

US EPA ARCHIVE DOCUMENT





Brazilian Institute for the Environment and Renewable Natural Resources – IBAMA  
Environmental Emergencies Coordination – CGEMA

## IBAMA's Prevention Measures for Oil Spills in Inland Areas Along Highways



INOJOSA, Fernanda Cunha Pirillo  
OLIVEIRA, Cristiane de  
MASCARENHAS, Gutemberg Machado

April, 2009





# IBAMA Overview

- Federal Brazilian Institute for the Environment (similar to EPA)
- Agents: 5,000
- Nominated to deal with environmental emergencies: 150 agents
- IBAMA is not a first response institution. Its role is to monitor the accident and impose law enforcement





## When IBAMA Acts in an Emergency

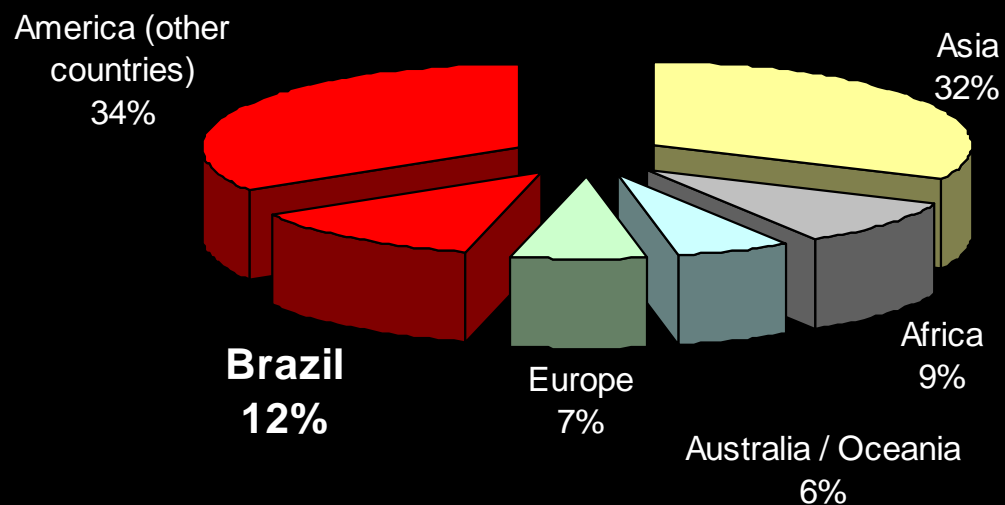
- Accident is originated by a company that possesses an **IBAMA permit**
- Accident affects **federal protected areas** (e.g., National parks)
- Accident affects **federal assets** (federal rivers, highways, caves, etc.)
- Accident impacts are felt in more than one state or at the national frontier
- Nuclear material is involved
- National prosecutor requires action
- State's environmental department **requires or needs** help



