

**CLEAN DEVELOPMENT MECHANISM
PROJECT DESIGN DOCUMENT FORM (CDM-SSC-PDD)
Version 03 - in effect as of: 22 December 2006**

CONTENTS

- A. General description of the small-scale project activity
- B. Application of baseline methodology and monitoring
- C. Duration of the project activity / crediting period
- D. Environmental impacts
- E. Stakeholders' comments

Annexes

Annex 1: Contact information of the participants in the small scale project activity

Annex 2: Information regarding public funding

Annex 3: Baseline information

Annex 4: Monitoring Information

Annex 5: Information on the visit of Pro Carbono in the Yara

Annex 6: Operation Licence of Rio Grande unit

CDM – Executive Board

Revision history of this document

Version Number	Date	Description and reason of revision
01	21 January 2003	Initial adoption
02	8 July 2005	<ul style="list-style-type: none">• The Board agreed to revise the CDM SSC PDD to reflect guidance and clarifications provided by the Board since version 01 of this document.• As a consequence, the guidelines for completing CDM SSC PDD have been revised accordingly to version 2. The latest version can be found at http://cdm.unfccc.int/Reference/Documents.
03	22 December 2006	<ul style="list-style-type: none">• The Board agreed to revise the CDM project design document for small-scale activities (CDM-SSC-PDD), taking into account CDM-PDD and CDM-NM.

CDM – Executive Board

SECTION A. General description of the small-scale project activity

A.1 Title of the small-scale project activity:

>>

Yara Brasil Project of replacement of fossil fuel by biomass.

A.2. Description of the small-scale project activity:

>>

The project developed by Yara Brasil Fertilizantes S/A consists of, at the first phase, in the replacement of a hot gas generating furnace that burned heavy petroleum oil (type A1 oil) by another heat generating furnace burning biomass residues from commercial reforestation in the region. This heat is used to dry fertilizers granules of the Unit CR 120.

The equipment manufactured by and with technology of Caldemaq – Caldeiras e Equipamentos Ltda, Brazilian company located at Agrolandia, in the state of Santa Catarina, consists of pyrolytic burning, changing organic residues, of forest origin, into thermal energy, without polluting the environment, even if such fuels have a high percentage of humidity. The technology of pyrolytic burning is largely used in the market and is well-known by the national industry.

The following equipment was replaced in the first phase:

- Furnace of Unit CR 120

In the second phase, approximately three years after the heat generating furnace of Unit CR 120 begins its operation, three steam furnaces using fossil fuel (type A1 oil) for steam generation will be replaced by two other furnaces that will also use biomass residues. In the same phase, it will also be replaced the heat generating furnace using the same fossil fuel by another furnace that will use biomass residues for granules production in the Unit CR 140.

The following equipments will be replaced in the second phase:

- Furnace of Unit CR 140
- Steam Furnace 410-HH-01 A
- Steam Furnace 410-HH-01 B
- Steam Furnace 410-HH-02

The project activity will reduce CO₂ emissions.



PICTURE 1 – INDUSTRIAL FACILITY OF YARA RIO GRANDE

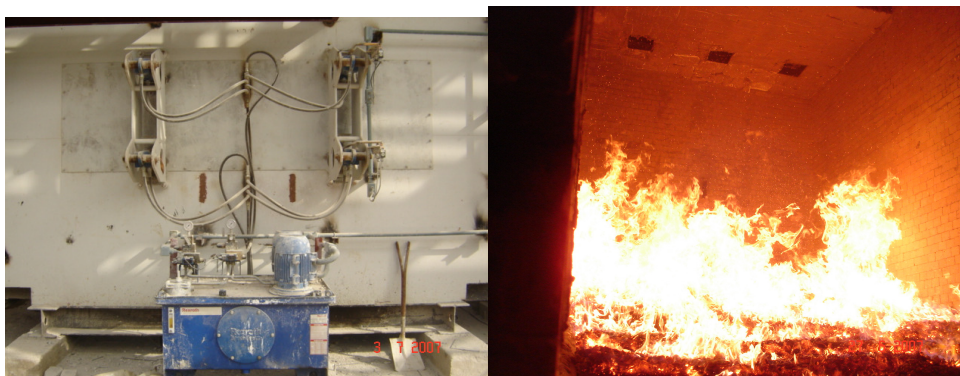
The industrial facility of Yara Brasil Fertilizantes S/A located in the municipality of Rio Grande, has two NPF granulation units, Unit CR 120 with capacity of 725,000 t/year (105 t/h) and Unit CR 140 with capacity of 240,000 t/year (35 t/h).

