Secretariat of Environment (SEMMAM).
(b) Date of the execution	16/03/2017.
(c) Description of the facts that led to the execution of the term	TCA entered into between Vale SA, MPF, MP/ES, Espírito Santo State, SEAMA, IEMA, Vitoria Municipality and SEMMAM, which consists of the execution of the action plans that allow full compensation and recovery of the Camburi beach northern region.

(d) Assumed obligations and deadlines

• Specific monitoring of the beach intervention area: execution, after IEMA and SEMMAM approval, of the environmental monitoring program of the northern region of Camburi Beach, contemplating the actions of adequate monitoring of the involved environmental compartments (water, sediment and biota) of the body of interest and ecosystems of the Bay of Espirito Santo, with systematic documentation of the development of the actions and evaluation of trends and possible deviations in the execution of the proposed activities, anticipating and predicting the possibilities of reaching the objectives and recommending corrective and preventive actions for the adjustment or replanning, under supervision by IEMA and SEMMAM, with the following actions:

• Approval by IEMA, after SEMMAM, of the monitoring plan for water, sediment and biota of the body of interest and ecosystem of the Bay of Espírito Santo presented by Vale on Dec- 07-2015. Deadline: 30 days from the date of signing of the TCA; and

• Beginning of execution of the monitoring plan. Deadline: 6 months, from the approval of the monitoring plan by IEMA.

• Restoration of the emerged shoreline, by surface removal of sediments with iron from the emerged region and recovery (pedological, vegetative with native and landscape species) of the object area of this Term, with the following actions:

• Mapping and identifying the limits of the Coastal Park, in the Atlantic Park area, without prejudice to the creation of a future conservation unit in the area. Deadline: 4 months, from the signing of the TCA;

• Elaboration and presentation of methodology for the execution of sediment removal and recovery of the area. Deadline: 6 months, from the signing of the TCA; and

• Implementation of the project of removal and recovery of the area. Deadline: as defined by the plan for the removal and recovery of the area approved by IEMA and SEMMAM.

• Compensatory measures for environmental recovery through the implementation of actions for protection the ecosystem and revitalization, with the following actions:

• Elaboration of the implementation project of the Coastal Park in compliance to the proposal demand for a future use of the northern region of Praia de Camburi to be recovered:

• Definition of objective, scope and premises of the project by the Municipal Government of Vitória together with Vale. Deadline: 4 months, from the signing of the TCA;

• Hiring, by Vale, of a company for the elaboration of the project. Deadline: to be defined by Vale;

• Elaboration and presentation of the project with executive schedule. Deadline: to be presented by Vale after completion of the item above;

• Hiring of a company for the implementation of the work. Deadline: to be presented by Vale; and

• Implementation of the work. Deadline: to be presented by Vale, after completion of the item above.

• Elaboration of the project and implementation of the leisure area Zé da Bola Park:

• Definition of objective, scope and premises of the project by the Municipal Government of Vitória together with Vale. Deadline: 4 months, from the signing of the TCA;

• Hiring, by Vale, of a company for the elaboration of the project. Deadline: to be presented by Vale, after completion of the item above

• Elaboration of the project, with executive schedule. Deadline: to be presented by Vale, after completion of the item above

• Hiring of a company for the implementation of the work. Deadline: to be presented by Vale after the concussion of the item above; and

• Implementation of the work. Deadline: to be presented by Vale after completion of the item above.

• Elaboration of the project and implementation of the physical protection of the restinga vegetation of the shoreline of the beach of Camburi:

• Definition of objective, scope and premises of the project by the Municipal Government of Vitória together with Vale. Deadline: 4 months, from the signing of the TCA;

• Hiring, by Vale, of a company for the elaboration of the project. Deadline:

to be presented by Vale after completion of the item above;

• Elaboration of the project, with executive schedule. Deadline: to be presented by Vale after completion of the item above;

• Hiring of a company for the implementation of the work. Deadline: to be presented by Vale after completion of the item above; and

• Implementation of the work. Deadline: to be presented by Vale after completion of the item above.

• Additional measures to environmental recovery, through the elaboration of a technical cooperation agreement, with the following actions:

• Elaboration of a technical cooperation agreement between Vale and SEMMAM to elaborate the necessary studies for the recovery of the erosion of the southern portion of the Camburi beach. The studies will be funded by Vale. Deadline: 6 months, from the signing of the TCA.

• Social mobilization, through the disclosure and promotion of the enterprise, so that, in a transparent way, actions are presented for the socio-environmental development of the region, as well as for mitigation of the environmental impacts caused by the works, with the following actions:

Elaboration and presentation, for approval by the IEMA and SEMMAM, of the Communication Plan. Deadline: 3 months, from the signing of the TCA; and
 Implementation of the Communication Plan. Deadline: 6 months, from the approval by IEMA and SEMMAM, and execution as defined by the communication plan to be approved.

(e) Information on the actions adopted to comply with the obligations assumed in the term	The TCA is being fully complied with.
(f) Consequences in case of non- compliance	In case of non-compliance with its obligations, Vale shall be notified, within thirty (30) days, to remedy such non-compliance, under penalty of a compensatory daily fine of R\$ 5,000.00 (five thousand reais), per day of delay in the compliance with each obligation, amounts that will be allocated 50% (fifty percent) to the State Fund for the Environment (FUNDEMA), established by the State Complementary Law No. 513, of December 11th, 2009, and 50% (fifty per cent) to the Municipal Environmental Fund (FUNDAMBIENTAL), established by the Municipal Law of Vitória no. 7,876, of January 12th, 2010.

8) Preliminary Atmospheric Environmental Commitment Term (TCAP)

(a) Signatories

(b) Date of the execution

(c) Description of the facts that led to the execution of the term $\label{eq:Vale S.A., Federal Prosecution Office (MPF) Prosecution Office of the State of Espírito Santo(MP/ES), State of Espírito Santo, State Secretariat for the Environment and Water Resources (SEAMA) and State Institute of Environment and Water Resources (IEMA).$

Nov-13-2017.

TCAP, executed between Vale SA, MPF, MP/ES, State of Espírito Santo, SEAMA and IEMA with the purpose of listing preliminary and preparatory measures, by mutual agreement and by mutual concessions, in order to guarantee the control of atmospheric emissions in what concerns them, and to identify additional measures that prove to be adequate and effective and which may contribute to the improvement of the air quality of the Metropolitan Region of Greater Vitória, which may be, timely, the subject to a possible Environmental Commitment Term. For the execution of the subject of the TCAP, the CETESB was hired by IEMA to perform the technical analysis that proposes a set of measures to reduce and verify the emission rates of atmospheric pollutants in the Tubarão Industrial and Port Complex.

The CETESB report was delivered on May 22, 2018, and the parties will have 15 days to bring their considerations and eventual requests for correction to CETESB. After this period, CETESB will have 15 days to consider the considerations and eventual requests to correct the report to be carried out by Vale, and complete the final document.

(d) **Obligations assumed**

by Vale and deadlines

• Industrial test implementation of the selective switching methodology: unprecedented worldwide technology, developed through a partnership with UFES, which aims to increase the dust removal efficiency released by the electrostatic precipitators installed in the pelletizing plants. Deadline for implementation and efficiency evaluation tests: 24 months, from September 2017;

• Implementation of a project to reduce material fall in pelletizing plants. Deadline for implementation: December 31st, 2020;

• Upgrading rating of the aspersion system of the car dumpers. Deadline for installation: December 31st, 2017;

• Implementation of new polymers application systems. Deadline for equipment development and start-up: December 31st, 2017;

• Closure of gaps (openings) in the wind fences installed in ore, coal and pellet storage yards. Deadline for implementation: December 31st, 2020;

• Lateral closing of pelletizing plants. Deadline for implementation: December 31st, 2018;

• Lateral closing of the pier carriers I. Deadline for implementation: December 31st, 2017;

• Environmental improvements at Pier II. Deadline for implementation: December 31st, 2017;

The TCAP is being fully complied with.

• Improvements in mist cleaning and aspersion systems at Pier I. Deadline for implementation: December 31st, 2018; and

• Installation of mist guns in pelletizing plants. Deadline for implementation: December 31st, 2018.

(e) Information on the actions adopted to comply with the obligations assumed in the term (f) Consequences in case of noncompliance In the event of unjustified non-compliance with the obligations assumed in the TCAP, provided that it has been established that the default occurred due to Vale s sole fault, the MPF and the MP/ES shall notify the company so that any non-compliance is remedied and/or justified within 30 days , under penalty of the imposition of a fine of R\$ 10,000.00 (ten thousand reais), per day of delay, within a maximum limit of R\$ 100,000,000.00 (one hundred million reais), for all possible non-compliance with the obligations agreed upon. The amounts of any penalties will be allocated as follows: 40% to the State Environmental Fund (FUNDEMA), established by State Complementary Law No. 513, dated December 11, 2009; 30% to the Municipal Environmental Fund (FUNDAMBIENTAL), established by Municipal Law of Vitória No. 7,876, dated January 12, 2010, and 15% to the Municipal Environmental Funds of the Municipalities of Vila Velha e Serra.

4.8 Rules of the country of origin and the country in which the securities are held in custody

Not applicable to the Company, considering that it is not a foreign issuer.

5. The policy to manage risks and internal controls

5.1 - The policy to manage risks and internal controls in relation to the risks indicated in item 4.1

a. If the Company has a formal market risk management policy, highlight the body that approved it and the date it was approved, and, if not, state why the company has not adopted such a policy

The Company understands that effective risk management is fundamental to support the achievement of its objectives and to guarantee the Company s soundness and financial flexibility and the business continues as a going concern. As such, it has developed its risk management strategy in order to provide an integrated view of the risks to which it is exposed.

The guidelines and instructions for the corporate risk management strategy are set out in the Company s Corporate Risk Management Policy, originally approved by the Board of Directors on December 22, 2005 and amended on August 25, 2011. The Company s Corporate Risk Management Policy is in process of revision and update by the Company.

b. Objectives and strategies of the risk management policy, if any, including:

The Company s Corporate Risk Management Policy is based on the following principles: (i) support the growth plan, strategic planning and business continuing as a going concern; (ii) strengthen the capital structure and asset management; (iii) allow an adequate degree of flexibility in financial management; and (iv) strengthen Vale s corporate governance practices.

Among the guidelines set out in this policy, the following should be highlighted:

• Measure and monitor the Group s corporate risk on a consolidated basis, considering the diversification effect, when applicable, in business group.

• Evaluate the impact of new investments, acquisitions and divestments on the Group s corporate risk profile.

• Adapt the Group s corporate risk profile to the needs of its growth plan, its strategic planning and its business to continue as a going concern.

Risks for which protection is sought

i.

Based on the referred to policy and organizational structure of internal controls, in conjunction with the business and support areas, the Company seeks to protect the main risks that may adversely and relevantly impact the objectives set by the Company s top management, its reputation as well as its financial and operating results, which are described in item 4.1 of this Reference Form, among which the following is highlighted:

(i) risks that may impact the Company s operations, in particular relating to events, whether due to force majeure or arising from the ordinary processes of the Company and its subsidiaries that may impact its production process and the use of installed capacity;

(ii) risks associated with the Company s strategic decisions to achieve its objectives and/or arising from the Company s ability to protect or adapt to changes in the mining sector, in particular regarding the demand for its products, the Company s capital structure and performance in different markets;

(iii) risks of legal or regulatory sanctions, legal proceedings against the Company and its subsidiaries, where a loss or the application of penalties, may impact the Company in a relevant manner, from a financial or operational point of view or damage its image;

(iv) risks of stoppages to project activities of the Company and its subsidiaries due to the non-acquisition or non-renewal of regulatory licenses, including but not limited to environmental licenses;

(v) risk of increases in the costs of the Company s operations, not only due to market conditions but also due to legal and regulatory changes in the locations where the Company operates;

(vi) risks associated with the lack of consistency and adequacy of the systems and control of Company operations and projects, including, but not limited to, information systems, as well as to failures in the management of the Company s internal controls.

ii. Instruments used for protection

Risk management is the structured approach that Vale uses to manage the uncertainty related to the possible inadequacy or deficiency of internal processes, as well as to people, systems and external events, in accordance with the principles and guidelines of ISO 31000. Internal events consist of flawed or inadequate internal systems, people and processes, while external events include natural or operational disasters caused by third parties, regulatory, political, economic, or social measures taken by governments or other important stakeholders.

The Company minimizes operational risks through new controls and improving existing ones, new plans to mitigate risk and transfer the risk through insurance.

