

Centres leaves environmental liabilities in Queimados (RJ)

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DISTRICTRJ - Queimados

LATITUDE

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LONGITUDE

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SUMMARY

The municipality of Queimados coexists with the consequences of inappropriate activities from the Center for Solid Waste Treatment (Centres), which operated in the area between 1987 and 1998. The Center used to receive industrial waste from large companies (the company stored more than 18 tons) which contributed to the contamination of soil and groundwater by heavy metals, causing damage to the health of the population.

CASE DESCRIPTION

In the State of Rio de Janeiro at least three major cases of environmental contamination can be cited, with consequent damage to the population: the Industrial and Mercantile Company Ingá, located in the municipality of Itaguaí and one of the greatest responsible for the release of heavy metals in Sepetiba Bay; soil contamination by pesticide residues, as well as waste and by-products from their processing at Cidade dos Meninos, in Duque de Caxias; and the Center for Solid Waste Treatment (Centres) (FINAMORE, 2010), a private company (JB ONLINE, 2008), located where lies today the municipality of Queimados (FINAMORE, 2010), which has 75,695 km2 and 137,962 inhabitants (IBGE 2010) and occupies the 89th place in the ranking of the State of Rio de Janeiro with a Firjan Municipal Human Development Index (IFDM) of 0.59 (SISTEMA FIRJAN, 2009).



Armazenamento irregular de residuos.

Created in 1987, Centres seeked to offer solutions for industrial waste from various companies in the country (SANTOS, 2011). However, the Center's activities, disabled in 1998, left a legacy of environmental liabilities not yet fully assessed in terms of environmental risks and impacts. It is estimated that there are about 29,000 m3 of contaminated soil in the area of the enterprise (FINAMORE, 2010).

After Centres' closure, the State Government in partnership with Petrobras performed in-situ removal of surface residues, but the chemical residue problem remained (JB ONLINE, 2011).

According to the Environment Committee of the Legislative Assembly of the State of Rio de Janeiro, about 800,000 tons of industrial waste are produced annually in the State, of which 240,000 are toxic. It is estimated, however, that environmental agencies do not have control of at least 50% of this volume of toxic waste. According to the State Foundation of Environmental Engineering (Feema) [currently the State Environmental Institute (Inea)], approximately 24,000 industries are operating with no control of the State's environmental agencies, many of them producing toxic waste.

In addition, Rio de Janeiro receives waste from other states such as Minas Gerais, São Paulo and Bahia. Such residues should be burned in ovens in Rio de Janeiro, but most of them are released in clandestine dumps along the way – companies take advantage of the weaknesses in supervision - to avoid the payment of incineration costs (ACSELRAD, 2006).

Evidence shows that waste deposition is mostly made in the outskirts of the city, where low-income populations reside and have difficulties of access to public services and infrastructure, and low capacity of influence over the regulatory and monitoring powers. As a result, this practice contributes to increase the social vulnerability of the populations involved. This is what has happened in the case of Centres (ACSELRAD, 2006).



Initially, the Center should be built in the neighborhood of Adrianópolis, in Nova Iguaçu. However, as the location was classified by the municipality as a rural area, the construction works could only be initiated after changes in this zoning. Until the amendment was effected by the Government, Feema and Centres decided that the company would operate at a transient storage yard for industrial waste, in the Santo Expedito neighborhood, on the outskirts of Queimados, which at that time was a district of Nova Iguaçu (FINAMORE, 2010).

Like other neighborhoods in the periphery, Santo Expedito has neither adequate paving nor sewer collection yet. Public water supply is deficient, which forces the local population, of around 2,200 inhabitants, to use artesian wells to supply their dwellings. In addition, much of the population lives off underemployment. At the time Centres started operating in the region, the socio-economic conditions were already adverse, not to mention the fact that the population suffered from the stigma of living in a landfill. That was because between 1984 and 1985 the city of Nova Iguaçu had installed a domestic landfill in the area, which was later withdrawn due to claims (FINAMORE, 2010).

Centres' operations began in 1988 on a land (FINAMORE, 2010) of 70,000 m2 (JB ONLINE, 2008) belonging to Companhia de Desenvolvimento de Nova Iguaçu (Codeni). At the time, the project was presented to the local community as

being environment-friendly and job-generating. However, over time, it just contributed to increase the stigmatization of the population, who continued to be called a landfill community: firstly domestic and subsequently toxic (FINAMORE, 2010).

According to the enterprise's environmental licensing, as soon as the Adrianópolis plant was completed, all the hitherto industrial waste deposited in Santo Expedito should be transferred there. In case the plant was not built, the industrial waste should return to its generating companies (CAIXETA, 2003 apud FINAMORE, 2010). The Adrianópolis plant was never implemented and Centres remained in Santo Expedito until its ban in 1998, after suffering three fires which terrified the residents of the locality (FINAMORE, 2010).

Over the course of its activities, Centres received industrial toxic waste from companies such as: Cera Johnson, Casa da Moeda, Xerox do Brasil, Sulzer do Brasil S.A., Duloren, Rio Paracatu Mineração S.A., Smithkline Becham do Brasil Ltda, Souza Cruz, Sony Music, Oxiteno, Siemens, Varig, Inepar S.A., Vale do Rio Doce, Fiocruz, Tibogue Guimarães Ltda and Coelce (FEEMA apud PINTO, 2001). Such residues, however, were not treated as initially planned; they were only stocked (SANTOS, 2011).

To give an idea, in 1991, the municipality of Nova Iguaçu and Feema authorized Centres to sublet part of the technological center for the installation of a workshop for waste contaminated with askarel and other products of high toxicity, such as tetraethyl lead. This attitude went against not only contractual clauses but also the environmental licensing (CAIXETA, 2003 apud FINAMORE, 2010).