For this granules production, the factory has three steam furnaces (410-HH-01 A, 410-HH-01 B e 410-HH-02) consuming fossil fuel for steam generation. These steam furnaces are included in the project activity, since they will be replaced in the second phase of the project activity approximately three years after the heat generating furnace of Unit CR 120 begins its operation. It's also included in the project activity the replacement of the heat generating furnace of Unit CR 140 using fossil fuel by a heat generating furnace that will use biomass residues.

A powder superphosphate production unit (SSP + TSP), Unit CR 110, with capacity of 900,000 t/year (130 t/h).

The facility has a liquid storage capacity (sulphuric and phosphoric acid) of 50,000 tonnes and granules storage capacity around 180,000 ton. Besides, to complete the production cycle of granules and fertilizers, it has a mixing and packing area with capacity of 600,000 t/year of final product.

The facility has a port terminal with capacity of 3,000,000 t/year.



PICTURE 2 - The outside and inside of the furnace CR120.

The project activity will keep the heat production through combustion of renewable energy sources. Biomass residues like chipwood, crowns' branches and leaves, are residual products of the cutting work in the commercial reforestation areas of the region. In the absence of the project, Yara would keep using heat and steam generated by using fossil fuel and the biomass residues from the forest activities would be sent to open sky waste or left on site to be degraded e generate CH₄ aerobically.

Project contribution to sustainable development

The project contributes for the sustainable development through the use of renewable and sustainable energy sources instead of using fossil fuel.

This project has an important contribution to environmental sustainability by reducing carbon dioxide emissions to the atmosphere that would have occurred in the absence of this CDM.

The biomass residue combustion also emits CO₂, however, since the biomass comes from renewable forests, the CO₂ emission is considered nil, since the emitted CO₂ is recovered during photosynthesis.

Besides, the project uses forest waste and wood waste from saw mills, which reduces greenhouse gas emission in CH₄ form through degradation of this waste, because otherwise this material would be sent to open sky waste deposits or left on site.

The project will increase job opportunities in the region directly and indirectly, contributing to income generation.

The project uses national technology and equipments and promoted the training of the local manpower for installation, operation and maintenance of all equipments.

It contributes for regional integration and cooperation with other sectors promoting a positive interaction between the forestry and industrial sectors.

About the project participants

The industrial unit of Rio Grande was built in 1967 by Adubos Trevo, a traditional fertilizer company founded in 1930 and has grown in the Brazilian agribusiness over its 77 years of existence, becoming one of the country's main companies in this field.

The construction of the industrial facility increased considerably the company production capacity that, in september 1996, started to operate the largest and most modern port terminal of the state of Rio Grande do Sul, with capacity to unload up to 12,000 t/year. The facility of Rio Grande, where are concentrated the company's main operations, has strategic importance in the American Latin market.

Through the incorporation to Yara in 2000, the company started a new cycle for the agriculture in Brazil.

Yara is a global leader in plant nutrition, and it's also the pioneer in the production of nitrogenated fertilizers and use of hydroelectric energy to obtain nitrogen from the air. Over its 100 years of existence, Yara has grown around the world and today is present in more than 60 countries, with distribution in 120 countries, becoming a vigorous and dynamic leader of the worldwide market.

The company's values are: ambition, teamwork, responsibility and reliability, which are the basis for Yara to evolve from a leader to an industry shaper.

Health, security, quality and environment are taken into consideration in all processes; and also other aspects such as public and occupational safety.

Yara has technological centers in different countries that developed technologies and competencies in the areas of: nitric acid production including catalyzers, nitrophosphate and calcium nitrate production, granulated fertilizers based on nitrites production, urea production in fluidized bed, efficient security and emergency process and emission of atmospheric pollutants reduction.

