



Review by Vale of the report “The mining and steel industry’s impacts on human rights in Açailândia, Brazil – How much are human rights worth?” Published on May 19, 2011 in the state of Maranhão by the International Federation for Human Rights (FIDH)

To FIDH and whom else it may concern,

It is with regret that we are placed in the position of having to refute serious unfounded accusations of human rights violations made against us.

We would like to make clear that we sought to meet all requests made by FIDH. We received the organization’s representatives in September 2010 at the company’s head office and we submitted the responses requested so that they could be incorporated in the report. As mentioned in the report itself, Vale was the only company to provide such information.

Unfortunately, we did not have access to the report before it was published. For this reason, we did not have the opportunity to clarify a series of points that are incorrect, incomplete or taken out of context presented in the document in question. We seek to clarify the main points by means of this review.

We were surprised not to have been given access to the report before it was distributed to the media. We expected that a serious institution like FIDH would adopt a proactive and conciliatory approach. However we were faced with a media spectacle used to judge and convict based on unsubstantiated data. The documents presented, when analyzed under the law, do not stand. It is precisely through working together that we have made a great deal of progress in our relationships with communities, pursuing shared goals and positive results for all stakeholders. Institutions that work with this mindset have our utmost respect and we seek to support them in the challenges that we face in our operations.

Due to the need to postpone our meeting in Rio de Janeiro scheduled for May 23 to May 31, it has not yet been possible to hold a second meeting with FIDH representatives. We regret this and we are at your disposal to meet at another time.

Yours sincerely,

Vale S.A.



Main points to be clarified:

Page 17 – Vale “responded”

We do not understand the ironic use of quotation marks around the word “responded.” Vale was available to answer FIDH’s questions in 2010 and, as soon as it received the request for information to complete the report, it sent the information requested. According to the report itself, Vale was the only company that received a visit from FIDH and that submitted responses when requested.

Page 19 – “were being built along the Carajás Railroad (EFC), belonging to the company Vale.”

Vale holds the operating concession to the Carajás Railroad, but does not own it.

Page 19 – “Vale was one of the entities responsible for the PGC Master Plan and is its main administrator.”

The Greater Carajás Program was a government strategy in the 1980s, aiming to develop the region, but it was not, and is not, controlled by Vale.

Page 19 – “Açailândia is one of the worst regions in terms of the number of human rights violations by the company Vale in Brazil since the 1980s.” And footer note 25 – “Besides Açailândia and other municipalities in Maranhão (such as the capital, São Luís), Vale has also been denounced for violations in regions in Minas Gerais, Pará, Rio de Janeiro, Mato Grosso do Sul and Ceará. In addition to cases in Brazil, there is information about violations in Peru, Canada, Argentina, Mozambique, Chile and Indonesia.”

Vale has not committed any human rights violations. (See pages 114 to 116 of our 2009 Sustainability Report.) We comply with all legislation and we are involved in building solutions in conjunction with communities and public authorities.

Page 21 – “[Vale’s activity] had exhausted native forests”

Vale protects 10,321 km² of natural habitat, including sites owned by the company (4%), leased areas (3%) and official Conservation Units protected in partnership with local governments (93%). These areas cover territory in the Amazon Forest (82%), Boreal Forest (1%), Atlantic Forest (6%), New Caledonia (<1%) and Wallacea (11%) biomes, as well as properties located in the transition region between Atlantic Forest and Cerrado (1%). Some of the company’s operational units are located inside protected areas that we help to preserve, such as Carajás National Forest and Tapirapé-Aquiri National Forest. There are also protected areas around our operations, such as a number of private nature reserves in Minas Gerais, in the transition region between the Atlantic Forest and Cerrado biomes. Our conservation initiatives in Carajás extend to all nature reserves within the regional Mosaic of Conservation Units, including Itacaiúnas National Forest, Tapirapé Biological Reserve and Igarapé do Gelado Environmental Protection Area, which do not contain our operations. We also protect other areas, both on our own land and through partnerships, which are not related to our activities, such as the Vale Nature Reserve



(Linhares, Espírito Santo), Sooretama Biological Reserve (Sooretama, Espírito Santo) and Ilha Grande State Park (Angra dos Reis, Rio de Janeiro). Source: Vale's 2009 Sustainability Report, pages 110 and 111.

Specifically in the Açailândia region, Vale is responsible for maintaining the only existing nature reserve, covering nearly 40,000 hectares of native forest. This area is preserved as a result of the Carajás Pig Iron project. This area of forest would no longer exist if 35,000 hectares of eucalyptus plantations for charcoal had not been planted elsewhere; in other words, reforestation has contributed significantly to maintaining areas of native forest. To install the Carajás Pig Iron project, Vale took on responsibility for, and has guaranteed, the protection of native forest, rivers, streams and lakes, thereby preserving the landscape, birdlife and biological diversity. All of the other areas of forest in the region have been cleared by cattle farmers and loggers who passed through the region and are now increasingly moving towards the north of the state.