# Freshwater in Brazil

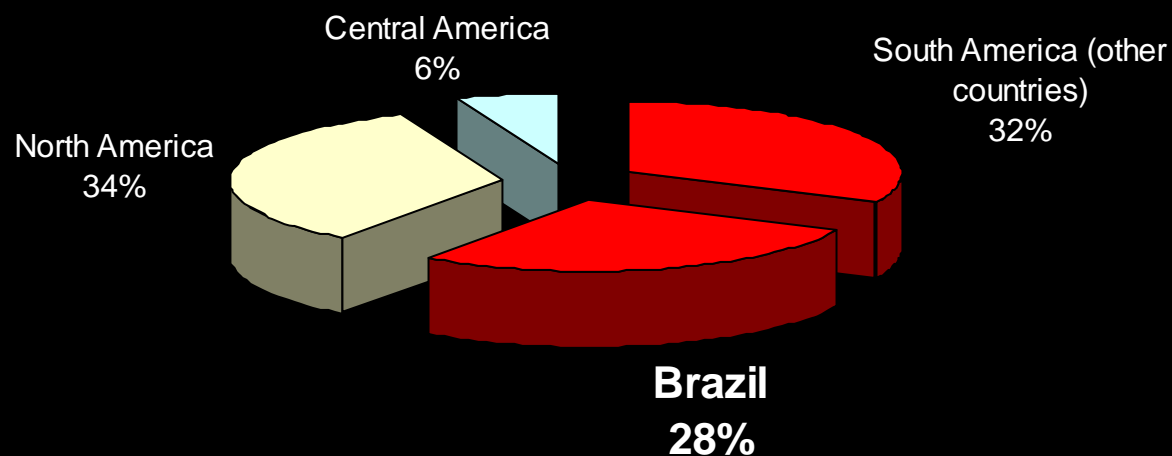


# Freshwater World Wide Comparisons – Brazil



(source: UNESCO)

# Freshwater in America – Brazil



(source: UNESCO)