Adubos Trevo still existing as a traditional fertilizers trademark, acknowledged all over the country for its agronomical competency, quality, reliability and credibility, and getting stronger every day, is part of this worldwide organization of excellence in the sector around the world.

CDM – Executive Board

A.3. Project participants:

>>

Project participants

Name of Party involved (*) ((host) indicates a host party)	Private and/or public entity(ies) Project participants (*) (as applicable)	Kindly indicate if the Party involved wishes to be considered project participant (Yes/No)
Brazil	Yara Brasil Fertilizantes S/A	No
Brazil	Pro Carbono Consultoria Ambiental Ltda	No

(*) In accordance with the CDM modalities and procedures, at the time of making the CDM-PDD public at the stage of validation, a Party involved may or may not have provided its approval. At the time of requesting registration, the approval by the Party(ies) involved is required.

 CDM – Executive Board

A.4. Technical description of the small-scale project activity:
A.4.1. Location of the small-scale project activity:

>>

Rio Grande

A.4.1.1. Host Party(ies):

>>

Brazil

A.4.1.2. Region/State/Province etc.:

>>

State of Rio Grande do Sul

A.4.1.3. City/Town/Community, etc:

>>

Rio Grande

A.4.1.4. Details of the physical localization, including information that allow the unique identification of this small-scale project activity:

>>

The project is located at Yara industrial plant in the city of Rio Grande, approximately 320 km from the Capital of the state of Rio Grande do Sul and has a population of 182,000 inhabitants according to IBGE (Brazilian Census Bureau) 2005 Census.

Yara Brasil Fertilizantes S/A

Av. Alm. Maximiano Fonseca 2001

Distrito Industrial

96204-040 – Rio Grande/RS

South Latitude 32° 04' 33,3"

Longitude 52° 05' 56,5"

Picture 1: Geographical position of the city of Rio Grande


 (Source: City Brazil, 2005 <http://www.citybrazil.com.br>)

A.4.2. Type and category (ies) and technology of the small-scale project activity:

>>

According to Appendix B of procedures and simplified modalities for small-scale projects, Yara Brasil project for replacement of fossil fuel by biomass falls into the following category:

Type I; Category I.C: Thermal Energy for the user with or without electricity

In the first phase of the project, the total capacity of the heat generating furnace is:

- Furnace of Unit CR 120 – 15 Gcal/h

$$15 \text{ Gcal/h} = 62,802 \text{ MJ/h} = (62,802 \text{ MJ}) / (3,600 \text{ s}) = 17.45 \text{ MW}$$

In the second phase of the project, when the steam generating furnaces and the heat generating furnace of the Unit CR 140 will be replaced, the total capacity of the project will be:

- Furnace of Unit CR 120 – 15 Gcal/h
- Furnace of Unit CR 140 – 06 Gcal/h
- Steam Furnace A - 8,8 Gcal/h
- Steam Furnace B - 8,8 Gcal/h

$$38.6 \text{ Gcal/h} = 161,610 \text{ MJ/h} = (161,610 \text{ MJ}) / (3,600 \text{ s}) = 44.90 \text{ MW}$$

The installed capacity is below 45 MW and, as such, it's a small scale project activity according to version 12 I.C. Methodology dated 10/08/2007 .

A.4.3. Estimated amount of emission reductions over the chosen crediting period:

Table 4 – Estimated emission reductions

Years	Annual estimation of emission reduction [tCO ₂]
2008 (Jul – Dec)	19,226
2009	38,452
2010	38,452
2011	68,684
2012	98,916
2013	98,916
2014	98,916
2015 (Jan – Jun)	49,458
Total estimated reductions (tCO ₂) eq	511,020
Total number of crediting years	7
Annual average over crediting period of estimated reductions (tCO ₂)	73,002

The estimation of the quantities of emission reduction over the crediting period were calculated based on the nominal capacity of the equipments provided by the manufacturer, i.e., in the first phase of the project was considered the nominal capacity of 15 Gcal/h of the heat generating furnace of Unit CR 120 and in the second phase of the project, when the heat generating furnace of Unit CR 140 e the three steam generating furnaces (410-HH-01 A, 410-HH-01 B e 410-HH-02) will be replaced, the total capacity of the project activity will be 38.6 Gcal/h.