Key risks are monitored periodically, as well as the effectiveness of their key prevention/mitigation controls and the implementation of their treatment strategies. As such, Vale seeks to have a clear view of its main risks, acting on them in a systematic manner through the adoption of protection or mitigation measures, among which are, for example:

- (i) definition of indicators and parameters for risk monitoring purposes;
- (ii) development of technological solutions to optimize the Company s processes;
- (iii) investments in training Company employees engaged in the planning and execution of their projects;
- (iv) adoption of measures to improve efficiency in the licensing processes of their projects, in order to avoid delays

and stoppages, for example, (a) promote greater integration between environmental teams and project development, (b) develop a Guide for Best Practices for Environmental Licensing and the Environment, (c) set up teams of highly qualified specialists, (d) encourage greater interaction with environmental agencies;

(v) Continuous improvement of the Company s health and safety management systems as well as the ongoing dissemination of information and prevention campaigns in the Company to improve employees health and safety standards;

(vi) control and manage environmental liabilities in its units, as well as the application of corrective measures aimed at mitigating the risks and eliminating environmental liabilities;

(vii) prepare environmental studies aimed at limiting the extent of environmental degradation and the potential risks to health and the environment;

(viii) choose highly-rated partners and maintain a long-term and fair relationship with its main suppliers, customers and partners in the Company s joint ventures. For information on counterparty credit risk control, see item 5.6 of this Reference Form;

(ix) manage an energy portfolio, operated by associated companies, composed of self-producing hydroelectric plants and long-term supply contracts, based on the current and anticipated energy needs of its mining operations, in order to mitigate the risk of increased costs and/or lack of energy;

(x) emphasis on cost reduction, capital discipline, liability management, working capital management and divestitures;

(xi) in order to mitigate risks related to extraction, (a) the detention of (an extensive base of assets and high quality business in which it operates, without solely and exclusively relying on certain mines (b) substantial investment in mineral exploration, since, by carrying out more sampling, it reduces the risk with reserve estimates , (c) continuous replenishment of its reserve base by means of new projects to avoid depletion of mines; (d) diversification of its operations in different geographical locations and by extracting various types of minerals;

(xii) adoption of controls and mechanisms to detect control failures and obtain information on cases of breach of conduct, especially through the Ethics Channel and Ombudsman;

(xiii) systematic monitoring of changes in government and regulatory policies in the sector to react quickly and timely to these changes, as well as, where applicable, participate in discussions regarding such changes through entities representing the mining sector, in which it participates;

(xiv) promote its activities in a responsible manner in all the locations in which it is present, aiming to respect the communities and the environment;

(xv) continuous monitoring of the Company s contingencies and lawsuits, making every effort to defend the lawsuits in which the Company and its subsidiaries are a party;

(xvi) adoption, in situations of crisis and disaster, measures that include (a) plans for the business to continue as a going concern that include immediate response to protect people, assets and the Company s image, (b) alternative solutions to guarantee the business continues as a going concern and quickly return to normal production flow and

(c) weather monitoring and forecasting systems;

(xvii) Insurance. For information on taking out insurance, see item 5.6 of this Reference Form.

iii. Organizational structure of risk management

Key risks are monitored periodically, as well as the effectiveness of their key prevention/mitigation controls and the implementation of their treatment strategies. As such, Vale seeks to have a clear view of its main risks, acting on them in a systematic manner through the adoption of protection or mitigation measures.

To this end, the Company has an operational structure to check and monitor the policy and internal controls, with the Board of Directors being the body responsible for approving the Vale risk policies.

The Company also has other bodies and areas for the purpose of composing the referred to structure, each with its competence and activities previously defined, such as: (a) the Risk Executive Committee, created by the Board of Directors, (b) the Company s Board of Executive Officers, (c) Business and Support areas throughout the Company, (d) Internal Audit, (e) Ombudsman and (f) Audit Committee.

The Risk Executive Committee, created by the Board of Directors is the main body of the risk management structure. It is responsible for supporting the Board of Executive Officers in decisions regarding risk management, issuing relevant opinions and recommendations. It is also responsible for supervising and reviewing corporate risk management principles and instruments, as well as periodically reporting to Vale s Executive Board on the main risks and their exposures.

It is also noteworthy that, the Board of Directors receives permanent advisory from the Financial Committee and Compliance and Risk Committee, the rules of which were duly approved by the Company s Board of Directors on December 14, 2017. These committees have as one of their main competences, among others:

• *Finance Committee:* to monitor risks and financial controls from the perspective of the integrated risk map, and propose improvements in the mitigation plans; and

• *Compliance and Risk Committee:* (a) to monitor that the Company has structure, processes, practices, mechanisms, systems, among others, which assure compliance with all legal and regulatory requirements and demands applicable to the Company; (b) to monitor the adequacy, strengthening and operation of all Vale s internal control systems and propose improvements; (c) to monitor the scope and effectiveness of the areas responsible for corporate governance, compliance, corporate integrity, risk management and controls of the Company and propose improvements; (d) to support the Board of Directors in defining the Company s risk exposure limit; (e) to evaluate the procedures adopted by the Company with regard to the effectiveness of the processes and controls to identify, evaluate, monitor and manage risks; (f) to monitor the Company s integrated risk map, and propose improvements in the mitigation plans.

Within the scope of the Company s organizational structure regarding risk management, the Board of Executive Officers is responsible (a) for assessing and approving risk mitigation strategies recommended by the Risk Executive Committee; and (b) for approving the developments of the Corporate Risk Management Policy in standards, rules and responsibilities, as well as reporting to the Board of Directors regarding those procedures. Risk management standards and procedures supplement the Corporate Risk Management Policy and define practices, processes, controls, roles and responsibilities in the Company with regard to risk management. Within the scope of such rules and procedures and the determination of responsibilities by the Company s Board of Executive Officers, it is incumbent upon:

(I) *Executive Management of Internal Controls, Risks and Compliance,* as the area responsible for managing risk: (a) to consolidate Vale s risk profile, with periodic reporting to the senior leadership and the Risk Executive Committee; (b) to provide information on Vale s main risks to its internal and external stakeholders, on demand, which includes carrying out an annual report for Internal Audit, for the purpose of preparing the Annual Audit Plan;

(II) *Executive Board for Finance and Investor Relations*, to monitor the activities of the Board of Directors that it comprises, whose duties are described below:

(a) *Executive Management of Internal Controls, Risks and Compliance,* which is responsible for monitoring the risks of preparing the financial statements through one of its management teams, the Internal Control Management, which consists in the area responsible for addressing the risks inherent to the preparation of financial statements, referred to herein as reporting risks;.

(b) *Treasury and Finance Board*, which is responsible for managing financial risks at Vale, and responsible for defining and proposing to the Risk Executive Committee operations or measures to mitigate market and credit risks consistent with Vale s strategy, as well as taking out insurance. To that end, this board has an Insurance

Manager and Market and Credit Risk Manager. There is also a back-office area, which (i) monitors the contracted financial instruments, (ii) is responsible for confirming the financial characteristics of the transactions, of the counterparties with which the transactions were performed, (iii) reports the fair value of the positions, and (iv) assess whether the transactions were carried out in accordance with internal approvals.

(III) *Business Areas and Support Areas of the Company*: to (a) identify, analyze, assess and address its principal risks, with periodic reviews and each significant change in the circumstances of the risks: (b) monitor changes in the level of risk, the efficiency status of the key risk prevention/mitigation controls and the progress of the implementation of risk reduction action plans, and (c) report information, at least on a quarterly basis, to the support areas responsible for specific risk management processes and to the Executive Management of Internal Controls, Risk and Compliance.

In addition to the aforementioned structures, Vale also has (a) an Internal Audit, which is the area responsible for assessing processes independently, verifying their compliance with the policies and standards adopted by the Company and possible cases of fraud, misuse of funds or damage to property; and (b) an Ombudsman, which is the area responsible for receiving and handling complaints of deviations from the Code of Ethics and Conduct and also the principles of good corporate governance and legislation, such as the Sarbanes-Oxley Act.

Lastly, it should be pointed out that it is the responsibility of Vale s Audit Committee to supervise the internal control assessment process carried out by Management to prepare the financial statements and the independent auditors (KPMG Auditores Independentes), through regular meetings to present the results of the work of the Internal Control Management and respective remediation plans established by those responsible for the processes.

Also, with regard to market risks, it is noteworthy that monitoring and periodic assessment of the consolidated position of financial instruments used to mitigate Vale s market risks allows for financial results and the impact on the cash flow to be monitored, as well as ensuring that the objectives initially set are achieved. The calculation for the fair value of the positions is made available monthly for management to follow.

c. Adequacy of the operational structure of internal controls to verify the effectiveness of the adopted policy

In line with the Company s Corporate Risk Management Policy, Vale has an Executive Management of Internal Controls, Risk and Compliance that assesses the environment of controls at the entity s level, to assure Company s risk management governance. The purpose of this assessment is to provide assurance regarding the reliability of the financial statements. In addition, Internal Audit also participates in the compliance process with the established standards.

5.2 - Description of the market risk management policy stated in item 4.2

a. If the Company has a formal market risk management policy, highlight the body that approved it and the date it was approved, and, if not, state why the company has not adopted such a policy

Risk management is carried out in an integrated manner so as to ensure that the Company s overall level of risk remains in line with its strategic guidelines.

Accordingly, the Corporate Risk Management Policy, approved by the Board of Directors on December 22, 2005 and amended on August 25, 2011, establishes guidelines that apply to the management of the corporate risks to which the Company is exposed, and not only specifically to market risks. Among these guidelines, we highlight the following:

• Measure and monitor the Group s corporate risk on a consolidated basis, considering the diversification effect, when applicable, in business group.

• Evaluate the impact of new investments, acquisitions and divestments on the Group s corporate risk profile.

• Adapt the Group s corporate risk profile to the needs of its growth plan, its strategic planning and its business to continue as a going concern.

In addition, the Company also has specific policies of hedge of costs, hedge of revenue, exchange hedge and interest rates, approved by the Board of Directors on June 29, 2017.

Objectives and strategies of the risk management policy

b.

i.

The Company s Corporate Risk Management Policy is based on the following principles: (i) support the growth plan, strategic planning and business continuing as a going concern; (ii) strengthen the capital structure and asset management; (iii) allow an adequate degree of flexibility in financial management; and (iv) strengthen Vale s corporate governance practices.

Market risks for which protection is sought

In this sense and, according to the set out in item 4.2 of this Reference Form, considering the nature of the business and operations of the Company, the main market risk factors to which it is exposed are the following:

• *foreign exchange rates and interest rates:* the Company s cash flows are exposed to the volatility of several currencies against the U.S. dollar and the loan and financing interest rates. While most of our product prices are indexed to U.S. dollars, most of our costs, disbursements and investments are indexed to currencies other than the U.S. dollar, mainly the Brazilian *real* and the Canadian dollar. Vale also has debt instruments denominated in currencies other than US dollar, mainly in Brazilian reais and Euros.

The Company s debt with floating rate consists mainly of loans, including export prepayments, commercial bank loans and multilateral organization loans. In general, the U.S. dollar floating rate debt is subject to changes in Libor (London Interbank Offer Rate).

• *product prices and input costs:* the Company is also exposed to market risks associated to volatilities in the prices of commodities.

ii. Hedging

Periodically, an assessment is made of the potential impact on the Company s cash flow on the exposure to market risk factors mentioned above. This supports the decision-making process

regarding the appropriate hedging strategy. This assessment is made considering together the main market risk factors and their correlations, in order to take advantage of potential natural hedges.

When necessary to adjust the Company s risk profile and reduce the volatility of its future cash flows, market risk mitigation strategies are assessed and implemented in line with these objectives.

Several forms of mitigation can be used: financial transactions by using hedge derivatives, committed lines of credit guaranteeing liquidity, or possible strategic decisions aimed at reducing cash flow risk.

Derivative portfolios are monitored monthly on a consolidated basis, allowing finance results to be monitored along with their impact on cash flow.

For more information, see item (iii) below.

iii. Instruments used for hedging

The financial instruments used for hedging predominantly include forward transactions, swaps, futures and options.

The hedging programs contracted by Vale and its objectives are as follows:

• <u>Program to hedge loans and financing in reais pegged to CDI</u>: in order to reduce cash flow volatility, swaps were used to convert the cash flow for debt pegged to CDI into US dollars for loan agreements and financing. In these transactions, Vale pays fixed rates in US dollars and receives remuneration in reais pegged to the CDI.

• <u>Program to hedge loans and financing in reais pegged to TJLP</u>: in order to reduce cash flow volatility, swaps were used to convert the cash flow for debt pegged to TJLP into US dollars for BNDES loan agreements. In these transactions, Vale pays fixed or floating rates (Libor) in US dollars and receives remuneration in reais pegged to the CDI.

• <u>Program to hedge loans and financing in reais at fixed rates</u>: in order to reduce cash flow volatility, swaps were used to convert the cash flow for debt denominated in reais at a fixed rate into US dollars for

BNDES loan agreements. In these transactions, Vale pays fixed rates in US dollars and receives a fixed rate in reais.

• <u>Program to hedge loans and financing in reais pegged to IPCA</u>: in order to reduce cash flow volatility, swaps were used to convert the cash flow for debt pegged to IPCA into US dollars for debentures. In these transactions, Vale pays fixed rates in US dollars and receives remuneration in reais pegged to the IPCA.

• <u>Program to hedge loans and financing in Euros</u>: in order to reduce cash flow volatility, swap operations were conducted to convert cash flow of debts in Euros into US dollars. In these transactions, Vale receives fixed rates in Euros and pays remuneration pegged to fixed rates in US dollars.

• <u>Program of hedging used to purchase nickel products:</u> to reduce the risk of a price mismatch between the period to purchase nickel products (concentrate, cathode, sinter and other types) and the period to sell the final product, hedging was used. The items purchased are the raw materials used in the refined nickel production process. The transactions usually carried out in this case are sales of nickel for future settlement, either on the stock market (LME) or in the over-the-counter market.

• <u>Fixed-price nickel sales program</u>: in order to maintain the exposure of revenues to nickel price fluctuations, derivatives were used to convert floating price nickel contracts with customers

requesting fixed prices. The transactions are intended to ensure that prices relating to these sales are equivalent to the London Metal Exchange (LME) average price when the product is physically delivered to the customer. The transactions usually carried out in this program are purchases of nickel for future settlement, either on the stock market (LME) or in the over-the-counter market.

• <u>Program of hedging used to purchases of copper products:</u> to reduce the risk of a price mismatch between the period to purchase copper products (scrap and others) and the period to sell the final product, hedging was used. Scrap purchased is mixed with other raw materials to produce copper for final customers. In this case, normally the transaction carried out is the sale of copper with future settlement in the stock exchange (LME) or over-the-counter.