As of January 2008, other plants in Açailândia had around 107,000 hectares of forest plantations, generating more than 9,700 direct and indirect jobs. By November 2010, this figure had risen to more than 130,000 hectares, and over 4,500 jobs have been maintained, despite the serious crisis in the pig iron market. (Data from the Brazilian Association of Steelmakers, ASIBRAS.)

On the border with the state of Pará, the Vale Florestar project, already under way, is responsible for planting 150,000 hectares of eucalyptus plantations. In order for these plantations to be approved, commitments were undertaken to maintain the land's areas of native forest, in line with federal legislation. In addition to planting eucalyptus, Vale Florestar is investing in the restoration of degraded areas and is planting 100,000 hectares of forest with species that are native to the region. Vale Florestar is taking a new economic activity to the region in which it operates, which besides restoring degraded areas, presents an alternative to the culture of deforestation. By 2015, there will be 1,500 km² of land covered by initiatives to protect and restore native trees, as well as 1,500 km² of commercial plantations in southeast Pará.

One of the program's distinctive features lies in the economic alternative offered to local communities. Besides deterring deforestation and restoring degraded areas, multiplier effects are generated in terms of income, formal jobs, tax revenue and improvements in the quality of life.

Page 21 – "Accordingly, Vale, whose history has always been connected with the 'need' to earn international revenue for the country, would do there what it has already done in the state of Minas Gerais: mineral exploration directed towards external markets, generating few jobs, most of them of low quality, giving back low revenues to impacted municipalities (it may be considered a veritable source of economic 'enclaves'), assuming a higher position of power..."



This information is not correct. Vale contributes significantly to the generation of municipal, state and federal taxes. It is an important agent in formalizing the local workforce in the regions where it operates. It employs a significant number of people (in Brazil, in 2009, Vale has approximately 109,000 direct employees and contractors – 2010 data taken from Vale's 2010 Sustainability Report, to be published in the coming months). Vale also promotes the development of its local suppliers and helps to attract external suppliers to the regions where it operates, thereby increasing local tax revenue.

In terms of the capacity for leverage generated by Vale, see this statement by Francisco Costa, a professor and researcher at the Advanced Amazon Study Center (Naea) at the Federal University of Pará (UFPA), with a PhD in economics from the Free University of Berlin, taken from page 46 of Vale's 2007 Sustainability Report: "Before, we saw Vale as an enclave in the regional economy. In other words, we believed that its action did not generate economic development in towns. The Diagnosis showed a different reality. The company has a strong impact. It buys goods and services in the region to supply its operational and administrative units, and its employees, partners and suppliers do the same thing. The result of this is stimulation of development that we did not evaluate before," says Francisco Costa. Since the researcher made this statement, Vale has significantly increased its investment in Brazil.

See also: "The de-structuring caused by the arrival of large companies in any region is the essence of development. As development with imbalances does not exist, Vale began to make partnerships with specialist consultancies to go beyond legislative requirements. Both in management and among the workforce, this approach has since become an ideological commitment in the company's business culture. Today we can say that the idea of sustainability is truly part of Vale's institutional mission." Paulo Haddad, former Brazilian minister of finance and planning, March 2008, quoted on page 154 of Vale's 2008 Sustainability Report.

Page 22 – "... only 32% of Brazilian municipalities have a worse Human Development Index (IDH) score [than Açailândia] in Brazil."

It was neglected to mention that in 2000, Açailândia was the 9th best municipality in Maranhão in terms of IDH score, with a better rating than 208 other municipalities in the state. Any data presented ought to be compared with the state of Maranhão, given that, in 2005, the state had the second worst IDH score in Brazil (0.683). Source: a 2008 report by PNUD/Fundação João Pinheiro. The infrastructure, housing and public service deficits identified are unfortunately a part of the reality of most of Maranhão's municipalities and they deserve special attention from defenders of human rights.

Page 23 – Measures to make environmental licensing more flexible

The entire process conducted by IBAMA and the Environment Secretariat takes place transparently and in line with legal requirements. Vale met all legal requirements to implement the Carajás Pig Iron project, from the production of an environmental impact



study (EIA-RIMA) and the holding of public meetings to compliance with strict conditions for issuing construction and operating licenses. Monthly, six-monthly and annual update reports are routinely submitted to SEMA-MA and other information is sent and duly registered, informing the authorities of any changes from the original plan. Every year, Vale is inspected by SEMA and other environmental entities, both federal and state.

Page 24 – Vale’s consent to slave labor in the steelmaking production chain

In 2007-2008, Vale unilaterally suspended its supply of iron ore to nine pig iron producers in Pará, Maranhão, Espírito Santo and Minas Gerais, due to their violation of environmental and labor laws.

Vale was able to act in this way when the public authorities, through inspection, proved the companies’ illegal conduct. Our contracts contain clauses that enable them to be terminated if slave or child labor is proved. This was the first time that a company has suspended contracts with CUSTOMERS due to human rights violations.