# Federal Highways in Brazil





BR 101



BR 163



BR 319



BR 040



BR 116

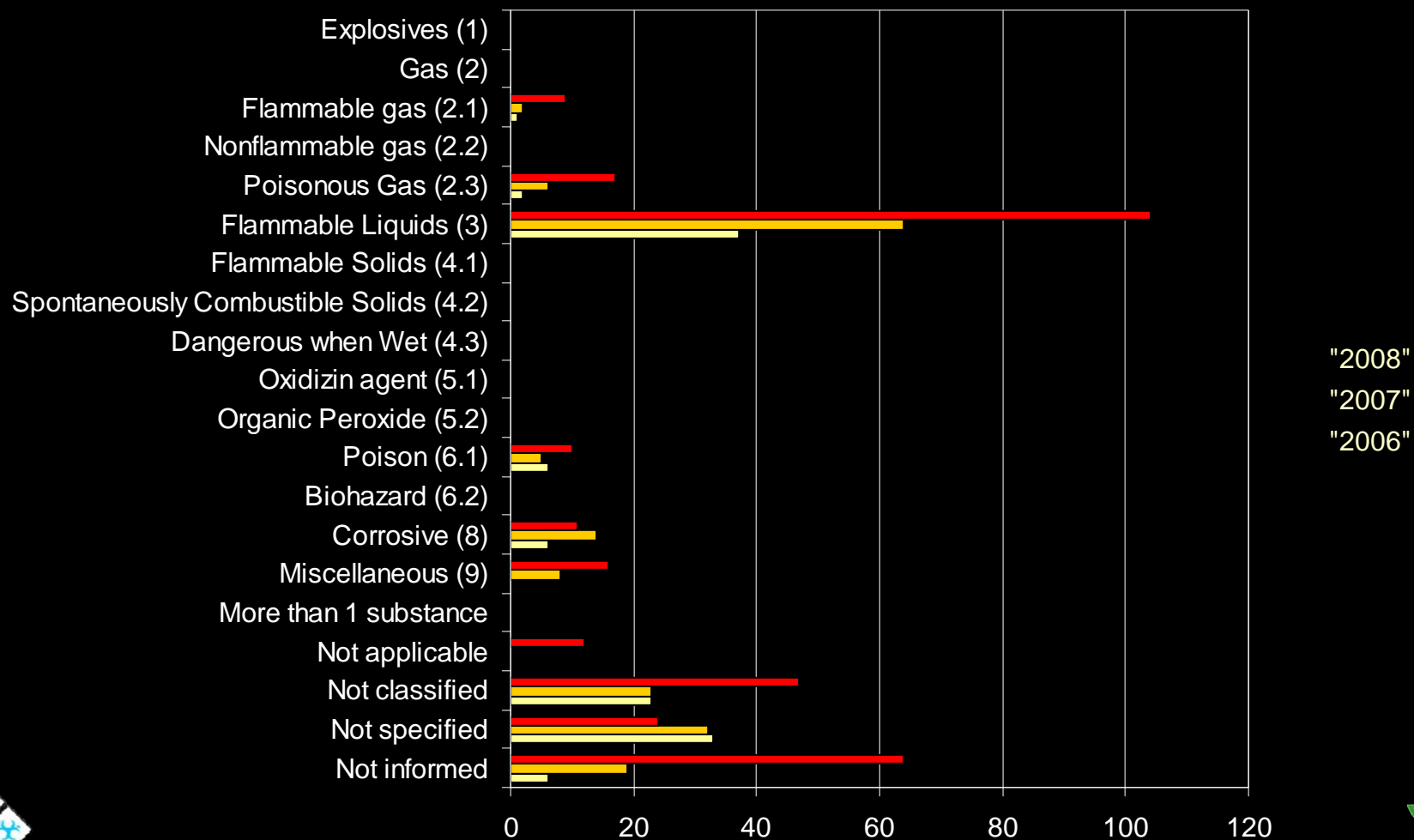




# Freshwater + Highways

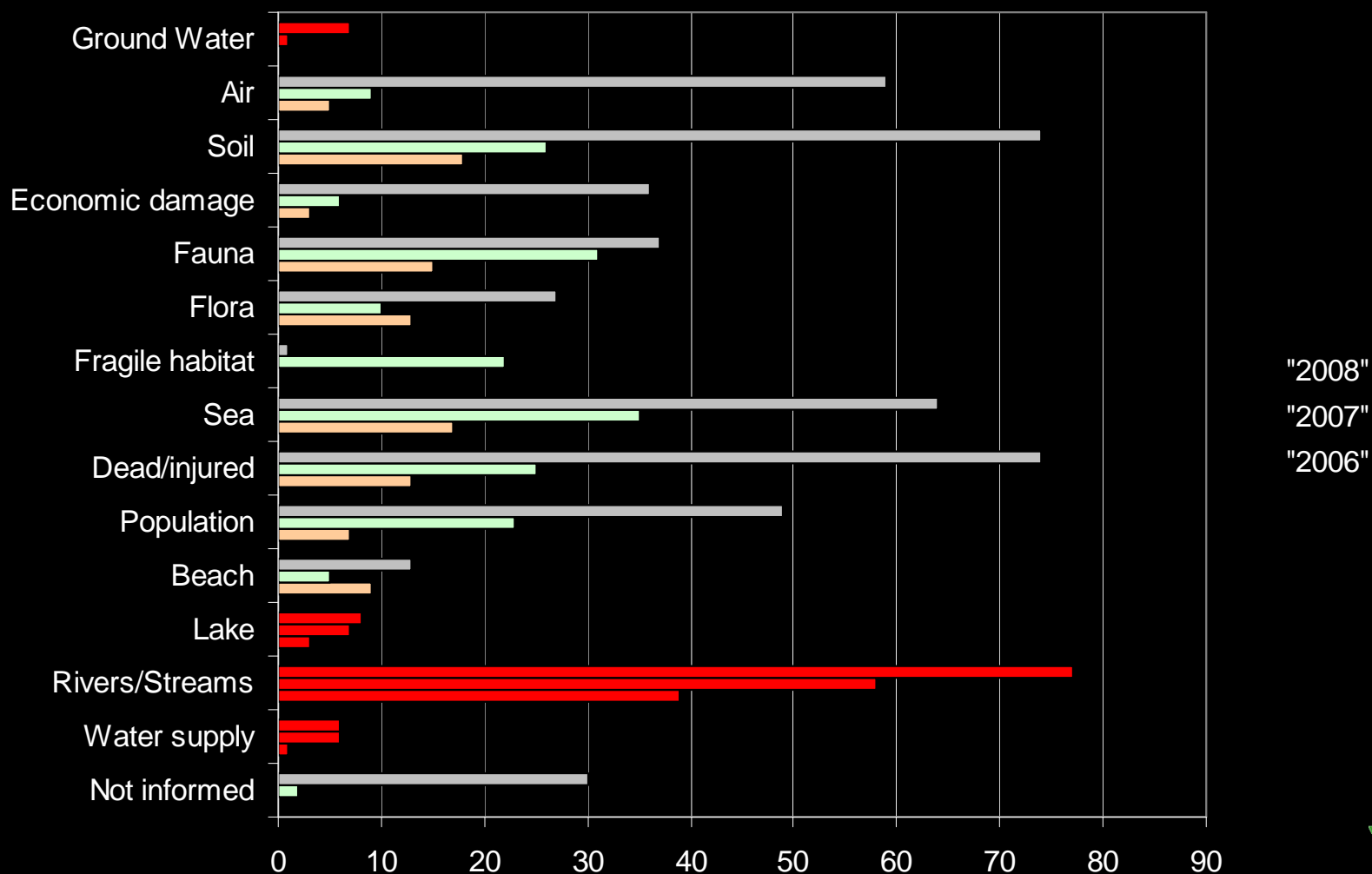


# Environmental Accidents – Substances

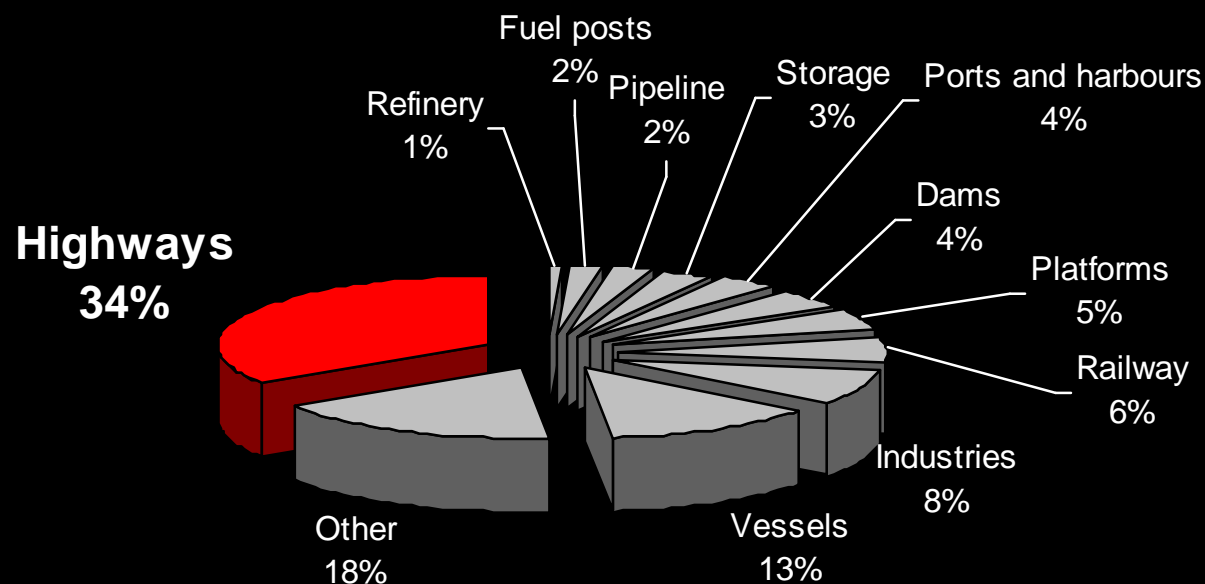




# Environmental Accidents – Impacts



# Environmental Accidents – Sources



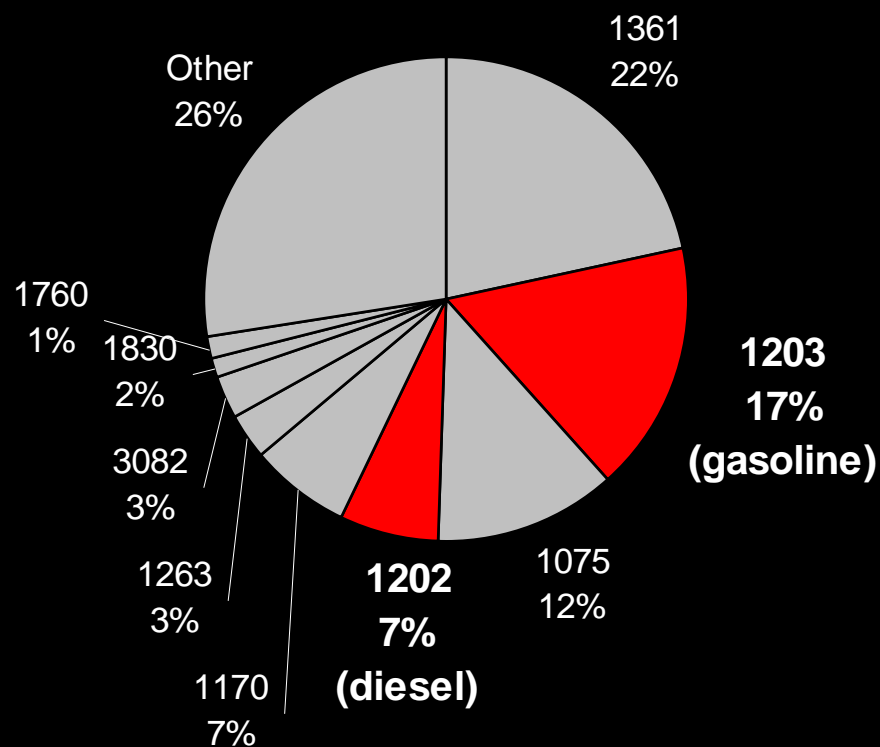
# Environmental Accidents in 2008 – Highways



Most dangerous  
Federal Highways –  
accidents with  
hazardous  
substances



# Environmental Accidents in 2008 – Substances



# Environmental Accidents in 2008 – Oil



- Oil – 1st substance most involved in road accidents
- Oil – 2nd substance most involved in road accidents