• <u>Bunker oil hedge program</u>: to reduce the impact of fluctuations in bunker oil prices on the contracting/provision of sea freight and, consequently, to reduce the volatility of the Company s cash flow, hedge operations were conducted for this raw material, through options.

Hedge Accounting

iv.

In accordance with CPC 38 Financial Instruments: Recognition and Measurement , all derivatives, designated in hedge or non-hedge relationships, are recorded in the balance sheet at fair value and the gains or losses from the fair value are recorded in the profit or loss, if it does not qualify as hedge accounting. A derivative must be designated in a hedge relationship to qualify for hedge accounting. This standard includes the determination of which hedge tranches are considered effective or ineffective. In general, a hedge relationship is effective when a change in the fair value of the derivative is offset by an equal and opposite change in the fair value of the hedged item. According to this standard, effectiveness tests are carried out in order to assess the effectiveness and quantify the ineffectiveness of the designated hedges.

The parameters used to manage these risks

The parameters used to check the Company s classification or non-classification of exposure are:

(i) verification that the programs mentioned in item 5.2 (iii), above have been executed;

(ii) Analysis and constant monitoring of contracted volumes; and

(iii) observing adequacy of the maturity dates, considering their respective hedging strategies, ensuring that there is no mismatch of our exposures. The mismatch between exposure and hedging strategies can occur if:

a. The contracted volumes/values of the hedge become greater than the volumes/values of the respective exposure;

b. The exposure for which hedging was sought ceases to exist; or

c. There is a maturity mismatch between the hedging strategies and their respective exposures.

In order to avoid potential mismatches due to the provisions of item (iii).a above, the procedure adopted is the periodic monitoring of the volumes/ values to be used as basis for the hedge proposals. For raw material price hedging, for example, if updated consumption estimates point to a decrease in volumes relative to the initial estimates used for the proposed hedging strategies, the volumes used in the hedging strategy will be adjusted accordingly.

To avoid potential non-classification due to the provisions of item (iii) .b , during the periodic monitoring, if the initially estimated exposure does not materialize, the hedging strategy is terminated immediately (by unwinding the contracted positions).

Also, for potential non-classification under item (iii) .c , the alignment between the expiry date of the contracted hedging strategies and the expiry of the initially estimated exposure is constantly checked.

v. If the Company uses financial instruments with different hedge objectives and what are these objectives

• *Warrants received on the sale of part of Vale s future gold (by-product) production:* These warrants constitute an American call option and were received as part of the payment for the sale of flows of payable gold produced as a by-product of the Salobo copper mine and specific Sudbury nickel mines.

• *Debenture purchase options:* The Company has debenture agreements in which the creditors have options to convert debentures into a certain number of shares of Vale Logística Integrada (VLI) held by the Company.

• Options linked to shares in Minerações Brasileiras Reunidas S.A. (<u>MBR</u>): The Company entered into an agreement for the purchase and sale of MBR shares that has options linked to them. The Company has the right to repurchase this minority interest in the subsidiary. Moreover, in certain restricted and contingent contractual conditions, outside the control of the buyer, such as the case of illegality due to changes in the law, there is a clause in the agreement that gives the buyer the right to resell their stake to the Company. In this case, the Company could choose to settle using cash or shares.

Embedded derivative positions: Vale s cash flow is also exposed to market risks associated with contracts that contain embedded derivatives or work as derivatives. From Vale s perspective, these may include, but are not limited to, trading contracts, purchase agreements, lease agreements, securities, insurance policies, and loans. The embedded derivatives as of December 31, 2017 are as follows: 1) agreements for the purchase of raw materials and nickel concentrate that contain price provisions based on the future price of copper and nickel; 2) the purchase of gas by Companhia de Pelotização Vale Omã (LLC), with a clause of premium in the price of gas if the Company s iron ore pellets are traded above a predefined level; and 3) agreement for the sale of stake held by the Company with a clause that establishes, under certain conditions, the guarantee of a minimum return on the investment of the acquiring company.

VI. Organizational structure to control market risk management

Market risks are managed by the same organizational structure described in item 5.1 (b) (iii) above.

c. adequacy of the operational structure and internal controls to verify the effectiveness of the adopted policy

Monitoring and a periodic assessment of the consolidated position of financial instruments used to mitigate Vale s market risks allows for financial results and the impact on the cash flow to be monitored, as well as ensuring that the objectives initially set are achieved. The calculation for the fair value of the positions is made available monthly for management to follow.

For this reason, the back-office department, which is part of the Treasury and Finance Global Board, monitors these financial instruments, and is responsible for confirming the financial characteristics of the transactions, as well as the counterparties with whom the operations were carried out and to report the fair value of the positions. This department also assesses whether transactions were carried out in accordance with internal approval. In addition to this area, the Internal Controls Management checks the integrity of controls that mitigate risks in transactions contracted within the governance criteria set forth above. In addition, the Internal Audit department also participates in the compliance process with the established standards.

5.3 - Regarding the controls adopted by the issuer to ensure the financial statements are prepared reliably, state:

a. The main internal control practices and the level of efficiency of these controls, indicating possible imperfections and measures taken to correct them.

Vale s management has assessed the effectiveness of the Company s internal controls in financial statements through processes designed to provide reasonable assurance regarding the reliability of the financial statements, in accordance with the criteria established in the Internal Control -2013 - issued by the Committee of Sponsoring Organizations of the Treadway Commission (<u>COS</u>O).

The process of assessing internal controls includes joint action with the business areas for assessment of reporting risks, process mapping, assessment of their compliance with the other policies and regulations, as well as the validation of applicable controls aimed at mitigating the risks that may affect the Company s ability to initiate, authorize, record, process and disclose relevant information in the financial statements.

In addition, the Internal Controls Management interacts with the Internal Audit and Ombudsman departments in order to capture any occurrences that may impact the financial statements.

At the end of the year, based on tests carried out by management throughout the period, no relevant deficiencies were identified in the execution of controls. Also, during the year, any deficiencies identified in the execution of controls are corrected by applying action plans with the objective of ensuring its correct execution at year-end and avoiding recurrences.

b.

The organizational structures involved

Vale S.A. has an organizational structure of internal controls to ensure that reliable financial statements are prepared. It is comprised of the Executive Management of Internal Controls, Risks and Compliance reporting to the Executive Office of Finance and Investors Relations, with the respective monitoring of the Fiscal Council. The process also counts on the participation of Internal Audit and the Ombudsman, both below the Board of Directors. The roles and responsibilities of these are described in item 5.1 (b) (iii).

c. If and how efficiently are the internal controls being supervised by the issuer s management, stating the position of the persons responsible for monitoring them

As part of the annual certification process of the internal controls environment, the Management promotes a review of all controls with the effective participation of all the Board of Directors involved in the processes and conducts validation tests, aiming to get the effectiveness of the controls.

At the end of the cycle, the executives responsible for the processes of all the Company s business areas and support areas, mapped on Sarbanes-Oxley compliance controls and tests, sign sub-certification terms that support the internal control environment assessment as well as the publication of the financial statements.

In addition, the Fiscal Council supervises the internal control assessment process carried out by Management and independent auditors (KPMG Auditores Independentes), through regular meetings to present the results of the work of the Executive Management of Internal Controls, Risks and Compliance and respective remediation plans established by the process.

d. Deficiencies and recommendations on internal controls contained in the detailed report prepared and sent to the Company by the independent auditor

The management assessed the effectiveness of Vale s internal controls related to the financial statements as of December 31, 2017 and concluded that internal controls provide reasonable

assurance in relation to the reliability of financial reporting and the preparation of consolidated financial statements and are considered effective. The internal control environment was audited by KPMG Auditores Independentes, an independent audit firm, and no significant deficiencies were identified in its assessment.

Vale identified no change in the internal control over financial reporting during our fiscal year ended December 31, 2017 that has materially affected or is reasonably likely to materially affect our internal control over financial reporting.

e. Comments of the officers on the shortcomings identified in the independent auditor s report and on the corrective actions taken

The Company s Officers made an evaluation based on the relevance, likelihood and possible magnitude of misstatements reported by the independent auditors, and reached the conclusion that the action plans defined for such shortcomings are adequate for proper implementation of the recommendations made by the auditors, pointing out that as described in item (d) above, no significant shortcoming was reported by the independent auditors.

5.4 - In relation to the internal integrity mechanisms and procedures adopted by the issuer to prevent, detect and remedy deviations, fraud, irregularities and illegal acts committed against the public administration, national or foreign, inform:

a. if the issuer has rules, policies, procedures or practices aimed at the prevention, detection and remediation of fraud and illegal acts committed against public administration, identifying, if so, the following:

i. the main integrity mechanisms and procedures adopted and their adequacy to the profile and risks identified by the issuer, informing how often the risks are reassessed and the policies, procedures and practices are adapted

Vale also has a Global Anti-Corruption Program (the <u>Program</u>), based on three main documents: The Code of Ethics and Conduct, the Global Anti-Corruption Policy, and the Global Anti-Corruption Manual (which details the rules set forth in the Policy). They are rules, procedures and controls intended to prevent and detect the risk of corruption to which the company is exposed because of its activity and of the countries where it operates. The rules of the Program are aligned to the best practices of the market, to the pacts of which the company is a signatory (UN Global Compact and Business Pact for Integrity and Against Corruption) and the anti-corruption laws applicable to Vale.

The performance and the revisions of the Program always consider the operations of the Company e the risk of corruption in the countries where the Company operates.

All suppliers of materials, services and equipment, entities, associations, or any third party that receives resources, assets or rights of Vale, before they are registered, undergo a process of corruption risk assessment. This procedure comprises anti-corruption due diligence, which is the checking by means of public information the criminal record of these third parties. The risk assessment process covers all of Vale s operations, and in 2017 more than 14,000 inquiries were made.

The monitoring and control activities performed in 2017 by the Corporate Integrity area (responsible for implementing the Program) were focused on matters related to non-mandatory expenses (such as donations, sponsorships, relationship actions, agreements, technical and/or financial cooperation agreements, environmental expenditures, expenses with traditional communities, social expenditures and other non-compulsory contributions). All these expenses require the prior approval of the Corporate Integrity area. In that regard, the expenditures are monitored and the rendering of accounts is analyzed, and possible political involvements in the communities served. The main purpose is to know if the funds are being properly used, according to the requested and used in a correct manner.

In 2017, Vale conducted a review of the Global Anti-Corruption Manual, as part of its permanent activity to perfect its levels of controls and processes. The changes involved the revision of the rules and procedures for contracting and the update of forms applicable to greater risk contracts.

ii. the organizational structures involved in the monitoring of operation and efficiency of the internal integrity mechanisms and procedures, indicating their attributions, if their creation was formally approved, the bodies of the issuer to which they report, and the mechanisms to guarantee the independence of their leaders, if any

The implementation, monitoring and compliance with the Program are an absolute priority for Vale. Therefore, Vale has a Director of Corporate Integrity, responsible for managing and supervising the administration and effective operation of the Program.

The Director of Corporate Integrity reports to the CEO, but may also bring concerns or relevant matters directly to the Board of Directors, if deemed necessary or appropriate, and work with Vale s other areas, as the case may be.

Some of the functions and responsibilities of the Director of Corporate Integrity are the following:

• to supervise and conduct investigations of any information or claims concerning breaches of the Program and/or applicable anti-corruption laws, and to determine in an independent manner whether a breach has occurred;

• to forward the results of the investigations to the regulatory authorities or law enforcement agents, as the case may be, after consultation with Vale s CEO, and provide pertinent reports to the Board of Directors;

• to appoint employees of the Corporate Integrity area of Vale and its direct or indirect subsidiaries;

• to develop and organize proper and periodic training for employees, officers and consultants, to ensure they are familiar with and understand the applicable anti-corruption laws and the Program;

• to respond to questions related to any aspect of the Program or other matters of corporate integrity and to convey such matters to the superiors, if necessary;

• to supervise the preparation and development of supplementary guidance for Vale s employees, officers, suppliers, consultants and other relevant persons with respect to specific obligations and legal issues, involving the applicable anti-corruption laws and the Program;

• to confirm that adequate resources, systems and internal controls are available for the operation of the Program and its ramifications;

• to conduct or supervise the performance of periodic anti-corruption compliance risk assessments (including risk of bribery) in the various business areas of Vale and in the jurisdictions in which Vale operates, in order to consider the need for additional controls; and

• to report relevant matters related to the Program to the Board of Directors, when deemed necessary.

The director of Corporate Integrity and the other members of the Corporate Integrity area are prohibited from working on sales, procurement, contracting of services with public companies or other functions from which a conflict of interests may arise.

At the discretion of the director of Corporate Integrity, Vale may appoint senior representatives of departments such as Internal Audit, Corporate Security, Internal Controls, Procurement, Institutional Relations, Communication and Risk for an Anti-Corruption Compliance Policy Committee, which will operate as a counseling group to deal with risks related to the Program and its impact on Vale s business and reputation.

The director of Corporate Integrity will be the chairman of the Committee, which will be convened by him and will have among its functions and responsibilities:

• establishment of global guidelines for the implementation or consistent operation of the Program;

• establishment of global policies regarding the provision or receipt of gifts/souvenirs and hospitality on special occasions;

• analysis and recommendations, according to the Program, regarding possible acquisitions, purchase of assets, joint ventures, consortia and new areas of operation for Vale based on issues identified in the respective due diligence;

• guidance on the implementation of anticorruption compliance programs in the associated companies in which Vale has a minority stake, in consortia and joint ventures; and

• advisory on risk assessments and performance of tests on Vale s anticorruption compliance structure.

iii. if the issuer has a formally approved code of ethics or conduct, indicating:

• if it applies to all officers, tax advisors, board members and employees and also covers third parties, such as suppliers, service providers, brokers and

associates

the Code of Ethics contains the main guidelines to be followed by the members of the Board of Directors and its advisory committees, by members of the Audit Committee, the CEO, and other executive officers, employees, by employees, trainees, contractors, and any person that acts on behalf of Vale and its controlled companies. The other entities in which Vale participates must also, as far as possible, follow the rules of the referred to Code of Ethical Conduct.