It was an unprecedented initiative, for the first time in Brazil, a Brazilian company suspended contracts with its clients – and not suppliers – for violations of human rights and environmental law. Due to this action, Vale set an important standard and was recognized in Brazil and internationally: “Vale is taking important and courageous steps, to promote the full eradication of forced labor exploitation throughout Brazil’s pig iron industry. This can be a model not only in Brazil but for steel producers worldwide, showing the vital contribution that committed business leadership can make to a world of work in freedom and human dignity. Vale’s efforts deserve widespread international recognition”. Roger Plant, Head of the Special Action Program to Combat Forced Labor of the ILO - International Labor Organization. March, 2008.

Vale has established specific clauses on child and forced labor in all iron ore sales contracts to pig iron producers. We also require pig-iron producers to provide every semester their operational license and the sustainable supply plan. We also consult the Brazilian Ministry of Labor on a regular basis, since it maintains an updated listing of all companies involved in issues where respect for labor may be absent and take action, suspending the supply of iron ore and demanding the documentation needed to show compliance with Brazilian laws. This procedure is contributing to improve compliance in the pig-iron sector.

It is a matter of great concern to us to help “clean” the pig-iron production chain since it employs a significant number of people: according to Brazilian Association of Steelmakers (ASIBRAS), considering the figures for November 2010, the activity of pig iron production currently provides around 4,500 direct jobs, both in the forest and in plants, in the Açailândia region alone. Adding in pig iron activities in Pará, the total number of direct jobs generated exceeds 8,900.



Page 25 – Measures to make environmental laws more flexible

Brazil's environmental legislation is among the strictest and most complex in the world, requiring continuous efforts to be correctly applied.

Page 26 – The Foundation did not grant public access to the EFC integrated socioeconomic diagnoses, as it had promised since 2008.

The EFC socioeconomic diagnoses of municipalities have been widely distributed among the public authorities, civil society and private companies. The printed and CD version of the socioeconomic diagnosis were distributed in 2008, to the audience attending the presentations made by Vale Foundation on the subject. Vale Foundation's website was recently remodeled and the socioeconomic diagnoses are being uploaded gradually.

Page 27 – “the organizations entered with a demand on the “4a Câmara da Procuradoria Geral da República”

Vale is not aware of this matter.

Page 30 – “Vale’s ‘social responsibility policy’ was created following the greater visibility that the impacts of its operations produced and resulting denouncements and resistance movements”

Vale does not have a Social Responsibility Policy. However, it has had a Sustainable Development Policy since 2007 and a Human Rights Policy since 2009. Both were the result of a continuous improvement process. It is important to stress that Vale is one of the first Brazilian companies (if not the only one) to have a Human Rights Policy.

Page 31 – “chapter setting out ‘ethnodevelopment actions,’ highlighting support for quilombo communities and indigenous peoples. This support, however, coincides with political pressures and legal action that indigenous groups such as the Xikrin, Kayapó and Krenak peoples are proposing to take against the company”

In our Sustainability Report, we explain the ACPs and each one's status (2009 Sustainability Report, page 118): “Our aim is to establish constructive, mutually beneficial relationships that respect the rights and cultural diversity of Indigenous Peoples. However, we continue to face legal action. A lawsuit involving the Xikrin community of Cateté is in progress, and a suit has been filed by the National Indian Foundation (Funai) against Pará Pigmentos S.A., which is controlled by Vale, concerning financial benefits for the Tembé community. Another lawsuit has been brought by the Indigenous Missionary Council (Cimi) and the Association for the Development and Preservation of the Araguaia and Tocantins rivers, against Ibama and the Estreito Energia consortium, alleging inadequate assessment of the indigenous element during the licensing process. In 2009, a Cooperation Agreement for carrying out projects was proposed between the Consortium, Funai and Ibama. In Minas Gerais, the Hydroelectricity Consortium of Aimorés continued to implement the project agreed with the Krenak community, which includes social, environmental and cultural actions. In the state of Pará, Vale is waiting for the response of the Quilombolo Communities of the territory of Jambuaçu before it can continue with the actions that had been agreed.” This information will be updated in the 2010 Sustainability Report.



The mentioned investments in ethnodevelopment are voluntary and complement actions contained in the scope of legal action. They are part of our process of continuously improving our relations with these communities.

Page 32 – “in these reports (Form 20-F), Vale does not explain the reasons for such occurrences, and does not refer to the problems observed”

Form 20-F is submitted to SEC every year. In this report, the company lists and analyzes the business’s “Risk Factors” in a short, objective manner. It is an analysis of scenarios and possibilities. There is no space for going into risks in detail.

Page 33 – “a significant share of the total allocated for the company’s social and environmental responsibility is the result of tax incentive laws”

In 2010 Vale carried out USD89.60 million of social investment through the use of tax incentive laws and made voluntary social investments of USD215.00 million. The use of tax incentive laws is legal and widespread among companies. Tax incentive laws exist precisely in order to encourage companies to invest in areas that are important to Brazilian society – in this case, culture, sport and the Children’s and Teenagers’ Fund. We do not understand how this action can be seen by FIDH as negative.

