MIMOSA

Minerales Monclova

Environmental Management of Coalbed Mine Methane

January 2009

General information

- Minerales Monclova (Mimosa) is the largest coal producer in Mexico.
- The coal production in 2007 was 4 million tonnes and 3.5 million tonnes in 2008.
- Mines for the project; mine 5 “La Esmeralda”, mine 6 and mine 7.

	Mine 5	Mine 6	Mine 7
Initiation year	1982	2001	2001
Total coal production to 2008	1,202,933	710,589	1,116,914
Remaining coal reserves	11 Mt, 8 years	11 Mt, 8 years	58 Mt,

Location


Key to States (shown by number on map)
1 AGUASCALIENTES
2 GUANAJUATO
3 QUERÉTARO
4 HIDALGO
5 MÉXICO
6 TLAXCALA
7 DISTRITO FEDERAL
8 MORELOS
9 PUEBLA
UNITED STATES
COAHUILA
NUEVO LEÓN
TAMAULIPAS
CHIHUAHUA
SONORA
BAJA CALIFORNIA
BAJA CALIFORNIA SUR
DURANGO
SINALOA
NAYARIT
ZACATECAS
SAN LUIS POTOSÍ
VERACRUZ
JALISCO
COLIMA
MICHOACÁN
GUERRERO
OAXACA
CHIAPAS
TABASCO
CAMPECHE
YUCATÁN
QUINTANA ROO
Gulf of Mexico
PACIFIC OCEAN
Tropic of Cancer
GUATEMALA
BELIZE
Coahuila State
Mimosa mines

Legal and technical history

- Until 2007 the law did not allow mining companies to use or sell the gas from coalbed mine; *"all hydrocarbons belongs to the nation and its exploration, recovery, processing and sale can only be done by PEMEX".*

- In 2006 an underground mine explosion were caused by high concentration methane. As a result, the mine law changed and now allows the productive use of coalbed gas.

- There is no currently environmental regulations requirements for the treatment of methane gas.

- The rules to implement this new law was published in December 2008.

Project

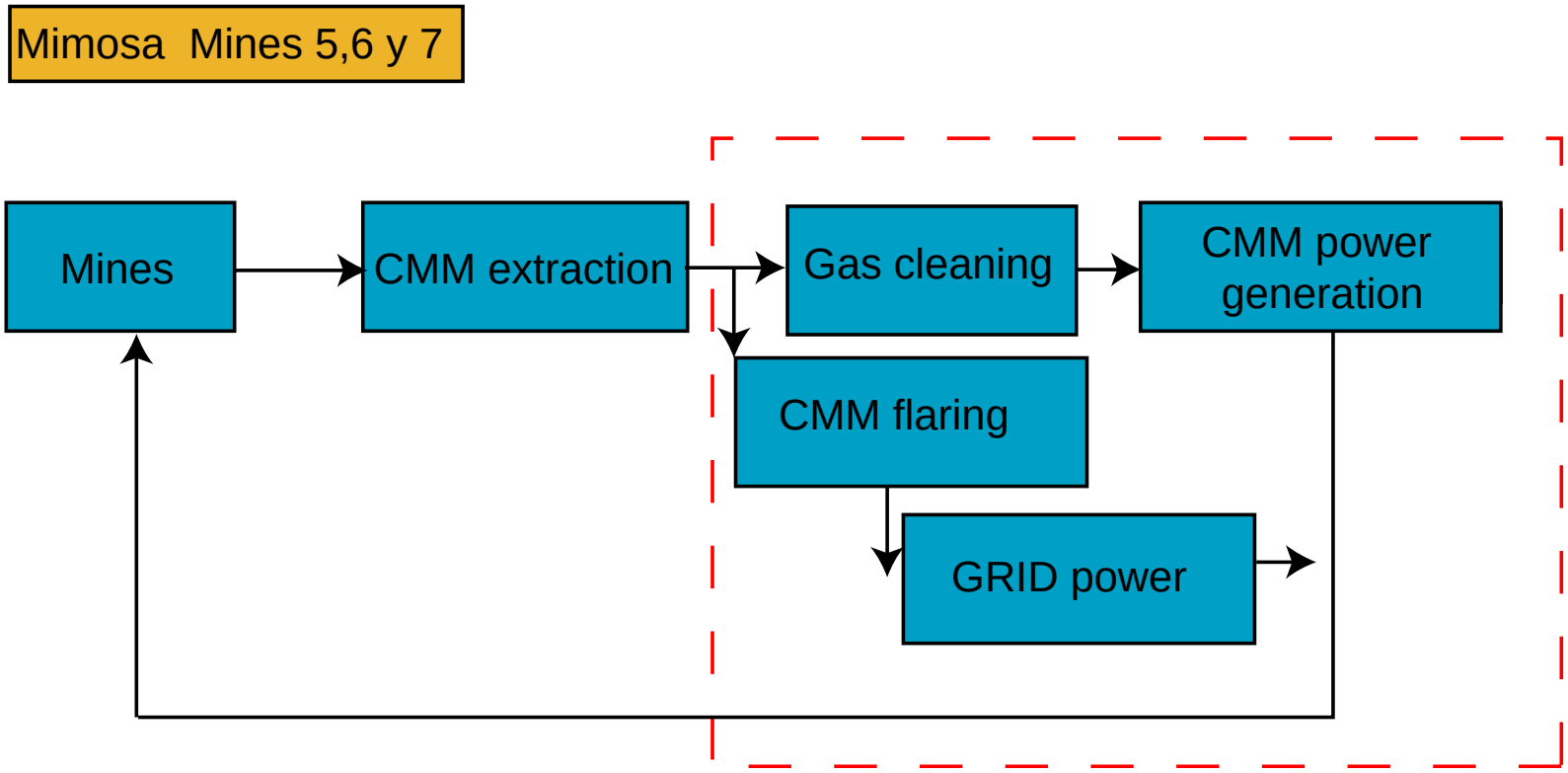
- The main objective of the project is to capture the methane (CMM) to burn it and generate power. Benefits; safety and environment.