• if and how often officers, tax advisors, board members and employees are trained in relation to the code of ethics or conduct and other standards related to the subject

As of 2013, when Vale s Code of Ethical Conduct was reviewed, Vale began to train employees every year on the content of the Code of Ethical Conduct.

In 2014, the training was done by the leadership, beginning with the Board of Executive Officers, which presented the Code of Ethical Conduct to its direct subordinates, and continued through each level of the hierarchy until it reached the operational level. After the training, the employees received the printed Code of Ethical Conduct and signed the term of commitment with it. This action reached 90% of employees globally.

In 2015, Vale, in turn:

(i) carried out the Integrity Movement - an event that aims at conveying the message to all employees of the importance of Acting Correctly, focused on the Code of Ethical Conduct and the Global Anti-Corruption Program. The movement opening was attended by Vale s Chief Executive Officer, the general consultant and the general ombudsman, who passed the message to the leaders, who were in charge of passing on the information to all employees. With the support from the Integrity Movement, more than 70% of employees worldwide have ratified their agreement to the terms of the Code of Ethical Conduct and the commitment to comply with them;

(ii) launched other initiatives that led employees to become aware of Vale s rules of ethical conduct, such as: Ethics on the Agenda , which published controversial topics on ethics every two months, to be discussed at team meetings; and the video that presents the Code of Ethical Conduct for new employees and new third parties;

(iii) promoted specific face-to-face training on the Global Anti-Corruption Program for members of priority areas for mitigating the risk of corruption (e.g. those responsible for relations with government officials, hiring of third parties and intermediaries, donations, sponsorships, community investments, business acquisitions, legal, internal audit and corporate security), which involved more than 2,700 participants in several countries where Vale operates (Australia, Brazil, Canada, China, Singapore, South Korea, the United Arab Emirates, India, Indonesia, Japan,

Malawi, Malaysia, Mozambique, New Caledonia, Oman and Taiwan);

(iv) developed online training on the Global Anti-Corruption Program and the Code of Ethical Conduct, which are mandatory for all employees;

(v) reinforced the importance of compliance with the Global Anti-Corruption Program through a global message on World Corruption Day (December 9th).

In 2016, the communication actions on Ethics and Integrity continued, with a new edition of the Integrity Movement, a new global message on the World Corruption Day, face-to-face trainings continued on the Global Anti-Corruption Program, new editions of Ethics on the Agenda and the implementation by the employees of online training on Ethics and the Global Anti-Corruption Program. The course achieved more than 40,000 employees in the

year.

The focus in 2017 was to continue the dissemination in Brazil and expand the training to other countries. During the year, more than 8 thousand employees undertook the online ethics course in operations outside Brazil, reaching 77% of the active employees abroad. Although the training does not have a defined periodicity, all the new employees already have in their development plan this associated training (employees with access to computers) and the Human Resources area carries out several actions together with the managers to deploy training for employees without access to computers. Furthermore, other Ethics-related training has been or is being created to detail situations and behaviors of our Code of Ethics. For example, this year online training on Diversity and Inclusion has been launched.

In addition, employees again reaffirmed their commitment to ethics in the annual event of the Integrity Movement. The theme of the year portrayed the impact of unethical actions on the professional and personal lives of those involved. Videos were used with actors that portrayed real situations, social experiments and a quiz about ethics. The managers deployed the Integrity Movement with their teams and suppliers reaching approximately 53 thousand people. For the first time, Vale released the Integrity Movement in social media and approximately 91 thousand people were impacted through organic campaigns, that is, without investment by the company.

Finally, the Code of Ethical Conduct provides within its scope that everybody must Participate in the mandatory periodic training we provide on the Code of Ethical Conduct and other associated topics. Keep up-to-date on policies, standards and procedures related to your assignments.

• the penalties applicable in the event of a breach of the code or other standards relating to the matter, identifying the document where such penalties are provided for

The penalties applicable in the event of breach of the Code of Ethical Conduct are set out in the document itself, in the section Breaches of this Code, other policies, standards, procedures and guidelines of Vale subject the offenders to consequences, including verbal or formal warning, suspension or dismissal. The disciplinary measures are applied considering the type of violation and its seriousness, the guidelines of the Ethics Committee, Vale s Human Resources area and the applicable legislation.

• body that approved the code, date of approval and, if the issuer discloses the code of conduct, locations on the world computer network where the document can be consulted

The review of the Code of Ethical Conduct was approved by the Board of Directors on March 29, 2018 and is available on Vale s Intranet (for employees) and on the Company s website (http://www.vale.com/brasil/PT/aboutvale/ethics-and-conduct-office/code-of-ethics/Paginas/default.aspx).

b. if the issuer has a complaint channel, indicating, if so:

•

if the complaint channel is internal or if it is in the charge of third parties

Vale has the Ethics and Ombudsman Channel, management of which is the responsibility of the Ombudsman s Office. The receipt of complaints is done via an outsourced company, but the coordination for analysis of the complaint is made via the Ombudsman s Office.

• if the channel is open to receive third-party complaints or if it receives complaints from employees only

The channel is available to anyone who wishes to file a complaint, including third parties and employees.

•

if there are mechanisms for anonymity and protection of bona fide whistleblowers

As provided for in the Code of Ethical Conduct, Bona fide complaints shall never be the basis for retaliation or intimidation of any whistleblower. The investigation of the complaints is coordinated by the Ombudsman s Office and will always be done in a careful manner, respecting the local legislation and protecting the rights of the complainant and the defendant. The investigations are carried out by the Ombudsman s Office, Corporate Security, Audit, Corporate Integrity area or other areas relevant to the case, at the discretion of the Ombudsman. It is the Ombudsman s commitment to guarantee the confidentiality of the identity of the complainant. In addition, the Ethics and Ombudsman Channel makes it possible to file complaints in an anonymous and confidential manner, for complainants who prefer not to identify themselves.

body of the issuer responsible for the investigation of complaints

The Ombudsman is responsible for coordinating the investigation of complaints, which, when necessary, delegates the investigations to other areas of the company, such as Internal Audit and Corporate Security. In turn, the Ombudsman s Office reports directly to the Board of Directors.

c. if the issuer adopts procedures in consolidation, acquisition and corporate restructuring processes aimed at identifying vulnerabilities and risk of irregular practices in the legal entities involved

All parties involved in a joint venture, consortium, association or any other business combination with any third party (such as in mergers or acquisitions) must first undergo due diligence, including on corruption, to ensure that the terms and business conditions will not result in - or will cause -a material risk of breach of the applicable anti-corruption laws.

d. if the issuer does not have rules, policies, procedures or practices aimed at the prevention, detection and remediation of fraud and illegal practices against public administration, to identify the reasons why the issuer has not adopted controls in this regard.

Not applicable, considering that the Company has procedures for this, as described in this item 5.

5.5 Significant changes in the main risks to which the Company is exposed or in the risk management policy adopted, commenting on possible expectations of reduction or increase in the Company s exposure to such risks

In relation to the last fiscal year, there were no significant changes in the main risks to which the Company is exposed, which are described in items 4.1 and 4.2 of this Reference Form.

Additionally, as of the date of this Reference Form, the Company does not identify a scenario of significant increase or reduction in risks already mentioned in items 4.1 and 4.2 of this Reference Form.

5.6 - Other relevant information

In line with the integrated view of the risks to which it is exposed, Vale considers in its risk management, in addition to market risks, liquidity risk, a risk arising from obligations assumed by third parties towards the Company (credit risk), those inherent to inadequate or poor internal processes, people, systems or external events (operational risk) and risks associated with policies and regulatory conditions in the countries where Vale operates (political risk), among others.

Operational risk

Operational risk management is the structured approach to manage uncertainties related to internal processes, people and systems and to external events. Internal events consist of flawed or inadequate internal systems, people and processes, while external events include natural or operational disasters caused by third parties, regulatory, political, economic, or social measures taken by governments or other important stakeholders.

Vale minimizes operational risks through new controls and improving existing ones, new plans to mitigate risks and transfer of risk through insurance. We seek to have a clear view of the major risks to which we are exposed, the cost-benefit on mitigation plans and the controls in place to monitor the impact of operational risks closely and to efficiently allocate capital to reduce them.

Credit Risk

Vale s exposure to credit risk derives from receivables, derivative transactions, guarantees, advances to suppliers and financial investments. The Vale s credit risk management process provides a framework to assess and manage counterparty credit risk and to maintain the Company s risk at an acceptable level.

Commercial Credit Risk Management

Vale assigns an internal credit rating and a credit limit to each counterparty using our own quantitative methodology for credit risk analysis, which is based on market prices, external credit ratings and financial information of the counterparty, as well as qualitative information regarding the counterparty s strategic position and history of commercial relations.

Based on the counterparty s credit risk, risk mitigation strategies may be used to manage the Company s credit risks. The main strategies for mitigation of credit risks include non-recourse discount of receivables, insurance instruments, letters of credit, corporate and bank guarantees, mortgages, among others.

Vale has a geographically diversified portfolio of accounts receivable, with Asia, Europe and Brazil, being the regions with the most significant exposures. According to the region, different guarantees can be used to improve the credit quality of the receivables. Periodically, the Company monitors the exposure of the counterparties in the portfolio and blocks additional sales to customers in default.

Treasury Credit Risk Management

To manage the credit exposure originated from financial investments and derivative instruments, credit facilities are approved for each counterparty with which the Company has credit exposure.

Vale controls the diversification of the portfolio and monitors different solvency and liquidity metrics of its different counterparties that were approved for negotiation.

Compliance Risks

Political Exposure

According to its Articles of Incorporation, Vale is prohibited from making, directly or indirectly, through third parties, any contribution to political movements in Brazil or abroad, including those organized as political parties and for their representatives or candidates.

Insurance

Vale takes out various types of insurance policies, such as: operational risk insurance, engineering risk insurance (projects), credit risk insurance, civil liability, life insurance for its employees, among others. The coverage of these policies, similar to those generally used in the mining industry, is taken out in accordance with the objectives set by the Company, the corporate risk management practice, and the limitations imposed by the global insurance and reinsurance markets.

Insurance management is carried out with multidisciplinary support from the operational areas of the Company. Among its management instruments, Vale uses captive reinsurers that allow the retention of part of the risk, taking out of insurance on a competitive basis, and direct access to the main international insurance and reinsurance markets, and diversification of counterparties.

Information about internal/external complaints on the Code of Ethical Conduct and the improvements made based on the complaints

In 2017, Vale s Ombudsman received 2,861 complaints, of which 10% could not be ascertained because they did not provide sufficient information to investigate the facts reported or because they were not ethical issues, thus being outside the Ombudsman s scope.

The valid complaints were checked and 47% confirmed, generating 1,914 corrective actions, including feedback to the employee, process change, coaching, warnings, layoffs and termination of business relationship with companies involved.

In addition, since October 2016, the Ombudsman s Office has been carrying out the Itinerant Ombudsman action, for the purpose of increasing employees trust in the use of the Ethics and Ombudsman Channel. Through it, the Ombudsman conducts face-to-face meetings in Vale locations that are open for the participation of all employees. This action is carried out together with the Human Resources regional offices, which invite employees to attend the meetings on the dates previously scheduled. As of March 2018, 71 sessions were held with more than 3,500 participants in various locations (Brazil, Oman, Malaysia, Singapore and Indonesia).

6. Issuer History

6.1 / 6.2 / 6.4 - Issuer s organization, duration and date of registration with the CVM

Date of Issuer Organization Form of Issuer Organization Country of Organization Duration Date of CVM Registration 01/11/1943 Government controlled company Brazil Indefinite Duration 01/02/1970

6.3 - Brief history

Vale was founded by the Brazilian Federal Government (Brazilian Government) on June 1, 1942, through Decree-Law no. 4,352, and finally on January 11, 1943, by the Definite Meeting for the Constitution of Corporation Companhia Vale do Rio SA Doce SA, in the form of a government controlled company, with the purpose of exploiting, trading, transporting and exporting iron ore from Itabira mines, and exploring the traffic of the Vitória-Minas Railroad (EFVM), carrying iron ore and agricultural products from Vale do Rio Doce, in the Southeast region of Brazil, to the port of Vitória, located in the State of Espírito Santo.

The Company s privatization process began in 1997. Pursuant to Call to Privatize PND-A-01/97/CVRD (Call Notice) and the Resolution of the National Privatization Council - CND no. 2 of March 5, 1997, the Extraordinary Sharedolders Meeting approved on April 18, 1997 the issuance of 388,559,056 non-convertible participative debentures (Participative Debentures), in order to guarantee to pre-privatization shareholders, including the Federal Government, the right to participate in the revenue of the mineral deposits of Vale and its subsidiaries, not valued for purposes of setting the minimum price of the Vale privatization auction. The Participative Debentures were attributed to Vale shareholders as payment for the redemption value of class B preferred shares, issued as bonus, in the proportion of one share held by the holders of class A common and preferred shares, at the time, through partial capitalization of Vale s profit reserves. The Participative Debentures could only be traded after prior authorization from the Brazilian Securities and Exchange Commission (CVM), as of 3 months from the completion of the Secondary Public Offering of Shares foreseen in the privatization process.