Page 33 – “Corporate social responsibility initiatives in the fuel, gas and mining sectors have been widely questioned and ‘there is growing evidence of a chasm between the intentions declared by business leaders and their real behavior / impact on the real world’”

According to the footnote on page 91, this comment refers to a study of conflicts between oil companies and communities in Nigeria. There is no basis for such a comparison.

Page 33 – “Vale played an important role in blocking efforts to achieve obligatory international standards for corporations”

According to the footnote on page 92, the text mentions Anglo American’s approach at the UN’s meeting in Johannesburg. We do not understand this accusation.

Page 34 – “For example, Vale recently financed the restoration of the Christ the Redeemer statue and new lighting for it... Once the work was complete, it published an advertisement showing the image of the statue in the biggest selling newspaper in Rio de Janeiro”

The statue of the Christ the Redeemer is a heritage and landmark of Brazil, a tourist attraction of great importance to the city of Rio de Janeiro, and is of enormous symbolism, not only for Brazilians, but also for millions of people across the world. Besides sponsoring it, we continue to maintain the area, located in the largest urban forest in the world, of great ecological importance. The communication strategy adopted sought to make the restoration known to Brazilian society, especially the people of Rio.



Page 35 – “despite overburdening the municipalities in which it operates, Vale does not invest directly in urban and housing infrastructure, but only helps municipal governments to seek funding from PAC, BNDES and Caixa Econômica Federal, among others”

Most of Vale’s projects are located in regions far from large urban centers, which have significant shortfall in urban infrastructure.

Deficiencies in water and sewerage, waste disposal, housing, drainage, paving and urban planning, among other areas, are still a fact of life and an obstacle to progress in many municipalities. Aware of these needs and the fact that community development will only be sustainable if people have better living conditions, the Vale Foundation chose support for reducing housing and urban infrastructure shortages as one of its main areas of activity.

Consequently, the Foundation produces preliminary engineering plans aligned with public policies and containing all the technical details necessary to raise the municipality’s chance of obtaining available state and federal government resources – such as through the Growth Acceleration Program (PAC) and the “My House, My Life” program – to implement them.

The Vale Foundation commitment is not only with the improvement of the infrastructure installed, but also with the management process, including the monitoring of building work, rendering of accounts and capacity building of local teams to manage the maintenance systems of installed facilities and services.

Between 2009 and 2010, 202 designs were produced in partnership with 56 municipalities in the areas of sanitation, housing and solid waste management. The Vale Foundation invested a total of R\$28.2 million (R\$19.3 million in 2009 and R\$8.9 million in 2010) to produce engineering plans for infrastructure and housing, enabling municipal governments to access R\$714,549,560.02 from the federal government (R\$326,325,729.86 for projects started in 2009 and R\$388,223,830.16 for 2010).

Page 35 – “Even though the mining industry is responsible for causing and aggravating respiratory problems, in the health area, for example, the Foundation has been active in maternal health.”

Mining does not cause the aggravation of respiratory problems. Concerning the Health Action Program, it initiates with the identification of the aggravations in the respective municipality in order to create multidisciplinary health cells that plan in an integrated approach the interventions needed. Since Mother-child health in the state of Maranhão is critical – including significant sub-notification problems – we have included this focus in the work.

Concerning Açailândia, according to an article by Repórter Brasil (December 22, 2007), based on 2003 Ministry of Health figures, the rate of infant mortality in Açailândia exceeds 30 deaths out of every 1,000 live births. The average figure for Maranhão is closer to 20 deaths per 1,000 births. It is impossible to say that this is not a priority focus for action.



Page 36 – “The railroad exacerbated migratory movements and land speculation, aggravating conflicts, without any measure taken by the government or Vale itself”
Vale was a state-owned company until 1997.

Page 36 – “As of 1987, steel companies connected to Vale”

Vale does not own any stakes in these steel companies, which are distinct entities. Our relationship with them involves selling them iron ore and providing them with transport services. In the case of transport, we are bound by the concession contract. We contribute to the region’s social and economic development, including the generation of jobs.

Page 37 – “all the money from there [pig iron producers] goes to Vale, because everything they [pig iron producers] make is sold to Vale; nothing leaves here without being sold to it (...)”

This statement is incorrect. Vale has contracts to supply iron ore to pig iron producers in Açailândia. In 2010 only, in exceptional circumstances and in response to requests from pig iron producers in a difficult situation due to the severe crisis, Vale bought some of the pig iron produced in order to contribute to maintaining the pig iron producers’ activities and ensure that their employees would remain employed.

Besides supplying iron ore to the pig iron producers, Vale transports the pig iron produced by them to the port of São Luiz, along the Carajás Railroad. Vale is obliged to follow the terms of the Carajás Railroad concession contract.