A.4.4. Public funding of the small-scale project activity:

>>

No public funding was used in this project and it doesn't derive from ODA.

A.4.5. Confirmation that the small-scale project activity is not a debundled component of a larger scale project activity:

Yara Brasil Project for replacement of fossil fuel by biomass, which consists in the exchange of fossil fuel by biomass, is not part of a larger project of greenhouse gas emission reduction – GHGs, because it's an unique CDM project proposed by the proponent of the project in the city of Rio Grande, state of Rio Grande do Sul, Brazil. It's in accordance with the Appendix C referring to simplified modalities and procedures for small scale CDM project activities.

There is no registered small scale CDM project activity or an application to register another small scale CDM project activity:

CDM – Executive Board

- With the same project participants; and
- In the same project category and technology/measure; and
- Registered in the 2 previous years; and
- Whose project limit is within 1 km of the project boundary of the proposed small scale project activity at the closest point.

SECTION B. Application of a baseline and monitoring methodology**B.1. Title and reference of approved baseline and monitoring methodology applied to the small-scale project activity:**

>>

Type I – Renewable energy projects / I.C. Thermal Energy for the user with or without electricity version 12 dated 10/08/2007.

B.2 Justification of the choice of the project category:

>>

The project activity meets all applicability requirements of AMS-1C methodology (Type I – Renewable Energy Project – Thermal energy for the user with or without electric energy).

The project activity uses technology of furnace burning biomass residue with generation capacity lower than 45 MW. The renewable energy technology that supplies user with thermal energy displaces fossil fuel as required by Appendix B of simplified modalities and procedures for small-scale CDM project activity.

The project activity will reduce the GHGs emissions by the use of biomass residue replacing fossil fuel in 511,020 tCO₂ over the first crediting period.

For renewable energy technologies that displace technologies using fossil fuels, the simplified baseline is the net quantity of thermal energy supplied by the project activity times an emission coefficient for the fossil fuel displaced according to the conservative appendix B to SSM&P.

For renewable energy technologies that displace fossil fuels the consumption of biomass is the only parameter that needs to be monitored.

B.3. Description of the project boundary

>>

The Type I methodology – Renewable Energy Project, I.C Category – Thermal energy for the user with or without electric energy, version 12 dated 10/08/2007, defines as the project boundary the physical and geographical site of the renewable energy generation.

As such, the project boundary is Yara industrial plant.

B.4. Description of baseline and its development:

>>

The project activity meets all applicability requirements of AMS-1C methodology (Type I – Renewable Energy Project – Thermal energy for the user with or without electric energy) according to paragraph 6.

The project activity uses technology of furnace burning biomass residue with generation capacity lower than 45 MW. For renewable energy technologies that displace technologies using fossil fuels, the simplified baseline is the net quantity of thermal energy supplied by the project activity times an emission coefficient for the fossil fuel displaced according to conservative appendix B to SSM&P.

By the AMS-1C, the fossil fuel is directly determined by the biomass consumption. It's assumed that the quantity of fossil fuel that would be required in each year of the crediting period to replace biomass is equal to the quantity of biomass used in energy units.

The first phase of the project activity started its operations in July 2007. The GHG emissions will be avoided by the displacement of fossil fuel for heat generation used to dry the fertilizers granules of Unit CR 120. The minimum efficiency of the new biomass hot air furnace, according to manufacturer's information, is 96% burning forest biomass residues with an humidity index between 45% and 55%.

In the second phase of the project activity, estimated to start operation in July 2011, the GHG emissions will be avoided by displacement of the fossil fuel used for steam generation in the steam furnaces of the fertilizers granulation process and heat generation to dry the fertilizers granules of Unit CR 140.