On May 6, 1997, the privatization auction was conducted, when the Brazilian Government sold 104,318,070 common shares issued by Vale, equivalent to 41.73% of the voting capital to Valepar S.A. (Valepar), for the amount of approximately R\$ 3.3 billion.

Subsequently, pursuant to the Call Notice, the Brazilian Government also sold 11,120,919 common shares representing approximately 4.5% of the outstanding common shares and 8,744,308 class A preferred shares, representing 6.3% of outstanding class A preferred shares, through an offering restricted to Vale employees.

On March 20, 2002, a Secondary Public Offering of Shares was issued by Vale, in which the Brazilian Government and the Brazilian Development Bank (<u>BNDES</u>) sold, each one, 34,255,582 common shares issued by Vale. The demand by investors in Brazil and abroad was substantial, surpassing the offer by approximately three times, which led to the sale of the entire lot of 68,511,164 shares. A portion of approximately 50.2% was placed on the Brazilian market and the remainder was sold to foreign investors. Subsequently, on October 4, 2002, the competent registration of Participative Debentures was obtained from the CVM, allowing their trading in the secondary market.

In 2017, all the class A preferred shares issued by Vale were converted into common shares, at the ratio of 0.9342 common share for each class A preferred share.

As of December 22, 2017, the common shares issued by the Company were traded in the Segment Novo Mercado of B3 S.A. - Brasil, Bolsa, Balcão.

Please find below the most striking events described in the history of the Company since its incorporation:

• President Getúlio Vargas, through Decree-Law no. 4,352, dated June 1, 1942, defines the basis on which Companhia Vale do Rio Doce S.A. would be organized. Under the Decree-Law, Companhia Brasileira de Mineração e Siderurgia and Companhia Itabira de Mineração were to be organized.

1943

[•] Vale is incorporated on January 11, 1943, as a joint stock company, pursuant to Decree-Law no. 4,352/42.

[•] Listing of Vale s shares at the Rio de Janeiro Stock Exchange (BVRJ) in October 1943.

• First tradings with Vale s shares at BVRJ in March 1944.

1952

• The Brazilian Government takes definitive control of Vale s operating system.

1953

• First shipment of iron ore to Japan.

1954

• Vale reviews its commercial practices abroad and starts to make direct contacts with steelmakers, without the intermediation of traders.

1962

• Long-term contracts signed with Japanese steelmakers and German plants.

1964

• Opening of Vale s first office outside Brazil in Dusseldorf, Germany.

1966

• Opening of the Tubarão Port, in Vitória, State of Espírito Santo, which is connected to the iron ore mines through the Vitória-Minas Railroad.

1967

• Geologists of Cia. Meridional de Mineração, subsidiary of United States Steel Corp. (US Steel), note the occurrence of iron ore in Carajás, in the State of Para.

• Vale shares become part of the IBOVESPA index.

1969

• Opening of Vale s first Pelletizing Plant in Tubarão, in the State of Espírito Santo, with production capacity of 2 million tons/year.

1970

• An agreement makes Vale a majority partner of the project Carajás in the State of Para, together with US Steel.

1972

• Vale enters into an agreement with the Canadian company Alcan Aluminiun Ltd., for a bauxite exploration project in the Trombetas River region, where Mineração Rio do Norte (\underline{MRN}) was incorporated.

1974

• Vale becomes the largest exporter of iron ore in the world, holding 16% of the transoceanic ore market.

1975

• For the first time, Vale launches debentures in the international market, worth DM 70 million, with brokerage of Dresdner Bank.

1976

• Decree no. 77,608/76 grants to Vale a concession for the construction, use and exploration of the railroad between Carajás and São Luís, in the States of Para and Maranhão, respectively.

1977

• Vale announces priority to the Carajás Project, to start as of 1982 the export of iron ore through the Port of Itaqui (MA).

• Effective start of the implementation of the Ferro Carajás Project, adopted as the main goal of Vale s business strategy.

1980

• Federal Government approves the Ferro Carajás Project and gives its financial guarantee.

1982

• With the start of operations of Valesul Alumínio S.A. in Rio de Janeiro, Vale enters the aluminum segment and contributes to reducing Brazilian metal imports.

1984

• Opening of Vale s office in Japan.

1985

• On February 28th, the Carajás Railroad (<u>EFC</u>) is opened and delivered to Vale.

• Opening of the Ferro Carajás Project, which increases the company s productive capacity, now structured in two distinct logistic systems (Northern and Southern).

1986

• Start of operation of the Port Terminal of Ponta da Madeira, in São Luís, in the State of Maranhão.

1987

• EFC starts to operate on a commercial scale.

1989

• Implementation of the Profit Sharing Program (PR) for Vale employees.

 \bullet In March, Vale launches its Level 1 American Depositary Receipts (<u>ADR</u>) program, tradable in the US over-the-counter market.

1995

• Vale is included in the National Privatization Program by Decree no. 1,510, dated June 1st, signed by the President of the Republic.

1996

• On October 10th, the National Privatization Council (CND) approves Vale s privatization model.

1997

• On March 6th, BNDES announces Vale s notice to privatize.

• On April 18th, Vale issues 388,559,056 Participative Debentures, which could only be traded after prior authorization from CVM, as of 3 months after the completion of the Secondary Public Offering of Shares foreseen in the privatization process.

• On May 6th, Vale is privatized in an auction held at the Rio de Janeiro Stock Exchange. Valecom Consortium - articulated by the Votorantim Group - and Brazil Consortium, led by Companhia Siderúrgica Nacional (<u>CSN</u>), participated in the auction. Brazil Consortium acquires 41.73% of Vale s common shares for R\$ 3,338 million in cash.

1998

• In the first year after the privatization, Vale achieves a growth of 46% in profit in relation to 1997.

1999

• Vale has the highest profit in its history until then: R\$ 1.251 billion.

• On February 2, the Container Terminal of the Port of Sepetiba was opened.

• In May, Vale acquires Mineração Socoimex S.A. and S.A. Mineração da Trindade (Samitri), iron ore producing companies, starting the consolidation of the Brazilian iron ore market.

• On June 20th, Vale announces the listing of its ADRs, representing preferred shares issued by the Company, at the New York Stock Exchange (<u>NYSE</u>), in a level II DR program approved by the CVM.

• On August 31st, the Special Shareholders Meeting approves the merger of the wholly-owned subsidiary Mineração Socoimex S.A., without the issuance of new shares, aiming at adding to the Company s assets the Gongo Soco mine, a high-grade hematite reserve in the iron quadrangle in Minas Gerais.

2001

• In February, Vale s Board of Directors authorizes the start of the divestment of its interests in the paper and pulp sector.

• On February 19th, the shares issued by S.A. Mineração da Trindade (Samitri) are merged into Vale, with no capital increase and no issue of new shares, due to the use of shares held in treasury, as authorized by the CVM.

• In March, the uncrossing of Vale and CSN shareholdings is conducted.

• In April, Vale acquires 100% of the capital of Ferteco Mineração S.A., the third largest iron ore producer in Brazil at the time.

• On October 1st, the Shareholders Meeting approves the merger of the wholly-owned subsidiary S.A. Mineração da Trindade (Samitri) in line with administrative and financial rationalization guidelines.

2002

• In March, the Pelletizing Plant of São Luís, in the State of Maranhão is officially opened.

• On March 21st, the global put option of 68,511,164 common shares issued by Vale and held by the Brazilian Government and BNDES is completed, of which approximately 50.2% were placed in the Brazilian market and the remainder sold to investors abroad. The sale price in Brazil was R\$ 57.28 per share and abroad of US\$ 24.50 per ADR.

• The common shares issued by Vale are traded at the NYSE, in the form of ADRs, in a level III program.

- The trading of the Company s common shares at the Madrid Stock Exchange Latibex also starts.
- The cornerstone of the Sossego Copper Project in the State of Para is laid down.

• On October 4th, Vale obtains from the CVM the registration of the Public Trading of Participative Debentures.

• On December 16th, the General Shareholders Meeting approves Vale s Shareholder Compensation Policy, in order to simultaneously increase transparency and financial flexibility, taking into account the expected trajectory of the Company s cash flow.

• On December 27th, the Special Shareholders Meeting approves the Reform of Vale s Articles of Incorporation, in order to (i) expand the Company s activities in the energy and logistics sector; (ii) to adapt the Articles of Incorporation to the new rules introduced by Law no. 10,303, of October 31, 2001; and (iii) introduce principles of best corporate governance practices.

2003

• On February 14th, Vale concludes the acquisition of 100% of the capital of Elkem Rana AS (Rana), a Norwegian iron alloy producer, for a price of US\$ 17.6 million.

• On March 31st, Vale acquires 50% of the shares of Caemi Mineração e Metalurgia S.A. (Caemi) for US\$ 426.4 million.

• On August 29th, Vale incorporates the wholly-owned subsidiaries Celmar S.A. Indústria de Celulose e Papel and Ferteco Mineração S.A.

• On November 7th, Vale completes the restructuring of corporate interests in logistics companies, which had as its purpose the elimination of relations between Vale and CSN in the shareholding structure of Ferrovia Centro-Atlântica S.A. (FCA), Companhia Ferroviária do Nordeste (CFN) and CSN Aceros S.A. (CSN Aceros).

• On December 12th, Vale joins Level 1 of the Differentiated Corporate Governance Practices Program established by B3 S.A. - Brasil, Bolsa e Balcão (<u>B</u>3), new company name of BM&FBOVESPA.

• Proceeding with the streamlining of its operational structure, on December 30th, Vale incorporates the following wholly-owned subsidiaries: Rio Doce Geologia and Mineração S.A. - Docegeo (Docegeo), Mineração Serra do Sossego S.A. (MSS), Vale do Rio Doce Alumínio S.A. - Aluvale (Aluvale) and Mineração Vera Cruz S.A. (MVC).

2004

• On July 2nd, the Sossego mine is opened, the first copper mine in Brazil, in the State of Para. The project is carried out in record time.

• In November, Vale wins the international bidding for coal mining in the Moatize region, northern Mozambique.

• In December, Vale signs a memorandum of understanding with ThyssenKrupp Stahl A.G. (ThyssenKrupp) for the construction of an integrated steel plate plant with capacity of 5 million tons, in the State of Rio de Janeiro.

2005

• Vale is the first Brazilian company to earn a higher risk rating than the host country and the only one to have this recognition by three different rating agencies: thus achieving the Degree of Investment granted by Moody s, and confirmed by Standard & Poor s and Dominion Bond.

• In July, Vale Belvedere Pty Ltd. signs an agreement with two Australian mining companies to conduct an survey study of the Belvedere Underground Coal Project (Belvedere Project), located in the State of Queensland, Australia.

• On September 22nd, Vale Investir is launched, a program that allows Brazilian investors to automatically reinvest the funds received from compensation to shareholders - dividends and/or interest on shareholders equity - on the purchase of shares issued by the Company.

• In November, Vale agrees to acquire a minority interest in Ceará Steel, an export-oriented steel plate project, in the State of Ceará, with a nominal capacity of 1.5 million tons of plates per year.

• The Company consolidates its entry into the copper concentrate industry, with the first full year of operation of Sossego Mine and sales to 13 customers in 11 different countries.

• In the last quarter of 2005, Vale acquires 99.2% of Canico Resources Corp. (Canico), owner of the laterite nickel project Onça Puma, located in the State of Para, for approximately US\$ 800 million.

2006

• In January, Vale acquires mineral resources, land and exploration equipment from Rio Verde Mineração (Rio Verde) for US\$ 47 million.

• In February, the acquisition of all Canico s shares is completed, which were withdrawn from the Toronto Stock Exchange.

• In March, the expansion of production capacity of the alumina refinery of Alunorte - Alumina do Norte do Brasil S.A. (<u>Alunorte</u>) is opened, located in Barcarena, in the State of Para.

• On May 3rd, Vale completes the merger of Caemi shares, and now holds 100% of the company s capital.

• On July 3rd, Vale acquires 45.5% of the capital of Valesul Alumínio S.A. and now holds 100% of the company s capital.

• On August 11th, the Company announces its intention to make an offer for the acquision of all common shares of Inco Limited (Toronto Stock Exchange - TSX and NYSE with the symbol N) (Inco). The offer is consistent with Vale s long-term corporate strategy and Vale s non-ferrous metal business strategy.

• In the third quarter, Vale divides the administration of the former Southern System for the production and distribution of iron ore into two departments: the Southeastern System and Southern System, and started to report the productions separately for each system.

• In September, Minerações BR Holdings GmbH buys a 25% interest in a joint venture, Zhuhai YPM, to build a new pelletizing plant in Zhuhai, in the region of Guandong, China.

• On October 5th, Vale opens the Brucutu Project, the world s largest mine/plant complex in initial capacity of iron ore production, located in the municipality of São Gonçalo do Rio Abaixo, in Minas Gerais.

• On October 26th, Vale liquidates a large part of the acquisition of the Canadian mining company Inco Ltd., the second largest nickel producer in the world, making a payment of US\$ 13.3 billion, corresponding to the acquisition of 174,623,019 shares issued by Inco.

• On November 6th, Vale becomes part of the control group of Usinas Siderúrgicas de Minas Gerais S.A. - Usiminas.

2007

• In January, Vale completed the expansion of the iron ore production capacity in Carajás, which reaches 100 million tons per year.

• On January 30th, the acquisition of Inco (currently Vale Canada Limited) is ratified at Vale s Special Shareholders Meeting. The nickel business is now managed from Toronto, as well as activities related to marketing and sales of metals. With the completion of Inco s acquisition, Vale becomes the second largest mining and metals company in the world in market value.