In 1992, Queimados emancipated itself from Nova Iguaçu and in 1996, the Municipal Secretary of Urbanism and Environment (Semurna) was created and became responsible for the inspection of environmental issues in the city. Centres' courtyard was the main problem encountered (SANTOS, 2011).

It was noted that waste disposal was done out in the open, in the company's yard, in drums placed directly under the ground, unprotected, which allowed the leaching and percolation of substances into the soil and groundwater. Also, the drums did not present labels identifying the substances they contained (PINTO, 2001; SILVA, 2007 apud SANTOS 2011). Moreover, many gallons with toxic waste (such as askarel, cyanide, etc.) had been buried directly in the soil (FINAMORE, 2010).



According to experts, Centres contaminated the place's soil and groundwater with chemical waste, such as lead, cyanide, cadmium, chrome, among others, accounting for 18 tons of toxic chemicals stored irregularly (COSTA, 2010).

The lack of security in the storage, preparation and handling of the waste ended up exposing to contamination by toxic products not only the company's employees but also the residents of Santo Expedito. Examples of sources of exposure to wastes can include: water consumption for domestic purposes and use of the drums as water tanks in some residences (FINAMORE, 2010).

The effect of contamination on human health was not quantified and qualified; yet, in the early 2000s, it was discovered that for every 129 residents of Santo Expedito, one had cancer. By way of comparison, the ratio was 1 to 760 in the municipality of Rio de Janeiro (CAIXETA, 2003 apud FINAMORE, 2010).

Mobilization of the local population against the enterprise began to occur more effectively in midyear 2000, from the articulation of NGO Grupo de Defesa Ambiental (Group for Environmental Defense) with the Committee for Environmental Defense of the Legislative Assembly of Rio de Janeiro (Alerj) (CAIXETA, 2003 apud FINAMORE, 2010). The NGO occupied and controlled the scene until 2010 (SANTOS, 2011). During this period, it inventoried all wastes stored in situ as well as the generating companies (CAIXETA, 2003 apud FINAMORE, 2010).

In 2003, Feema signed an agreement with Petrobras for the complete removal of Centres' residues and the decontamination of the courtyard. Removal of surface residues was carried out, but a considerable proportion still remained buried. In addition, there was no decontamination of the courtyard (FINAMORE, 2010).

In 2008, it was announced a new project for complete removal and decontamination of the Centres area, from an agreement signed between Petrobras and the State Secretary of Environment of Rio de Janeiro. Budgeted at R\$ 20 million and with completion slated for 2011, the initiative was in charge of Feema (FINAMORE, 2010).

While the situation is not definitely settled, the population of Queimados - especially the residents of Santo Expedito - is in a condition of social vulnerability, which has only increased since Centres was installed in the region (FINAMORE, 2010).

GEOGRAPHIC LOCATION

BIBLIOGRAPHIC REFERENCES

ACSELRAD, Henri. Tecnologias sociais e sistemas locais de poluição. Horizonte Antropológico, v.12, n. 25, Porto Alegre, jan.-jun., 2006. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-71832006000100007. Acesso em: 27 set. 2011.

COSTA, Cláudio. Preço do abandono. In: Revista Viva Favela, 24 out. 2010. D i s p o n í v e l e m : http://acervo.vivafavela.com.br/publique/cgi/cgilua.exe/sys/start.htm?from_info_i ndex=196&infoid=45470&sid=87. Acesso em: 22 set. 2011.

FINAMORE, Renan. Contaminação do solo e conflitos: o caso da empresa CENTRES. In: RGSA – Revista de Gestão Social e Ambiental Set. – Dez. 2010, v.4, n.3, p. 119-135, dez. 2010. Disponível em: http://www.revistargsa.org/ojs/index.php/rgsa/article/viewFile/332/118. Acesso em: 22 set 2011.

IBGE, Instituto Brasileiro de Geografia e Estatística. Queimados (RJ). In: IBGE C i d a d e s , 2 0 1 0 . D i s p o n í v e l e m : http://www.ibge.gov.br/cidadesat/xtras/perfil.php?codmun=330414&r=2. Acesso em: 25 nov. 2011.

JB ONLINE. Estado e Petrobras vão tratar lixo químico deixado pelo Centres em Queimados - RJ, 09 jul. 2008. Disponível em: http://jbonline.terra.com.br/extra/2008/06/20/e20067415.html. Acesso em: 25 nov. 2011.

_____. Estado e Petrobras vão tratar lixo químico do Centres. 24 out 2011. Disponível em: http://www.jb.com.br/ciencia-e-tecnologia/noticias/2008/06/21/estado-e-petrobras-vao-tratar-lixo-químico-docentres/. Acesso em: 06 mar. 2013.

PINTO, E. M. Principais Dificuldades de Gerenciamento de Resíduos Industriais no Estado do Rio de Janeiro: O Caso Centres - Centro Tecnológico de Resíduos, localizado no Município de Queimados, 2001 (Dissertação de Mestrado). UFF, Niterói, 2001

SANTOS, Maria Carla Barreto. Avaliação da contaminação por metais em solos impactados pela disposição de rejeitos industriais: estudo de caso – CENTRES (Queimados, RJ). Maria Carla Barreto Santos. –. Niterói: [s.n.], 2011. 66 f.: il., 30 cm. Dissertação (Mestrado em Geociências – Geoquímica Ambiental). Universidade Federal Fluminense, 2011.

SISTEMA FIRJAN. Índice Firjan de Desenvolvimento Humano Municipal (IFDM). Rio de Janeiro, 2009. Disponível em: http://www.firjan.org.br/IFDM/. Acesso em: 22 set. 2011.