# Brazilian Law

- Law 9.605/98 – “Crimes against the environment”

Article 56. To produce, process, package, import, export, sell, supply, **transport, use or store product or toxic substance, dangerous or harmful to human health or the environment, in disaccordance with the requirements established in laws or in its regulations:**

Penalty – detention of one to four years and fine.





# IBAMA's Prevention Measures in Inland Areas

- Involves the following group of institutions:
  - IBAMA, Civil Defense, Federal Highway Police, Regional Environment Agencies, etc.
- Consists of roadblocks in the most dangerous Federal Highways (First Step Measure)
- Inspections at companies liable for illegal trucks (Second Step Measure)



# Roadblocks

---

During the roadblocks, the teams check:

- **Documentation** – driver's license, environmental agency permit, driver's training certificate, invoice, etc.)
- **Safety equipment** – personal safety equipment (mask, gloves, boots, etc.); and first response equipment (warning signs, fire extinguisher, flashlights, cones, tools, etc.)
- **Truck conditions** – leaking, rusting, and cracking in the tank



# Roadblocks





# Roadblocks



# Roadblocks





# Roadblocks



# Roadblocks



Would you breathe into it ??





# Roadblocks



EMPTY ??



Flammable Liquid ?



# Roadblocks

---

## Penalties for illegal/irregular trucks:

- Fines
- Seizure of the truck

Liable for environmental crimes in transport: driver, owner of the product, transport company, buyer of the product.