• On February 16th, Vale announces a public offering of shares of Log-In Logística Intermodal S.A. (<u>Log-In</u>).

• On February 26th, Vale enters into a purchase and sale agreement for the acquisition of the Australian company AMCI Holdings Australia Pty Ltd. (<u>AMCI</u>), which operates and controls coal assets through participations in joint ventures.

• In March, Vale acquires the 18% stake in Ferro-Gusa Carajás S.A. (<u>FGC</u>), which belonged to Nucor do Brasil S.A., for US20 million, and now holds 100% of the FGC capital.

• In May, Vale enters into a usufruct agreement, controlling the entire capital of MBR for the next 30 years.

• On May 2nd, Vale signs a 25-year freight agreement with Bergesen Worldwide (B.W. Bulk), which provides for the construction of the world s four largest bulk carriers, each with a capacity of 388 thousand tons.

• On June 28th, the Government of Mozambique approves the Mining Contract for exploration by Vale of the Moatize coal project, in the Tete province, in the Northwestern region of the country.

• On August 30th, the shareholders, at an Extraordinary Shareholders Meeting, ratify the acquisition of the AMCI shareholding control by the Company.

• On November 29th, Vale starts to use the brand Vale in all countries where it has activities and, at the same time, takes on a new visual identity worldwide.

• On December 21st, Vale signs a contract for commercial exploration for 30 years of 720 kilometers of the North South Railroad (FNS).

• Vale leases three pelletizing plants at the Tubarão complex in Vitória, State of Espirito Santo, owned by the joint ventures (Itabrasco, Kobrasco and Nibrasco) in which the Company participates.

• In July, Vale undertakes a global offering of shares of 256,926,766 common shares and 189,063,218 preferred shares, including ADSs, with a view to making strategic investments and acquisitions, as well as maximizing the Company s financial flexibility. The aggregate value of the global offer to Vale, after subscription discounts and commissions, including the amounts of the exercise of the supplementary stock option was approximately US\$ 12.2 billion. In August, due to the full exercise of the supplementary stock option, Vale issued an additional 24,660,419 class A preferred shares.

• In connection with the offer above, Vale will list and trade its common and preferred ADSs at Euronext Paris.

• On August 3rd, Vale orders the construction of 12 large ships for iron ore, buys used ships and signs long-term freight contracts. Total investment was US\$ 1.6 billion for the construction of new ships and US\$ 74 million for the purchase of used ships.

• On October 31st, Vale announced a reduction in its pace of production of iron ore, pellets, nickel, manganese, iron alloys, aluminum and kaolin, due to the impact of the global economic crisis on the demand for minerals and metals.

• On December 16th, Vale enters into an agreement with African Rainbow Minerals Limited (<u>ARM</u>) and its subsidiary TEAL Exploration & Mining Incorporated (<u>TEAL</u>) to acquire 50% of the capital of a joint venture that then owned the TEAL subsidiaries, for CAD\$ 81 million, increasing Vale s strategic options for growth in the copper business in Africa.

• On December 23rd, Vale signs a purchase and sale agreement to acquire 100% of the coal export assets of Cementos Argos S.A. (Argos) in Colombia for US\$ 306 million.

2009

• On January 30th, Vale enters into a purchase and sale agreement with Rio Tinto Plc (<u>Rio Tinto</u>) for the acquisition, upon cash consideration, of iron ore and potash assets located in Brazil, Argentina and Canada.

• On April 1st, the Company concludes the acquisition of Argos thermal coal export assets in Colombia.

• On April 16th, Vale completes the sale of all of its 14,869,368 common shares issued by Usiminas and linked to the steel company s shareholders agreement in effect. - On May 22nd, Vale s Special Shareholders Meeting approves the proposal for change of its corporate name from Companhia Vale do Rio Doce to Vale S.A.

• On July 13th, the Company informs that its union employees from Sudbury and Port Colborne, in the province of Ontario, Canada, went on strike. The same occurs on August 1st, with the union employees of its operation in Voisey s Bay, in the province of Newfoundland and Labrador, Canada.

• On July 22nd, Vale signs a memorandum of understanding (<u>MOU</u>) with ThyssenKrupp to increase its stake in ThyssenKrupp CSA Siderúrgica do Atlântico Ltda. (TKCSA) from 10% to 26.87%, through a capital injection of EUR965 million.

• On September 18th, Vale completes the acquisition of the Corumbá iron ore operations, located in Mato Grosso do Sul, belonging to Rio Tinto and other controlled entities.

2010

• On January 22nd, the wholly-owned subsidiary Valesul Alumínio S.A. (Valesul) entered into an agreement for the sale of its aluminum assets, located in Rio de Janeiro, to Alumínio Nordeste S.A., a company of the Metalis group, for US\$ 31.2 million. During the first half of the year, Vale entered into agreements with its customers in the iron ore sector to move from annual contracts to quarterly indexed-value contracts. The new contracts offer more efficiency and transparency to iron ore prices and allow the recognition of quality differences, which helps encourage long-term investments. In addition, customers can know in advance the price to be paid in the subsequent quarter.

• In the second quarter, Vale acquired a 51% stake in VBG - Vale BSGR Limited (<u>VB</u>G) (formerly BSG Resources (Guiné) Limited), which had rights of concession of iron ore in Simandou South (<u>Zogota</u>) and permits for exploration of iron ore in Simandou North (Blocks 1 & 2) in Guinea.

• In a series of transactions in 2010, Vale acquired the phosphate operations of Vale Fertilizantes S.A. (<u>Vale Fertilizantes</u>, formerly Fertilizantes Fosfatados S.A. - Fosfertil) and Vale Fosfatados S.A. (formerly Bunge Participações e Investimentos S.A.). The total cost of these acquisitions was US\$5.899 billion. Among the sellers there were: Bunge Ltd., The Mosaic Company (Mosaic), Yara Brasil Fertilizantes S.A. and other Brazilian companies.

• In May, Vale Internacional S.A. entered into an agreement with Oman Oil Company S.A.O.C. (OOC), a wholly-owned subsidiary of the government of the Sultanate of Oman, for a 30% stake in Vale Oman Pelletizing

Company LLC (VOPC) for US\$125 million.

• In July, Vale sold to Imerys S.A. 86.2% of its stake in Pará Pigmentos S.A. (PPSA), a producer of kaolin and other kaolin mining rights for US\$ 71.3 million (equivalent to R\$126.1 million).

• In July, Vale completed the operation announced on March 31, 2010, in which it sold 35% of the total capital of MVM Resources International B.V. (MVM) for Mosaic for US\$ 385 million, and 25% of MVM s total capital for Mitsui, for US\$275 million. MVM controls and operates the project Bayóvar of phosphate rock, located in Peru.

• In August, Vale Emirates Ltd. acquired a 51% interest in Sociedade de Desenvolvimento do Corredor Nacala S.A. (<u>SDCN</u>) from the Mozambican company Insitec SGPS SA (Insitec) for US\$21 million (equivalent to R\$36.6 million on the date of disbursement).

• In the fourth quarter, Vale listed Depositary Receipts representing its Class A common and preferred shares (HDRs) at the Stock Exchange of Hong Kong Limited (HKEx). The HDRs started to be traded on December 8, 2010.

2011

• On February 28th, Vale announced the end of the operation with Norsk Hydro ASA (<u>Hydro</u>), announced on May 2, 2010, to transfer all of its interests in Albras - Alumínio Brasileiro S.A.

(Albras), Alunorte and Companhia de Alumina do Pará (CAP), receiving in exchange, through the subsidiary Vale Austria Holdings GmbH, currently denominated Vale International Holdings GmbH (<u>Vale Austria</u>), 22% of the outstanding common shares of Hydro and US\$503 million in cash. In addition, Vale Austria sold 60% of Mineração Paragominas S.A. (Paragominas) to Hydro for US\$578 million in cash.

• On April 28th, the Board of Directors approved the acquisition of up to 9% of the capital of Norte Energia S.A. (<u>NESA</u>), a share previously held by Gaia Energia e Participações S.A. (Gaia). NESA is a company whose sole purpose is to implement, operate and explore the Belo Monte hydroelectric plant in Para. In June 2011, Vale completed the acquisition of 9% of NESA s capital.

• In June 2011, Vale Emirates Ltd. acquired an additional 16% stake in SDCN for US\$ 8 million, equivalent to R\$12.8 million. The acquisition was in line with the Company s strategy to develop the Nacala logistics corridor, and proceeded with the acquisition of the 51% interest in SDCN occurred in September 2010. SDCN has a concession to create the necessary logistics structure for the flow resulting from the expansion of coal production at Moatize.

• In December 2011, Vale completed through its wholly-owned subsidiary Mineração Naque S.A. a public share auction for the acquisition (<u>OPA</u>) of shares issued by Vale Fertilizantes in circulation in the market. As a result of the OPA, Vale acquired 211,014 common shares and 82,919,456 preferred shares issued by Vale Fertilizantes, representing 83.8% of the common shares and 94.0% of the preferred shares of Vale Fertilizantes in the market. The shares, both common and preferred, were purchased at the unit price of R\$25.00, totaling an amount of R\$2.078 billion.

2012

• In April, Vale sells 61.5% of its interest in Cadam S.A. to Kamin LLC, completing the divestment operation, for the sale of the kaolin business, which started in 2010, with the sale of the interest in Pará Pigmentos S.A.

• In June, Vale, together with Vale Internacional Holding GmbH and Vale Internacional S.A., completes the sale of its thermal coal operations in Colombia to CPC S.A.S, an affiliate of Colombian Natural Resources S.A.S. (CNR), for US\$ 407 million in cash.

• On June 7th, Vale Emirates Ltd. acquires an additional 18% interest in SDCN, holder of concessions to create Vale s logistics corridor in Nacala, Mozambique, for US\$ 18.5 million. As a result, Vale now holds 85% of SDCN s total capital.

• In August, Vale Internacional reports having entered into a US\$ 600 million sale agreement for 10 large ore carriers with Polaris Shipping Co. Ltd. (Polaris).

• In October, Vale and Vale Internacional complete the sale of their manganese ferroalloy operations in Europe to subsidiaries of Glencore International Plc (<u>Glencore</u>) for US\$ 160 million in cash. Vale also procures Glencore as its marketing agent abroad, for metallurgical manganese ore for a period of five years.

• On December 20th, Vale completes the annual appraisal of Onça Puma and aluminum assets, which results in the recognition of pre-tax impairment of R\$ 8.2 billion, affecting the accounting result in the fourth quarter of 2012.

• On February 28th, Vale concludes definitive agreements with Silver Wheaton Corp. (<u>SLW</u>), a Canadian company with shares traded on the Toronto Stock Exchange and NYSE, to sell 70% of the payable gold flows produced as a by-product of some nickel mines of Sudbury for 20 years and with Silver Wheaton (Caymans) Ltd. to sell 25% of the payable gold flows produced as a byproduct of the Salobo copper mine during the lifecycle of the mine, for the initial payment of US\$ 1.9 billion in cash, 10 million of SLW warrants with a strike price of US\$ 65 and term of 10 years. Moreover, Vale will receive future cash payments for each ounce of gold delivered to SLW under the agreement at the lower between US\$ 400 per ounce (plus an annual adjustment for inflation of 1% as of 2016 in the case of Salobo) and the market price.

• On March 11th, Vale informs the Government of the Argentine Republic that it has suspended the implementation of the Rio Colorado project in Argentina.

• On March 14th, Vale exercises preemptive rights, provided for in the incorporation agreement of the Capim Branco Consortium, acquiring for R\$ 223,030,470.52 a 12.47% interest of Suzano Papel e Celulose S.A. in the capital of the Capim Branco I and II hydropower plants. Consequently,

Vale now holds 60.89% interest in Capim Branco I and II, being able to generate 1,524 giga watts hour per year by the end of the concession in 2036.

• In July 2013, Vale concludes the contracting of a revolving credit facility with a five-year term of US\$ 2 billion.

• On September 18th, Vale enters into agreements to sell 20% of the total capital of VLI S.A. (<u>VLI</u>) to Mitsui & Co. Ltd. (<u>Mitsui</u>) for R\$ 1.5 billion and 15.9% of VLI s capital for R\$ 1.2 billion to the Investment Fund for the Guarantee Fund for Length of Service - FGTS (FI-FGTS), whose assets are managed by Caixa Econômica Federal.

• On November 14th, Vale announces the sale of its 22% interest in Hydro at a NOK price 25.00 per share, resulting in the amount of NOK 11,196 billion, equivalent to US\$ 1,822 billion (equivalent to R\$ 4,218 billion). Vale Austria held these shares since 2011, when it restructured its aluminum assets portfolio. Upon completion of this transaction, Vale Austria has no further interest in Hydro.

• On November 27th, Vale announces its adherence to the Federal Tax Refinancing Agreement (REFIS) referring to the payment of income and social contribution taxes on the net income of subsidiaries and affiliates on the income generated abroad in the years 2003 to 2012, in accordance with the conditions established by Law 12,865/2013 and Provisional Presidential Decree 627/2013. The adhesion to REFIS results in payment of R\$ 5.965 billion to the Federal Revenue Secretariat at the end of November and R\$ 16.360 billion divided into 179 monthly instalments, each adjusted by the SELIC interest rate.

• On December 12th, Vale concludes the sale of Sociedad Contrabica Minera Tres Valles, a cathode copper producer in the Coquimbo region of Chile, for US\$ 25 million (equivalent to R\$ 54 million) to Inversiones Porto San Giorgio S.A. (ISG), a company controlled by the Chilean group Vecchiola S.A.