Page 39 – Smoke causing harm to health in the Califórnia settlement

UPR02 has been operating at the Monte Líbano Farm since 2005 and, so far, no cases of smoke-related disease have been detected among any of its employees or contractors. All of them take annual medical exams. Respiratory problems may be caused by the dry, dusty conditions at the settlement, given that the region is very arid in the summer and the street are unpaved. Crop burning on farms close to the settlement also produces smoke during the dry season, as does the burning of garbage at the settlement.

The residents of the Califórnia settlement have never had problems as neighbors of the Monte Líbano Farm charcoal production unit, particularly because many of them have worked there. Recently, on May 12, 2010, Francisco Araújo Pinto, who at the time represented the Califórnia settlement, requested a meeting to propose a partnership with Vale. He apologized for the events of March 2008, and said that they were led by members of the MST from other locations and that further action would not occur. At the meeting, Francisco Pinto asked for a donation of tiles, bricks, chairs and support for holding the settlement’s anniversary party. Vale agreed to his request and offered the support of its contractors.

As Pinto himself stated, at a meeting held on September 15, 2010 with Vale employees, including a representative of the Community Relations area, Ronald Neri, and various residents of the settlement, it is impossible to prove that a disease is related to smoke, as



he reported knowing of the existence of these same health problems in other settlements. He also said that he had great hopes of obtaining improvements for the settlement through the partnership with Vale and also Suzano. He concluded by stating that there had been no smoke-related problems for a long time, and that it was only noted very sporadically, unlike in the past.

Since then, Vale has received and evaluated requests for support from leaders and residents of the Califórnia settlement and has sought to intercede with the municipal government of Açailândia to complete the project of building a road inside the settlement, as requested by Francisco Araújo Pinto. Copies of some official letters sent by representatives of the Califórnia settlement, proving their good relations with Vale, are attached.

It is important to highlight that an environmental evaluation study has been conducted at UPR02.

In July 2010, Vale hired the company AVAM Avaliação Ambiental Ltda to conduct an environmental evaluation study, in order to investigate chemical agents (aerosols, gases and vapors) and physical agents (noise) associated with charcoal production at the Monte Líbano UPR. Samples were collected in July and evaluated for the following substances: acetaldehyde, acrolein, formaldehyde, benzopyrene, carbon monoxide, respirable inhalable dust and total inhalable dust.

These studies demonstrated that the results are below the tolerance levels established by the American Conference of Governmental Industrial Hygienists (ACHIG).

Samples	Substance	Average result	Minimum	Maximum	Tolerance	Unit
5	Acetaldehyde	<0.1	0	<0.1	25.00	ppm
5	Acrolein	0.0001	0.01	0.01	0.10	mg
5	Formaldehyde	0.01	0	0.02	0.30	ppm
5	Benzopyrene	0.01	0	0.01	0.20	mg/m ³
3	Carbon monoxide	15.0	5.0	31.0	25.00	ppm
4	Respirable inhalable dust	0.260	0.124	0.675	3.000	mg/m ³
7	Total inhalable dust	0.625	0.253	1.583	10.000	mg/m ³

The full document, which has around 220 pages, is available at the Monte Líbano Farm office. A copy of the results will be sent to SEMA-MA by the end of May, proving compliance with another of the operating license conditions.

Page 40 – “intensive release of pesticide in eucalyptus plantations linked to the project”

Pesticide is not used intensively at the eucalyptus plantations. When it was applied in 2007, use was made of backpack sprayers whose bars have a protective “skirt” to prevent



the product from being dispersed by the wind. The pesticide was applied manually, 10 cm above the ground. All of the products used are authorized by current environmental legislation and their use is duly controlled.

Since 2008, Vale has not used any chemical product in forests around the Califórnia settlement, or in any other forest, due to the sale of assets to Suzano Papel e Celulose.

Page 43 – Smoke as a persistent organic pollutant (POP)

Charcoal smoke is not a POP. Persistent organic pollutants (POPs) are highly stable compounds that persist in the environment, resisting chemical, photolytic and biological degradation. They are able to bio-accumulate in living organisms, and are toxic to them, including the human body. They have a negative effect, especially in disrupting the reproductive, immune and endocrine systems, and are also carcinogenic. Another very important characteristic is that they can be transported for long distances by water, wind and animals. POPs may be divided into pesticides (e.g. DDT, aldrin and toxaphene), polychlorinated biphenyls (PCBs), dioxins and furans. The latter two are usually produced through industrial and waste incineration.