The nominal capacity for thermal energy generation of the new furnace of Unit CR 120 is 15Gcal/h (0.0628 TJ/h); the capacity of the two new heat generating furnaces that will start operation in July 2011 is 8,8 Gcal/h (0.0368 TJ/h) each; and the one of Unit CR 140 is 6 Gcal/h (0.0251 TJ/h). The Inferior Calorific Power (PCI) of Type A1 fossil fuel is 9,500 kcal/kg (0.0398 TJ/t) according with report obtained from the raw material supplier, and the PCI of the forest biomass residue is 2,200 Kcal/kg (0.0092 TJ/t) obtained from the Foundation of Science and Technology – CIENTEC, institution linked to Department of Science and Technology of the State of Rio Grande do Sul.

CDM – Executive Board

The baseline emission will be:

$$BE_y = FF_y * EF_{CF_CO2}$$

BE_y – Baseline emission of the project activity over the year y in tCO₂.

FF_y – is the consumption of fossil fuel that would be required in each year of the crediting period to replace biomass, in TJ.

EF_{FF_CO2} - is the emission factor CO₂ by energy unit of fuel that would be used in the baseline refinery in (tCO₂/TJ)

As mentioned earlier, the fossil fuel is directly determined by the biomass consumption. It's assumed that the quantity of fossil fuel that would be required in each year of the crediting period to replace biomass is equal to the quantity of biomass used in energy units.

$$FF = BIO * LHV_{Biomass}$$

FF – is the consumption of fossil fuel that would be required in each year of the crediting period to displace biomass, in TJ.

BIO – quantity of biomass residue consumed during the year y in tonnes.

$LHV_{Biomass}$ – is the Lower Heating Value of the biomass residue in TJ/t

<p>B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered <u>small-scale CDM project activity</u>:</p>
--

The additionality of the project activity is evaluated and demonstrated by the Annex A of Appendix B of the simplified modalities and procedures for a small-scale CDM project activity. In absence of the project activity the most likely scenario would be the use of oil in the operation of the furnaces and steam furnaces.

Step 0

Since Grupo Yara acquired the facilities of Grupo Trevo S/A in the year 2000, it always sought to obey the current environmental rules of the state of Rio Grande do Sul and Brazil with the aim to be within the sustainable development policies. The fertilizer industry has been always looked upon with reservation by the environmental sector and for this reason Grupo Yara worked in a way to show to the community that it's possible to have an industry that allies production and sustainability without harming the environment.

CDM – Executive Board

Yara Brasil Fertilizantes S/A, after a presentation of Pro Carbono Consultoria Ambiental Ltda technical team about the Clean Development Mechanism in April 2006¹, devised in the CDM Project an opportunity to show to its customers and the local community that it could be engaged in the fight for a sustainable development and act strongly for GHGs reduction, contributing for the earth climate change. This presentation helped the company to take the decision of changing the fuel used in the furnaces to dry fertilizers granules and in the steam furnaces for steam production.

It's not an applicable step, since the project is not asking for retroactive crediting.

Technological barriers

The furnace to burn the biomass residue was developed and installed by the company Caldemaq and followed by Yara Brasil technical team. Yara Brasil is also the responsible for the maintenance of the biomass furnace. The biomass furnaces are more laborious than oil furnaces, and require extra care from employees as well as their training.

Unlike the oil furnaces, which are fed by automatic pumps, Yara's biomass furnace is fed by a power shovel that carries the biomass from its storage room, inside the Industrial Unit, to a feed hopper. It requires a storage area for the raw material and additional costs for the feeding operation, since it's necessary extra manpower that wasn't required previously.

Barrier due to prevailing practice

The operation with fossil fuel was well established in Yara Brasil industrial plant, even before the company purchase the unit from Grupo Trevo, because its easy to operate and due to the fact that its industrial unit is located near to two petroleum refineries, one of them in the city of Rio Grande at less than 5km of distance, and the other in the metropolitan area of Porto Alegre at approximately 320 km. Besides, Yara has marine terminals to load and unload fossil fuels in the city of Rio Grande, ensuring a good logistic supply in any worldwide market.

In other words, the option for fossil fuel could ensure a higher safety in the supply.