• On December 19th, Vale enters into agreements with Cemig Geração e Transmissão S.A. (<u>CEMIG G</u>T) to create two joint ventures: (i) Aliança Geração de Energia S.A., consisting of assets and power generation projects of the two companies; and (ii) Aliança Norte Energia Participações S.A., formed through the sale to CEMIG GT of 49% of Vale s 9% interest in NESA, the company responsible for the construction, operation and exploration of the Belo Monte hydropower plant, for approximately R\$ 310 million.

• On December 23rd, Vale enters into an agreement with a fund managed by Brookfield Asset Management (<u>Brookfield</u>) to sell 26.5% of its interest in VLI capital for R 2 billion.

• On December 23rd, Vale informs by means of a notice to the market that it has filed in the Superior Court of Justice (STJ) petition for partial withdrawal of the lawsuit in which it discusses the legality of the taxation of the profits obtained by its subsidiaries abroad. Withdrawal involves the years 2003 to 2012.

• On December 26th, Vale holds an auction, pursuant to CVM Instruction 168/1991, as amended, for the sale of 28,737,367 common shares owned by it, issued by Log-in, a company listed on B3 (ticker symbol: LOGN3), corresponding to the totality of common shares issued by Log-in then held by Vale, at a price of R\$ 8.11 per share, amounting to R\$ 233 million. The completion of this transaction took place on January 2, 2014.

2014

• In January, Vale updates its Code of Ethics and Conduct in order to achieve greater alignment with its mission, vision and values, reinforce ethical standards and update aspects of anti-corruption and antitrust laws. On April 14th,

the transaction announced on September 18th, 2013 is concluded, transferring 20% of the total capital of VLI to Mitsui for R\$ 1.5 billion and 15.9% to the Investment Fund of the Guarantee Fund for Length of Service (FI-FGTS), whose assets are managed by Caixa Econômica Federal, for R \$ 1.2 billion. On August 19th, the transaction announced on December 23rd, 2013 is completed, transferring 26.5% of VLI s total capital to Brookfield for R\$ 2 billion. As a result of this transaction, Vale now holds 37.6% of VLI s total capital.

• On September 12th, Vale International SA and the China Ocean Shipping Company (<u>Cosco</u>) enters into a strategic cooperation agreement between the two companies for iron ore shipping. Under the terms of the agreement, four VLOC vessels, with a capacity of 400 thousand tons, which then belonged and were operated by Vale, would be transferred to Cosco.

• On September 26th, Vale International S.A. and China Merchants Group enters into an agreement that includes strategic cooperation between two companies for iron ore shipping.

Under the terms of this agreement, the two companies agree to sign a 25-year charter agreement to ship iron ore from Vale Brasil to China using 10 VLOCs to be built by China Merchants Group.

• On November 9th, 2014, Vale Austria sells to Hydro shares issued by Mineração Paragominas S.A. representing 20% of its total capital, as a result of a put option. The remaining portion of the interest held by Vale Austria in the share capital of Mineração Paragominas S.A. is also subject to a put option by Vale, which takes places on December 15th, 2016. Currently, Vale no longer holds any interest in Mineração Paragominas S.A.

• On December 9th, Vale announces to have entered into an investment agreement with Mitsui, under which Mitsui, subject to condition precedents, would hold 15% of Vale s 95% interest in Vale Moçambique (concessionaire of the Moatize mine) and 50% of Vale s interest in the Nacala Logistics Corridor. The transaction is concluded in 2017.

2015

• On February 27th, 2015, Vale completes the transaction started in December 2013 with CEMIG GT for the creation of the joint venture Aliança Geração de Energia S.A., upon the investment of its interests in some projects (Central Eólica Garrote Ltda., Central Eólica São Raimundo Ltda., Central Eólica Santo Inácio III Ltda., e Central Eólica Santo Inácio IV Ltda) and assets in operation (Igarapava Hydropower Plant Consortium, AHE Porto Estrela Consortium, AHE Funil Consortium, UHE Candonga Consortium, Consortium of the Aimorés Hydropower Plant and Capim Branco Energia Consortium in the Aliança Geração).

• On March 2nd, 2015, an amendment is signed to a contract entered into with Silver Wheaton (Caymans) Ltd. on February 28th, 2013, in order to extend the agreement to an additional 25% payable gold produced as by-product of copper mining at the Salobo mine, over the lifecycle of said mine.

• On March 13th, 2015, Vale transfers its equity interest in VBG back to BSGR due to the repeal by the Government of Guinea of the mining rights of the joint venture in April 2014.

• On March 31st, 2015, Vale concludes the transaction initiated in December 2013 with CEMIG GT for the sale of 49% of its 9% interest in the Belo Monte hydropower plant project for approximately R\$ 310 million.

• On April 27th, 2015, Companhia Siderúrgica do Pecém - CSP (\underline{CSP}) concludes a long-term financing agreement of approximately US\$3 billion that contributes to the fulfillment of the main project financing needs. This loan was taken directly by CSP.

• On May 15th, 2015, Vale completes the contracting of a revolving credit facility with a term of five years, in the amount of US\$ 3 billion. Vale also has another line of credit worth US\$ 2 billion, amounting to US\$ 5 billion in revolving credit lines.

• On May 19th, 2015, Vale International SA and China Merchants Energy Shipping Co., Ltd. (<u>CMES</u>), a subsidiary of China Merchants Group, celebrate an amendment to the agreement that comprises a long-term strategic cooperation between the two companies for iron ore shipping. The first agreement was entered into with China Merchants Group on September 26th, 2014. Under the terms of this amendment, Vale would divest 4 VLOCs (very large ore carriers) to CMES.

• On May 19th, 2015, Vale completes the transaction announced on September 12, 2014, involving the sale of four VLOC vessels, with a capacity of 400,000 tons, to Cosco. The transaction amounts to US \$ 445 million.

• On May 29th, 2015, Vale obtains licenses of vegetation suppression and operation to mine the N5S area.

• On May 29th, 2015, Vale starts operations in Conceição Itabiritos II and will start operations in Cauê Itabiritos in the second half of 2015.

• On July 30th, 2015, Vale and the Investment Fund in Multisectoral Holdings Plus II (<u>FIP Plus II</u>), whose quotas are held by Banco Bradesco BBI SA, enters into a Sales Agreement of Shares and Other Covenants whereby Vale promises to sell Class A preferred shares, representing 36.4% of the capital stock of Minerações Brasileiras Reunidas S.A. - MBR (<u>MB</u>R), for the price of R\$ 4 billion, subject to usually applicable condition precedents, including prior approval by CADE.

• On July 30th, 2015, Vale concludes the sale of four VLOC vessels, with a capacity of 400 thousand tons, to CMES. The transaction is related to the agreements entered into with CMES on September 26th, 2014 and May 19th, 2015, which were disclosed previously. The transaction amounts to US\$ 448 million. The amount is received by Vale upon delivery of the vessels to CMES on September 25th, 2015.

• On September 1_{st}, 2015, Vale and FIP Plus II conclude the sale of 36.4% of MBR s capital stock by complying with the preceding conditions required for the settlement of the transaction. The transaction is related to the announcement made on July 30th, 2015 and the amount received by Vale through the disposition of class A preferred shares was R\$ 4 billion (US \$ 1.089 billion). After the sale, Vale holds 61.9% of the total capital and 98.3% of its voting capital. Vale has the option to repurchase the shares of the MBR that are currently held by BBI, successor to FIP Plus II.

• On September 18th, 2015, Vale closes the offer of infrastructure debentures.

• In November 2015, Vale completes the sale of its 50% interest in the Isaac Plains joint venture and all related assets to Stanmore Coal Limited (<u>Stanmore</u>). Under this agreement, Vale will pay A\$ 21.6 million in 12 monthly installments to Stanmore, which will undertake Vale s liabilities under the joint venture agreement. Stanmore agrees to pay Vale royalties amounting to A\$ 2.0 per tonne for coal produced and sold at the Isaac Plains Coal Mine for a period of 10 years, subject to certain minimum price thresholds, up to an aggregate value of A\$ 21.6 million.

• On November 5th, 2015, one of the Samarco s iron ore tailings dams (Fundão) located in the Germano Mining Complex in the city of Mariana, State of Minas Gerais, collapses, causing social and environmental impacts. As a consequence of the collapse of the dam, Samarco s operations in Germano/Alegria (Mariana Complex) are temporarily suspended by government agencies. For further information on dam collapse and its impacts, see items 4, 7.9, 10.1 of this Reference Form.

• In December 2015, Vale completes the sale of its 68.4% interest in Integra s Coal Joint Venture (<u>ICJV</u>) and all related assets to Glencore Plc (<u>Glencore</u>). On the other hand, Glencore agrees to pay royalties to Vale in the amount of A\$ 1.50 per ton for the coal produced and sold by ICJV, based on the mineral rights currently held by ICJV, proportional to Vale s participation in the ICJV prior to sale and limited to an annual volume of two million metric tons for ten years. As part of the transaction, Glencore undertakes some, but not all, ICJV obligations, including certain compulsory procurement logistics contracts.

• On December 8th, 2015, Vale concludes the purchase and sale transaction of four 400,000-ton VLOCS vessels for a consortium led by ICBC Financial Leasing, a wholly owned subsidiary of the Industrial and Commercial Bank of China. The transaction adds up to US\$ 423 million and the amount is received by Vale, concomitantly with the delivery of the vessels to the new owners.

2016

• On January 12th, 2016, Vale disburses US\$ 3 billion of the US\$ 5 billion available in revolving credit lines to increase its liquidity and cover potential cash flow needs until the end of its program of divestments, particularly the completion of the Coal transaction involving Moatize and the Nacala Logistics Corridor.

• On February 16th, 2016, Vale changes the address of its headquarters office to Avenida das Américas, No. 700, Bloco 8 - Loja 318, 3° andar, Barra da Tijuca, Rio de Janeiro, RJ.

• On February 26th, 2016, the rating agency Moody s withdraws Vale s Investment Grade .

• On March 7th, 2016, Vale enters into a non-binding MOU with the Australian Fortescue Metals Group Ltd. (<u>Fortescue</u>), which sets forth the principles by which Vale and Fortescue agree to pursue long-term opportunities to develop new businesses, including the formation of one or more joint ventures for the blending and distribution of

Vale s and Fortescue s products and the possibility of Vale, on an optional basis, carrying out mining projects jointly with Fortescue in Australia and purchasing a minority interest in the controlling company of Fortescue.

• On April 4th, 2016, Vale announces the sale of its 26.87% interest in Companhia Siderúrgica do Atlântico (CSA) to Thyssenkrupp as part of its initiative to simplify its asset portfolio, a transaction completed on May 31st, 2016.

• On April 28th, 2016, Vale announces that its Board of Directors approves the proposal to close the listing program of HDRs on the Hong Kong Stock Exchange (HKEx). - On June 30th, 2016, the HDR certificates expire and are automatically canceled under the HKEx procedures, and the HKEs de-listing process of the Company s HDR Program becomes effective on July 28th, 2016.

• On May 10th, 2016, Vale announces the end of negotiations with Hydro regarding the potential sale of its 40% stake in MRN. Vale and Hydro had drafted a letter of intent in October 2015 relating to a possible transaction but were unable to agree to the terms of business.

• On June 20th, 2016, the integrated steel plate mill of Companhia Siderúrgica do Pecém (<u>CS</u>P), in the State of Ceará, enters the ramp-up phase.

• On June 30th, 2016, Vale and a consortium led by ICBC International (ICBC), a wholly-owned subsidiary of the Industrial and Commercial Bank of China, conclude the purchase and sale transaction of three VLOC vessels with 400,000 tons capacity previously operated by Vale. The transaction adds up approximately US\$ 269 million and the amount is received by Vale through the delivery of the ships.

• On August 2nd, 2016, Vale informs that it has signed an agreement with Silver Wheaton (Caymans) Ltd. (Silver Wheaton), a wholly owned subsidiary of Silver Wheaton Corp. (SLW), a Canadian company with shares traded on the Toronto Stock Exchange and the New York Stock Exchange, to sell additional 25% of the premium of payable gold flows on copper concentrate produced at the Salobo copper mine during the lifecycle of the mine.

• On September 29th, 2016, Vale announces that it has approved new terms regarding the investment agreement with Mitsui (which were formalized in November 2016), whereby Mitsui will hold 15% of Vale s 95% interest in Vale Moçambique (concessionaire of Moatize) and 50% of Vale s interest in the Nacala Logistics Corridor. The completion of transaction is subject to some conditions precedents and is expected to occur in 2017.

• On November 30th, 2016, Vale sells to its subsidiary AMCI Euro-Holdings BV (<u>AMCI</u>) its interest in certain coal assets in Australia, including operations in Carborough Downs, the operation in Broadlea, and the deposits to be developed in Ellensfield and Red Hill.

• On December 5th, 2016, Vale and Polaris Shipping Co. Ltd. (Polaris) have conclude the purchase and sale transaction of four capesize vessels previously operated by Vale. The transaction amount to US\$ 140 million, equivalent to US\$ 35 million per vessel, received by Vale upon delivery of each vessel.

• On December 9th, 2016, Vale receives the operating license (LO) of the S11D mine and plant, issued by the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA).

• On December 15th, 2016, the sale of Vale s remaining 13.63% interest in Mineração Paragominas S.A. to Norsk Hydro ASA is completed. The transaction totaled US\$ 113 million and is related to the sale of Vale s aluminum assets announced on February 28th, 2011.

• On December 17th, 2016, Vale begins production at the mine and mining plant located in Serra Sul de Carajás, in the state of Pará. The nominal capacity of the Ferro Carajás S11D Project is 90 Mtpy.