Uses and applications of the 12 POPs covered by the Stockholm Convention ⁴¹		
Substance	Application	Used by FGC
Aldrin	Produced as a pesticide to control insects in the soil.	No
Endrin	Rodenticide and insecticide used in cotton, rice and corn crops.	No
<u>Dieldrin</u>	Insecticide used in fruit, the soil and seeds.	No
<u>Chlordane</u>	Insecticide used to control fires and ants in various crops.	No
<u>DDT</u>	Used as an insecticide to combat mosquitoes that transmit <u>malaria</u> and <u>yellow fever</u> , and to combat typhus-carrying lice.	No
<u>Heptachlor</u>	Used as a contact insecticide against insects in the soil and ants.	No
<u>Hexachlorobenzene</u>	Fungicide. Also appears as a byproduct in the chemical industry.	No
<u>Mirex</u>	Insecticide and flame retardant used in plastic, rubber and electrical components.	Yes
<u>Toxaphene</u>	Acaricide, especially used against larvae and in cotton crops.	No
<u>Polychlorinated biphenyls (PCBs)</u>	Used in coolants in capacitors and transformers.	No



<u>Dioxins</u>	Byproduct of burning materials, especially plastics. Also generated in the manufacture of products using chlorine and in paper production processes.	No
<u>Furans</u>	Byproducts related to dioxins.	No

Of the list of POPs covered by the Stockholm Convention, the pig iron production facilities have only used mirex, to combat ants. The product is sold in the form of granulated bait that is placed directly in the anthill entrance, and it is not possible for it to be taken from the forest to the settlement due to the existence of physical barriers. Vale stopped using the product in January 2008.

Page 56 – “Vale delivers an incomplete report, without data on sulfur dioxide emissions, and does not take into account data that would prove that emissions of Total Suspended Particles were higher than CONAMA standards”

a) Levels of sulfur dioxide were evaluated in April 2005, at the same time the PCA was produced. The monitoring results indicated that concentrations of these parameters were below the primary and secondary standards for maximum daily concentrations.

A transcription of the text is given below:

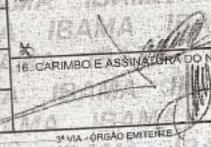
”4.2.8. Air Quality

The air quality diagnosis presented in the RCA/PCA of the UPRs already licensed was based on monitoring of background air quality in the areas where UPRs 1 to 6 are located. The new UPRs are located in the region covered by this monitoring network, and so the air quality indicated by the study is also very likely to correspond to the air quality in the new areas.

Total suspended particles (TSP) and sulfur dioxide (SO₂) parameters were monitored at three points distributed between the Carajás Pig Iron company’s farms. The monitoring results indicated that concentrations of these parameters were below the primary and secondary standards for maximum daily concentrations and also average annual concentrations, as established for both parameters in prevailing environmental legislation. The results therefore indicate good air quality in the region.

Significant differences between the TSP of SO₂ results were not found at the three sampling points, indicating a level of air quality very similar to that found in the Carajás Pig Iron farm region.”

b) On April 8, 2008, Vale received notice 512810 from SEMA-MA, containing a request to present a report about the installation of Hi-Vol air quality monitors, in line with the operating license’s PCA. The notice was promptly responded to, by means of a letter officially registered on April 14, 2008.

Ministério do Meio Ambiente - MMA INSTITUTO BRASILEIRO DO MEIO AMBIENTE E DOS RECURSOS NATURAIS RENOVÁVEIS - IBAMA Diretoria de Proteção Ambiental - DIPRO				NÚMERO 512810 SÉRIE B	
NOTIFICAÇÃO					
01. QUOTEI O INTERESSADO DIA: 00 ANO: 2008 MES: 02		02. REGISTRO NO IBAMA		03. ATIVIDADE DO NOTIFICADO	
04. CÓD. UNIDADE/CONVENIO 301.201-8		06. CPF/CGC 05.728.345/0004-22			
07. NOME COMPLETO FERRAZ GUSA CARATAS S.A					
08. ENDEREÇO R. OLO Km 14 04 MARCEM ESABERDA		09. MUNICÍPIO (CIDADE) AÇAILÂNDIA		10. CEP 65.430-000	
11. UF MA		12. ZONA RURAL ZONA RURAL			
13. DESCRIÇÃO DA OCORRÊNCIA Fica NOTIFICADA A EMPRESA EM CAIXOTE, A APRESENTAR NO PRAZO DE 30 DIAS, RELATORIO DE INSTALAÇÃO DE MONITORES DE QUALIDADE DO AR DO TIPO HI VOL. CONFORME PCA DA LICENÇA DE OPERAÇÃO Nº 130/2007, B. PCMA DE AUTUAÇÃO E CMBARGO, CONFORME LEGISLAÇÃO VIGENTE.					
14. ENDEREÇO DE APRESENTAÇÃO R. D. Pedro II N.º 170, B. CIRA-RIO					
15. LOCAL GEREX / IMPERATRIZ / IBAMA / MA					
16. ASSINATURA DO NOTIFICADO 					
17. CARIMBO E ASSINATURA DO NOTIFICANTE ANTONIO L. C. JUNIOR MAT. 15223977					
18. PESSOA RESPONSÁVEL CASO O INTERESSADO NÃO ESTEJA PRESENTE		19. VIA - PROCESSO			
20. VIA - NOTIFICADO		21. VIA - ÓRGÃO EMITENTE			

The notice did not request measurement of sulfur dioxide levels, as they were considered insignificant, and so this study was not conducted.

Page 58 – “SEMA decided to deploy environmental analysts to conduct an evaluation of the impacts generated by the project.”