The change to biomass incurred in higher maintenance costs of the furnace and auxiliary equipments that come with the feed hopper, belt conveyor, screw conveyor, among others, costs that weren't present before the implementation of the project.

The biomass feeding stage also has a higher cost and is more laborious because it's carried out using a power shovel, which required an increase in the number of employees.

Other Barriers

The instalation of the furnace requested an investment of approximately US\$ 2,695,000.00, with 2/3 of this amount used for purchasing the furnace and other auxiliary equipments like feed hopper for

¹ Data confirmed in the Annex 5.

CDM – Executive Board

the biomass residue, screw conveyor and belt conveyor, building of the biomass storage room. The rest of the investment was used with civil works and manpower to mount the furnace.

For the installation of the two steam generating furnaces and the furnace of Unit CR 140, Yara Brasil forecasts an investment of approximately US\$ 3,500,000.00.

The implementation of the project faced a barrier related with securing the biomass supply. Since three years the forestry base industry is in state of alert because of the unbalance between wood demand and supply. The expectation is that in the next years there will be a shortage of raw material to attend the needs of wood production.

Public policies encouraging the reforestation have shown to be insufficient and inefficient to mitigate the pressure over natural forests to attend the growing need for wood. In the state of Rio Grande do Sul, where is located Yara Brasil industrial unit, despite the fact that were left only 13,5% of the natural forests in medium and advanced stage, the growing need for wood doesn't mean a pressure over this native residual forest. This is due to the efficient action taken by the environmental protection agencies, environmental police and the social control exerted by non-governmental agencies. However, the barriers for wood supply remain.

The overcoming of the present barrier will happen with the engagement of small and medium rural owners and public policies encouraging the reforestation.

Another aspect is the raising in the wood prices. This raising is due, from one side, to the growing need for wood and, on other side, to the insufficient supply by the renewable forests for commercial ends and the prohibition of exploitation of the native forests².

BNDES (Brazilian National Development Bank) mentions some inhibition factors of the primary sector of wood in the country:

- Absence of a long term sectoral police – absence of planning.
- The institutional model is not directed to the production – lack of instruments.
- Complexity of legislation, which discriminates and restricts the forestry plantations.
- Expansion of forestry base is dependent almost exclusively of big corporations.
- Insufficient insertion of small and medium rural producers.

The skepticism about the reliability of biomass supply and its price is one of the limiting factors for the development of the project, especially because of the inefficiency and discontinuation of long run public policies of reforestation.

Yara has long term contracts for biomass supply, but eventually there are delays in the deliveries, forcing the company to keep a stock higher than necessary, affecting the just in time process.

² Seminar, A questão florestal e o Desenvolvimento – Carlos Alberto Roxo, Aracruz Celulose, BNDS, 8/06/2003.

National policies and circumstances relevant to the baseline

There are no programs limiting the use of oil fuel in Brazil. However, there are no national policies that would reduce the use of oil fuel in the baseline.

Besides, the uncertainties of Brazilian energetic policies led the proposed CDM project to define the company policy for use of biomass.

The use of the CR 120 furnace is in compliance with all applicable legal and regulatory requirements in Brazil, as well as with the local safety and pollution standards. The same standards will be followed in the second phase of the project.

Impact of CDM registration

The impact of the project CDM registration will contribute to overcome all barriers described in this PDD like the technological barriers, the barriers due to prevailing practices and the barriers due to uncertainties of political and economic policies.

The registration will bring more security to the investment itself, and will encourage and support the project owners' decision to persist in their business model.

Yara Brasil understands that the current project that contributes with the sustainable development and climate change is an unique opportunity to build a positive image of the company and of the sector in which it operates as well.

Concerning the cooperation with the sustainable development it also believes in a better income distribution among the firewood producers, since the demand for wood and forest biomass residue will grow with the consequent need for increasing reforestation in small and medium properties.

The costs and barriers of the project will be reduced with the CERs sale, and will add value to the community with the GHGs reduction.