• On December 19th, 2016, Vale informs that it has entered into a sales and purchase agreement of shares with The Mosaic Company (Mosaic) to sell its Fertilizer business, excluding its nitrogenous and phosphated assets located in Cubatão, Brazil. The value of the transaction is US\$ 2.5 billion, of which US\$ 1.25 billion will be paid in cash and US\$ 1.25 billion will be paid in approximately 42.3 million common shares to be issued by Mosaic. The consummation of the transaction is expected for the end of 2017 and is subject to (i) separation of Cubatão assets from Vale Fertilizantes S.A .; (ii) compliance with usual condition precedents, including the approval of the Administrative Council for Economic Defense (CADE) and other antitrust authorities; and (iii) other operational and regulatory issues. The operation is completed in 2018. For further information, see item 15.7 of this Reference Form.

2017

• On February 19th, 2017, the shareholders of Valepar S.A., namely: Litel Participações S.A., Litela Participações S.A., Bradespar S.A., Mitsui & Co, Ltd. and BNDES Participações S.A. BNDESPAR enter into a new Valepar

Shareholders Agreement, effective as of May 10th, 2017. In addition to the common rules regarding voting and preemptive rights in the acquisition of shares of the signatory shareholders, the new Shareholders Agreement provides for the submittal by said shareholders of a proposal to the Company with the purpose of enabling Vale s listing in the special segment of Novo Mercado of B3 and transforming it into a society without defined control.

• On March 27th, 2017, the equity operation with Mitsui & Co., Ltd. is completed. (Mitsui) related to the divestment of part of its interest in the Moatize coal mine and the Nacala Logistic Corridor (CLN). Vale receives, on that date, US\$ 690 million and US\$ 87 million in the first quarter of 2018 at the closing of the Nacala Logistics Corridor project finance.

• On May 9th, 2017, Valepar s Shareholders Agreement enters into force on May 24th, 1997.

• On May 11th, 2017, Vale s Board of Directors approves the submittal to the Company s General Meeting of the proposal sent by Valepar, the controlling shareholder of Vale on that date, at the request of its shareholders Litel Participações S.A., Litela Participações S.A., Bradespar S.A., Mitsui & Co., Ltd. e BNDES Participações S.A. BNDESPAR, which involves the corporate

restructuring of the Company, as well as changes in corporate governance, with the purpose of transforming Vale into a company without defined control and make its listing possible in the special segment of B3 s Novo Mercado (Corporate Restructuring).

• On June 27th, 2017, Vale s shareholders approve, at the Extraordinary Shareholder s Meeting, the proposal submitted by Valepar on May 11th, 2017, which became effective on August 14th, 2017, uponi) the merger of Valepar into Vale, approved at the Extraordinary Shareholder s Meeting of Valepar held on August 14th, 2017 and (ii) the acceptance of 84.4% of class A preferred shares of the voluntary conversion into common shares, according to the material fact of August 11th, 2017.

• In August and December 2017, Vale sells a total of four VLOCs of 400,000 deadweight tons (DWT) for an aggregate amount of US\$356 million to Bank of Communications Finance Leasing Co., Ltd. (Bocomm). With the conclusion of these sales, Vale no longer owns any huge ore carrier of 400,000 DWT in its fleet. Moreover, Vale also sells two floating transfer stations for an aggregate value of US\$ 35 million.

• On October 18th, 2017, the Special Shareholders Meeting and the Special Preferred Shareholders Meeting approve the conversion of all of the class A preferred shares issued by Vale at a ratio of 0.9342 common share to each class A preferred share, the same ratio applied in the voluntary conversion completed in August 2017 (<u>Conversion of the Remaining Shares</u>). Due to the approval of the Conversion of the Remaining Shares, the shareholders holding preferred shares dissenting from the resolution have the right to withdraw from the Company, pursuant to art. 137 of the Brazilian Corporation Law, which may be done by November 21th, 2017.

• On November 17th, 2017, Vale enters into a share purchase agreement with Yara International ASA for the sale of its wholly-owned subsidiary, Vale Cubatão Fertilizantes Ltda., which owns and operates the nitrogen and phosphate assets located in Cubatão, Brazil . The operation is completed on May 15th, 2018, and Vale and its subsidiaries receive US\$ 255 million in cash.

• On November 27th, 2017, entities from the Logistics Corridor of Nacala (CLN) sign agreements for project finance in the total amount of US\$ 2.730 billion. The transaction is closed in February 2018 and Vale receives project finance in March 2018. Vale receives US\$ 2.6 billion in funds in payment for certain loans from shareholders to build the CLN, net of some commissions paid by CLN. The project finance is to be amortized in 14 years with the financial resources obtained from the fee charged by the CLN in relation to the provisions of coal transportation services and cargo services in general.

• On November 27th, 2017, dissenting shareholders who exercised their withdrawal rights receive the reimbursement amount and, as of said date, all shares issued by Vale under negotiation at B3 become common, with the exception of the twelve special class preferred shares held by the Federal Government.

• On the same date, November 27th, 2017, and as a result of the Conversion of the Remaining Shares, holders of American Depositary Shares representing class A preferred shares (<u>Preferred ADSs</u>) are entitled to receive American Depositary Shares representing common shares and Preferred ADSs are no longer traded on the NYSE.

• On December 18th, 2017, the company changes its headquarters to Torre Oscar Niemeyer, Praia de Botafogo, 186, salas_701 a_1901, in Botafogo, in the City of Rio de Janeiro, RJ.

• On December 21st, 2017, the following issues are approved in the Company s Special Shareholders Meeting, among other issues (i) Vale s proposal to migrate to the special listing segment of B3 S.A. - Brasil, Bolsa, <u>Novo Mercado</u>), and (ii) amendment to the Company s Bylaws to reflect the conversion of all Class A preferred shares into common shares, as well as adjust them to the regulations of Novo Mercado in effect at the time of migration.

• As of December 22nd, 2017, the Company s common shares are traded on the Novo Mercado. For further information, see item 15.7 of this Reference Form.

2018

• In January 2018, Vale completes the sale to The Mosaic Company (Mosaic) of a significant part of its fertilizer business, which includes (i) its phosphate assets in Brazil; (ii) its participation in the joint venture that operates the phosphate rock mine in Bayóvar, Peru; (iii) its potassium production assets located in Brazil; and (iv) its Canadian-based potassium production project (Kronau). Vale will retain a shareholder participation in the TIPLAM port terminal in southeastern Brazil, which was previously included in the transaction, and will receive approximately US\$ 1.150 billion (US\$ 1.080 billion after usual working capital adjustments) plus 34.2 million shares of

Mosaic, representing 8.9% of Mosaic s outstanding common shares after the issuance of these shares with the completion of the transaction. For further information, see item 15.7 of this Reference Form.

• In January 2018, Vale resumes the operations at its pelletizing plant Tubarão II.

• On March 20th, 2018, Project Finance for the Nacala Logistics Corridor (CLN) is complete and paid, and Vale receives US\$ 2.6 billion as reimbursement for part of the shareholder loans granted for the construction of the CLN, net of some premiums and commissions paid, or to be paid, by CLN.

• On March 29th, 2018, a new shareholders compensation Policy is approved, effective as of the publication of the results for the first half of 2018, the contents of which are available on the CVM website (www.cvm.gov.br) and the Company s (www.vale.com).

Vale clarifies that there are no sector or macroeconomic policy decisions that have materially affected the Company in the last fiscal year ended in December 31, 2017 and up to the annual filing date of this Reference Form.

6.5 - Information on bankruptcy petitions based on material value or judicial or extrajudicial recovery

Not applicable. There are no bankruptcy petitions based on material values, or for judicial or extrajudicial recovery of the Company. .

6.6 - Other relevant information

Sale of part of gold flows produced as by-products

On March 2nd, 2015, an agreement is signed with Silver Wheaton (Caymans) Ltd. on February 28th, 2013, in order to extend the purchase agreement of an additional 25% of payable gold produced as a by-product of copper mining at the Salobo mine, over the lifecycle of this mine. For this transaction, Vale receives an initial payment of US\$ 900 million, and will receive future cash payments for each ounce of gold delivered to Silver Wheaton, based on the lowest amount between \$ 400 per ounce and the market price. This amount will be annually updated at 1% as of 2017.

On August 2nd, 2016, an agreement is entered into with Silver Wheaton (Caymans) Ltd. (Silver Wheaton) to sell additional 25% of the premium of payable gold flow contained in the copper concentrate produced at Salobo copper mine over the lifecycle of the mine. In the second amendment, the Company receives (i) an initial cash payment of R\$ 2.568 billion (US\$ 800 million) and (ii) one option value resulting from the reduction of the strike price from R\$ 211.00 (US \$ 65.00) to R\$ 142.00 (US\$ 43.75) on the 10 million warrants of SLW held by the Company since 2013 and maturing in 2023.

As a result, SLW held, on December 31st, 2017, 75% of the flow of payable gold contained in the copper concentrate of the Salobo mine and 70% of the gold mined as a by-product of the Sudbury nickel mines. Under the goldstream agreement, SLW received 280,704 ounces of gold in 2017.

Royalties Alemão Project

On June 19th, 2015, Vale enters into a contract with BNDES to regulate the participation of the economic rights of BNDES in the event of the implementation by Vale of the Alemão Project, provided for in the Future Equity Advance Payment Agreement , entered into on March 5th, 1985, through the payment by Vale to the BNDES of royalties corresponding to 1/3 (one third) of the economic rights deriving from the Alemão Project, which was determined through the use of an economic model with market assumptions.

The royalty will be paid annually by Vale upon start of the sale of the copper concentrate at the Alemão Project. The royalty corresponds to 2.5% of the annual net revenues of the Alemão Project, and in the years in which the annual average price of copper, as disclosed by LME, reaches USD 8,000.00/ton (<u>Trigger Price</u>), the royalty for these particular years shall be increased by 2.25%. The Trigger Price will be adjusted annually by the Consumer Price Index (CPI).

On May 11th, 2017, Vale s Board of Directors approves the submittal to the Special Shareholders Meeting of the Company of proposal sent by Valepar S.A. (<u>Valepar</u>), the controlling shareholder of Vale on said date, at the request of its shareholders Litel Participações S.A., Litela Participações S.A., Bradespar S.A., Mitsui & Co., Ltd. e BNDES Participações S.A. which involves the corporate restructuring of the Company, as well as changes in corporate governance, with the purpose of transforming Vale into a company with no defined control and its listing in the special segment of Novo Mercado of B3 (<u>Corporate Restructuring</u>).

On June 27th, 2017, Vale s shareholders approves, at the Special Shareholders Meeting, the proposal submitted by Valepar on May 11th, 2017, effective as of August 14th, 2017 upon (i) the merger of Valepar into Vale, approved at the Special Shareholders Meeting of Valepar held on August 14th, 2017 and (ii) the acceptance of 84.4% of Class A preferred shares from voluntary conversion into common shares , according to the material fact of August 11th, 2017.

On October 18th, 2017, the Special Shareholders Meeting and the Special Preferred Shareholders Meeting approves the conversion of all class A preferred shares issued by Vale into a ratio of 0.9342 common shares for each class A preferred share, the same ratio applied

in the voluntary conversion completed in August 2017 (<u>Conversion of the Remaining Shares</u>). Due to the approval of the Conversion of the Remaining Shares, the shareholders holding preferred shares dissenting from the resolution have the right to withdraw from the Company, pursuant to art. 137 of the Brazilian Corporation Law, which may be done by November 21th, 2017.

On November 27th, 2017, dissenting shareholders who exercised their withdrawal rights receive the reimbursement amount and, as of said date, all shares issued by Vale under negotiation at B3 became common, with the exception of twelve special class preferred shares held by the Federal Government.

On the same date, November 27th, 2017, and as a result of the Conversion of the Remaining Shares, holders of American Depositary Shares representing class A preferred shares (<u>Preferred ADSs</u>) are entitled to receive American Depositary Shares, representing common shares (<u>Common ADSs</u>), each Common ADS representing one common share of Vale s, at the ratio of 0.9342 Common ADS for each Preferred ADS held, and, if applicable, a cash payment representing the net amounts resulting from the sale in the market, by Citibank, N.A., in its capacity as Custodian (<u>Depositary</u>), of rights over fractions of the Common ADS to which the Preferred ADS holder would be entitled (Cash Payment). No fraction of Common ADS was issued to holders of Preferred ADSs. As of November 27th, 2017, the Preferred ADSs are no longer traded on the New York Stock Exchange (<u>NYSE</u>), observing that Vale s Common ADSs continue to be traded under the VALE code.

The fractions of common shares resulting from the Conversion of the Remaining Shares are grouped into whole numbers of common shares and sold at auctions held at B3, net proceeds from sale (after deduction of applicable fees and expenses, including selling commissions) reverted to the holders of the fractions in proportion to the fractions held by them.

The Depositary calculates and added rights to fractions of Common ADSs that would be issued to all holders of Preferred ADSs, and makes the sale of the full amount of such rights on the NYSE, distributing the Cash Payment (net of applicable fees and reimbursable expenses).

On December 21st, 2017, the Company s Special Shareholders Meeting approves, among other issues, (i) the proposal for the migration of Vale to the special listing segment of B3 S.A. - Brasil, Bolsa, (ii) amendment of the Company s Bylaws to reflect the conversion of all Class A preferred shares into common shares, as well as to comply with Novo Mercado regulation in force at the time of the migration.

In view of the foregoing, it is further clarified that as of December 22nd, 2017, the Company s shares began to be traded on Novo Mercado.

For information on the Company s Corporate Restructuring, see item 15.7 of this Reference Form.

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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.

Date: May 29, 2018

Vale S.A. (Registrant)

By:

/s/ André Figueiredo Director of Investor Relations

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