We have not received any technical statements from SEMA about the impacts generated by the project (Monte Líbano UPR) installed in Açailândia.

Page 58 – “families from the Califórnia settlement who have suffered from smoke produced by the burning of eucalyptus in that charcoal production facility”

With the ending of activities by December 2011, due to the sale of forest assets to Suzano Papel e Celulose, the demands will be met.

Page 59 – “SEMA’s notice presented the company with a series of demands, some of which were not fulfilled”

Vale has promptly complied with all notices and demands received from SEMA-MA.

The monthly, six-monthly and annual reports are duly produced, submitted and officially registered within the established timeframes.



Specifically in relation to the notices issued by SEMA-MA in 2008, cited on page 59 of the report, we wish to state the following:

a) Notice 512810 from SEMA-MA, dated April 8, 2008, copied above, demanded that Vale present a report about the installation of Hi-Vol monitors, and this was promptly done, in accordance with a letter officially registered on April 14, 2008 at the same state entity.

b) On October 9, 2008, Vale received Notice and Summons 2214, requesting the following information:

- Description of management of “smoke burner” equipment;
- Final disposal of tar;
- Schedule for the construction and operation of other smoke burners;
- Description and characteristics of Hi-Vol monitoring equipment (data storage);
- Hi-Vol air quality environmental monitoring reports submitted monthly to SEMA-MA.

The notice was answered before the deadline and the response was officially registered at SEMA-MA on October 24, 2008.

c) On December 7, 2010, SEMA issued notice 001547, demanding the following documents:

- CEPROF registration;
- Publication of the request for the operating license in a large-circulation regional newspaper and the official gazette (Diário Oficial da União);
- Up-to-date operating license.

The notice was answered before the deadline and the response was officially registered at SEMA-MA on December 29, 2010.

Page 60 – “non-compliance with the environmental license and unjustified discarding of inspection data”

Vale proactively informed SEMA of the removal of the measuring instruments and gave the respective justification. In other words, this fact was not hidden from the Environment Secretariat but rather clarified, making it evident that there were no ulterior motives or improper manipulation of data. The action reflects Vale’s concern to analyze and understand data in the pursuit of continuous improvement in the process of evaluating particulate emissions.

Another observation is that, from 2009 to the last report, no other readings that exceeded the 205 mc/m³ limit were taken, confirming the hypothesis that the data from the reading supposedly removed were biased or suffered from external interference, and so did not represent the site’s environmental reality.



Finally, it should be stressed that, in line with particulate evaluation norms, the target is to obtain readings below 240 mg/m³, but annual measurements above the maximum limit may still occur. In 2008, the average reading was 439.4 mg/m³ and in 2010, after reducing production and installing smoke burners, the average reading was 81.82 mg/m³, meeting SEMA's demands.

We consider it to be true that the movement of vehicles could interfere in monitoring, if this should occur close to the particulate measuring equipment. The Environmental Control Plan itself, approved by SEME-MA, in the section about evaluating air quality, states that "The movement of machines and vehicles will generate particulate material and gases from engine fuel."

The values obtained from readings between 2009 and 2011, shown below, indicate that the actions taken by Vale, such as the reduction in the number of furnaces and the installation of smoke burners, has been sufficient to minimize any environmental impact.

Hi-Vol readings (mc/m ³)		
2009	2010	2011
90.7	25.4	41.1
7.1	22.2	72.8
12.0	53.3	39.0
9.4	59.2	82.1
22.2	42.9	115.9
6.7	165.6	49.4
12.4	190.9	25.3
9.9	147.5	29.5
4.1	66.3	115.5
4.3	34.6	21.0
2.5	51.1	20.6
3.2	62.6	14.4
4.0	66.3	33.8
7.1	34.5	13.7
13.5	51.1	7.3
18.9	51.1	15.7
18.0	205.6	11.1
50.8	36.3	7.9



45.0	76.1	28.6
36.8	80.0	
52.7	71.8	
50.6	86.4	
108.1	153.6	
52.6	52.8	
64.1	160.4	
125.9		
56.8		

Page 61 – Vale representatives were not able to respond

Vale received representatives of FIDH and Justiça Global on September 17, 2010 and, during the meeting, provided all manner of information; in fact, page 61 of the report cites the information obtained from Vale. During the visit, FGV’s valid environmental license was shown and it was explained that Vale, through the equipment it had installed, was complying with its environmental conditions. It should be clarified that the presence of specialists from the environmental area had not been requested, but we expressed our willingness to receive queries in writing and forward responses from the technical area. However, not a single question about the issue was received.

Page 74 – “In the situation examined, the people do not have adequate access to information concerning Vale’s activities”

Vale participated throughout the complex process to build the operating units, which involved conducting environmental impact studies (EIA-RIMA) and holding public meetings to present the project to the local communities, among other measures.