# Inspections

---

- When the government agents find irregularities during the roadblocks, the companies are selected for an inspection and can have their activities suspended
- Normally, when the truck is in bad shape, the company is also out of standards



# Inspections





# Inspections



# Inspections





# Inspections



# Results

---

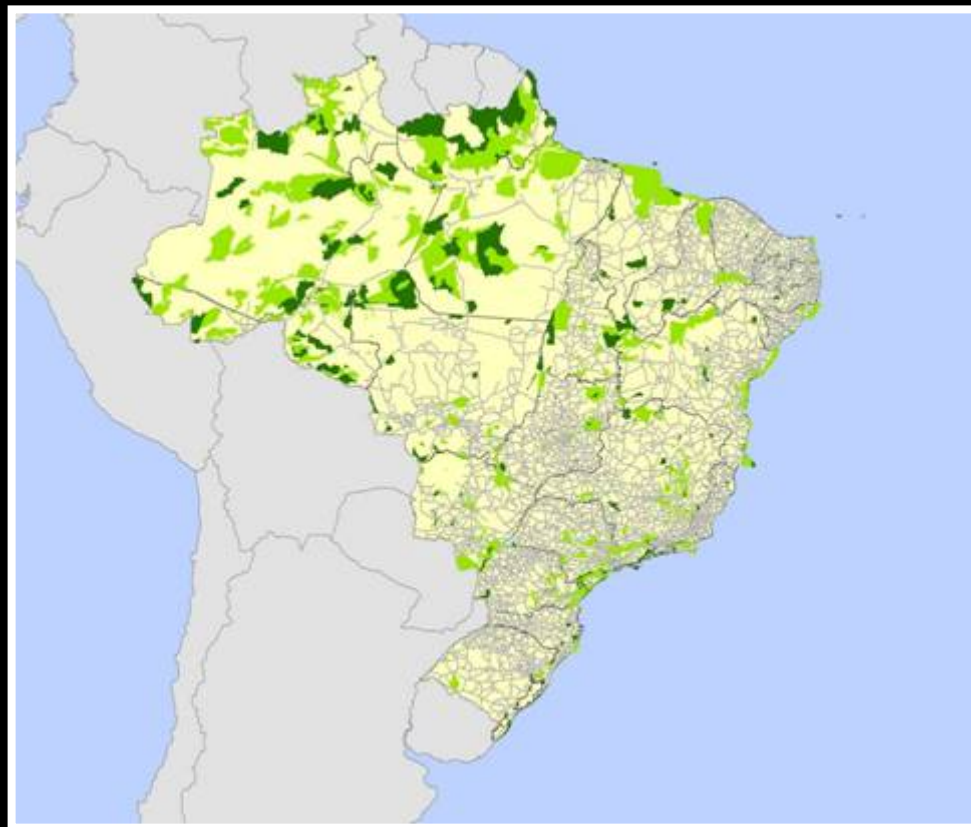
- Innovative approach in use at IBAMA, acting on prevention measures instead of remediation
- Educational focus
- Program held in 4 states in 2008
- BR \$500,000,00 in fines (US \$217,000,00)





## Other Activities / Challenges in 2009/2010

- Expand the program to other states and highways
- National roadblock (educational)
- Develop contingency plans for protected areas crossed or surrounded by highways



Brazilian National Contingency Plan ??



# Future Cooperation

---

- How could we improve our actions?
- Could our governments/companies work together in the prevention of spills/contamination?
  - ICS
  - Technology exchange
  - Training





Brazilian Institute for the Environment and Renewable Natural Resources – IBAMA  
Environmental Emergencies Coordination – CGEMA

Thank you !

(55) (61) 3316-1070

[Fernanda.Pirillo@ibama.gov.br](mailto:Fernanda.Pirillo@ibama.gov.br)

[Cristiane.Oliveira@ibama.gov.br](mailto:Cristiane.Oliveira@ibama.gov.br)

[Gutemberg.Mascarenhas@ibama.gov.br](mailto:Gutemberg.Mascarenhas@ibama.gov.br)

[www.ibama.gov.br/emergencias](http://www.ibama.gov.br/emergencias)