B.6. Emissions reduction:

B.6.1. Explanation of methodology choice:

>>

The project activity displaces fossil fuel that would be used in the absence of the project by the use of forest biomass residue, the baseline will be calculated as follows:

$$BE_y = FF_y * EF_{CF_CO_2}$$

BE_y – Baseline emission of the project activity during the year y in tCO₂.

FF_y – is the consumption of fossil fuel that would be required in each year of the crediting period to replace biomass, in TJ.

$EF_{FF_CO_2}$ - is the emission factor CO₂ by energy unit of fuel that would be used in the baseline refinery in (tCO₂/TJ)

The fossil fuel is directly determined by the biomass consumption. It's assumed that the quantity of fossil fuel that would be required in each year of the crediting period to replace biomass is equal to the quantity of biomass used in energy units.

$$FF_y = BIO_y * LHV_{Biomass}$$

CDM – Executive Board

FF_y – is the consumption of fossil fuel that would be required in each year of the crediting period to replace biomass, in TJ.

BIO_y – Quantity of biomass residue in tonnes.

$LHV_{Biomass}$ – Lower Heating Value of the biomass residue in TJ/t

The table below describes the data used to determine the baseline emissions.

Parameters	Applied Values	Explanation
FF_y	First phase: 496.8 TJ Second phase: 1,278.0 TJ	The fossil fuel is directly determined by the biomass consumption. The quantity of fossil fuel that would be required in each year of the crediting period to replace biomass is equal to the quantity of biomass used in energy units.
$EFCO_2$	77.4 tCO ₂ /TJ	IPCC 2006, guidelines V2_1_ch1, page 23. IPCC was chosen as a reliable source for the emissions factors data.
BIO_y	First phase: 54.000 t Second phase: 138.960 t	Considering the nominal capacity of the equipments in the first and second phase of the project activity, 15Gcal/h and 38.6 Gcal/h, respectively.
$LHV_{Biomass}$	0.0092 TJ	Report provided by CIENTEC

CDM – Executive Board

B.6.2. Data and parameters that are available at validation:

Data / Parameter:	EF_{CF CO2}
Data unit:	tCO ₂ /TJ
Description:	CO ₂ emission factor by energy unit of fuel that would be used in the baseline.
Source of data used:	IPCC 2006, guidelines V2_1_ch1, page 23
Value applied:	77.4
Justification of the choice of data or the description of methods and procedures of measure really applied:	The IPCC was chosen as a reliable source for emission factors data. This value is fixed for the whole crediting period.
Any comments:	

Data / Parameter:	LHV_{Biomass}
Data unit:	TJ/t
Description:	Inferior Calorific Power of biomass residue used in the furnace and in the steam furnaces that will be replaced
Source of data used:	Fundação de Ciência e Tecnologia - CIENTEC
Value applied:	0.0092
Justification of the choice of data or description of measurement methods actually applied:	This value is fixed for the whole crediting period of the project.
Any comments:	

B.6.3 Ex-ante calculation of emissions reductions:

>>

The formulae for the calculation of emissions reductions is as follows:

$$ER_y = BE_y - PE_y - Leakages$$

Where:

ER_y - is the emission reduction in the year y

BE_y - is the baseline emission in the year y

PE_y - is the project emission in the year y

Baseline Emission:

As drafted in section B.4, the following formulae is used:

$$BE_y = FF_y * EF_{CF_CO2}$$

BE_y – Baseline emission of the project activity during the year y in tCO_2 .

FF_y – is the consumption of fossil fuel that would be required in each year of the crediting period to displace biomass, in TJ.

EF_{FF_CO2} - the emission factor CO_2 by energy unit of fuel that would be used in the baseline refinery in (tCO_2/TJ)

The fossil fuel is directly determined by the biomass consumption. It's assumed that the quantity of fossil fuel that would be required in each year of the crediting period to replace biomass is equal to the quantity of biomass used in energy units.

$$FF_y = BIO_y * PCI_{RB}$$

FF_y – is the consumption of fossil fuel that would be required in each year of the crediting period to replace biomass, in TJ.

BIO_y – Quantity of biomass residue consumed in the year y .