- The content of methane gas in coal mine is 30-60 m^3 per ton of coal.

- Only 30% of the methane content in coalbed is collectable (40-60% concentration).
  The remaining 70% (1% concentration) is drawn into the atmosphere as part of the ventilation safety process. (CMV).

- Today Mimosa only extracts methane gas as a security measure.

Project boundary



Project

- Once the quality and quantity of methane is established. In the second year, 7 Mw power generators will operate. Mimosa is currently using from CFE 27.8 MW per year.

- The project will contribute to sustainable development in different ways:

  Environment: reducing emissions of methane gas to the atmosphere. Not increase the consumption of natural resources.

  Social: Providing a new source of clean energy, jobs generation.

  Technology Transfer: The burning practice of natural gas is not common in Mexico.

Project

Estimated reduction of greenhouse gas emissions

Estimated emission reduction per year (tons CO_2e)	549,744
Total project emissions reduction (tons CO_2e)	3,848,206
Life cycle	7 years

Project Development

2005/2006

- PIN presentation to DNA.
- Intergovernmental panel to climate change approval.
- Companies selection to elaborate the PDD

2007

- PDD elaboration using approved methodology -ACM008
- Public presentation to local stakeholders,
- DOE Validation (DNV).
- PDD web registration in the UNFCCC.
- Amendments to PDD according to recommendations.
- PPD assessor change to a new consulting company in order to continue the process with the company best interest.

Project Development

2008

- PDD in validation process by DOE (DNV).

- Sending PDD to review technical host country (Norway).

2009.

- PDD still in validation process by DOE.

Opportunities

Simplification and cost reduction of the administrative process.

- Carbon credits are important to finance a healthy environmental project for mine methane gas. In order to get them, there is complex administrative procedures "*know how*".

- It is a common practice for companies having this "*know how*" to offer integrated services. Sometimes this is very useful because they provide in addition, capital and / or technology. On the other hand, the mine owners loose part of the property rights of this instruments (carbon credits).

- If the company wants to go alone with investment and/or technology, it is not easy to find assessors to only elaborate and present the PDD in UNFCCC. This is not an expensive work it self.