In addition, Vale’s environmental actions near the Califórnia settlement were widely reported. They consist of the following:

- Reducing production by using 50% of the furnaces. Of the 72 furnaces, just 36 are in operation;
- Construction of smoke burner equipment. There are currently three smoke burners attached to 20 furnaces;
- Maintenance of a 1.5 km green belt between the UPR and the settlement;
- Locking of chimneys in the case of thermal inversion;
- Emission monitoring using Hi-Vol equipment;
- Holding of fire prevention campaigns.

Page 77 – “Lawsuits proposed by Vale against leaders and other members of the Brazilian landless movement (MST)”

Vale has merely defended itself legally from attacks. Representatives of MST and other movements (Via Campesina, MAB, etc.) have a recent history of invading and damaging



the company's property, as has been reported in the press around the world. Accordingly, all legal measures adopted, as well as being permitted by legislation, have had the purpose of stemming the number of attacks promoted by these movements. The right to full defense and to submit any legal injury to the scrutiny of the judiciary is provided for in Brazil's federal constitution (article 5 XXXV of the CF).

Page 79 – “Vale filed a lawsuit in the courts of Açailândia against members of the Justiça nos Trilhos network”

Brazilian law gives aggrieved parties the right to request prohibitive injunctions, which have the purpose of preventively repelling a threat to an owner's propriety. It is applicable when the threat of damage to the propriety is imminent and the concern is well sustained. In addition, the Brazilian penal code stipulates that interfering with a railroad is classified as a railroad accident hazard crime (article 260 of the penal code). As a result, Vale simply used these judicial resources to legally oppose attacks it suffered or was about to suffer, and this was upheld by the decision of the court, which agreed to Vale's request.

Page 79 – “In the opinion of this research, the impartiality of the decisions of the public security and legal departments is questioned”

This accusation to the judiciary authority, including the Rio de Janeiro one, concerning the lawsuit against the MST leader, should be directed to the courts themselves and not to a social responsible company which seeks the judiciary as a way to resolve the events with which it is involved.

Page 90 and 91 – Responsibility for compensating the communities of Califórnia and Pequiá de Baixo

The commercial activity of selling iron ore is absolutely legitimate and permitted by national legislation. This simple act cannot make Vale liable if the purchasers of the iron ore use it in some way that causes harm to communities.

Nevertheless, as part of Vale's social responsibility initiatives and in line with the concern it has always demonstrated for human rights in its value chain, the company is voluntarily contributing to the performance of socioeconomic studies required to support the resettlement process in Pequiá de Baixo.

With regard to the Califórnia settlement, all preventive measures to reduce smoke emissions are being taken and the operation will be closed by December 2011.

Page 92 – “Besides its role as the main coordinator in implementing the Greater Carajás Program”

The Greater Carajás Program was a government strategy in the 1980s that aimed to develop the region, but was not, and is not, controlled by Vale.

Page 93 – Vale as an “indirect polluter” in Piquiá



The commercial activity of selling iron ore is absolutely legitimate and permitted by national legislation. This simple act cannot make Vale liable if the purchasers of the iron ore use it in some way that causes harm to communities.

Page 94 – Vale “jointly and severally liable for harmful acts” in Piquiá

This cannot be accepted, given that joint responsibility arises exclusively from the intention of the parties or the law. The supply of iron ore, when contractually agreed, does not provide for this responsibility and there are no laws to this effect, and so the assertion made in this report is not credible. Under the environmental law, there is no cause-effect relation between Vale activities and the problems raised.

Page 98 – “Legal action, both administrative and judicial, against the company Vale, the owner of Carajás Pig Iron, arising from its violation of one of the conditions of its environmental license, according to which it ought to have installed and put into operation 16 (sixteen) gas burners, as recommended in a technical statement issued by Antonio César Carneiro de Sousa, environmental analyst at the Maranhão State Environment and Natural Resources Secretariat.”

Condition 24 of operating license 130/2007 states that FCG is obliged to “find ways of avoiding smoke emissions from charcoal production as much as possible.” Based on this condition, FGC installed emission control equipment, including gas burners. In other words, the company complied with the environmental condition.

The first smoke burner was installed on October 6, 2008. The second was installed in January 2009, but it suffered an accident, falling from its position due to a design problem. The third burner, to replace the second one, was built in February 2009. There is now a fourth burner, attached to four furnaces.

We have received no notice or request from SEMA-MA providing guidance about the building of 16 burners. This number is excessive, given that there are 72 furnaces and each burner is attached to eight furnaces. This means that nine burners would be required if the UPR were operating at 100% capacity. At current production levels, four burners are sufficient.

On October 24, 2008, a notice was officially registered at SEMA-MA, reporting the intention to build eight smoke burners, to be attached to 72 furnaces. At this time, the first burner had been built and was showing good results.

However, following the reduction in output at the end of 2008, a new notice was sent to SEMA, officially registered on January 12, 2009, in which Vale stated that the construction of new burners would be conditional upon:

- a) the correct functioning of the second burner, which was at the end of the construction phase;
- b) a return to production at 100% of capacity, which has not yet happened.



So far, SEMA-MA has not commented on this issue.