$LHV_{Biomassa}$ – Lower Heating Value of biomass residue in TJ/t

B.6.4 Summary of the ex-ante estimation of emissions reductions:

>>

Emissions Reductions = Baseline Emission – Project Emission - Leakages

$$ER = EB - EP - F$$

Years	Annual estimation of emissions reduction [tCO ₂]
2008 (Jul – Dec)	19,226
2009	38,452
2010	38,452
2011	68,684
2012	98,916
2013	98,916
2014	98,916
2015 Jan – Jun)	49,458
Total estimated reductions (Tco ₂) eq	511,020
Total number of crediting years	7
Annual average over crediting period of estimated reductions (ttCO ₂)	73,002

CDM – Executive Board

B.7 Application of the monitoring methodology and description of monitoring plan:
--

B.7.1 Data and parameters monitored
--

Data / Parameters:	BIOy
Data unit:	T
Description:	Quantity of biomass residue used in the project activity over the year
Source of data to be used:	Measured on site
Value of data	First phase: 54,000 Second phase: 138,960
Description of measurement methods and procedures to be applied:	The quantity of biomass residue consumed will be monitored by the following procedures: Each truck arriving at the project site is weighted at the entrance and the biomass is unloaded in the storage area. The book values of purchase invoices will be registered in the system (SAP) automatically updating the biomass inventory.
QA/QC procedures to be applied:	Checking of purchase invoices against the quantity of biomass consumed.
Any comments:	

Data / Parameters:	FFy
Data unit:	TJ
Description:	It's the consumption of fossil fuel that would be required in each year of the crediting period to displace biomass, in TJ.
Source of data to be used:	Calculated
Value of data	First phase: 496.8 TJ Second phase: 1,278.0 TJ
Description of measurement methods and procedures to be applied:	The fossil fuel is directly determined by the biomass consumption. It's assumed that the quantity of fossil fuel that would be required in each year of the crediting period to replace biomass is equal to the quantity of biomass used in energy units.
QA/QC procedures to be applied:	Based on biomass control and Biomass Lower Heating Value <i>LHV_{Biomass}</i>
Any comments:	To calculate the estimations, it was considered the nominal capacity of the furnace.

B.7.2 Description of the monitoring plan:
--

>>

The project activity meets all applicability requirements of the AMS-1C methodology (Type I – Renewable Energy Project – Thermal energy for the user with or without electric energy).

 CDM – Executive Board

For renewable energy technologies that displace technologies using fossil fuels, the simplified baseline is the net quantity of thermal energy supplied by the project activity times an emission coefficient for the fossil fuel displaced based on conservative appendix B to the SSM&P.

For renewable energy technologies that displace fossil fuels the consumption of biomass is the only parameter that needs to be monitored. Values like Inferior Calorific Power of the forest biomass residue will be verified at the moment of the Validation and the same value will be used over all crediting period.

The monitoring is conducted by the factory technicians who gather and report the data to the monitoring supervisor. The monitoring supervisor organize the data that will be reviewed and archived by the financial controller. An independent accounting reviewer makes an annual verification of the data-gathering process and archived records.

The following social and environmental indicators will be monitored:

- The numbers employed in the new furnace will be monitored and reported in the book that monitores the project reports of biomass burning.

- The particle emissions of the chiminey, referring to the granulation process that also includes the project activity of biomass burning, will be monitored according to environmental requirements of the environmental license. The result of this monitoring will be included in the book that monitores the project activity.

B.8 Data of completion of the application of the baseline and monitoring methodology and the name of the responsible person (s) / entity (ies):

>>

(1) Data of completion of the application of the baseline and monitoring methodology:
10/11/2007

(2) Name of the person/entity responsible by the baseline:

Pro Carbono Consultoria Ambiental Ltda

Marcos Cardoso da Cunha

Rua Jerônimo Coelho 102, conjunto 51

Porto Alegre/RS – 90.010-240

Brazil

 CDM – Executive Board

SECTION C. Duration of the project activity / crediting period
C.1 Duration of the project activity:

For the first phase of the project activity, the construction of the furnace of Unit CR 120 began on 15/03/2007 and the project activity started its operation on 12/07/2007.

For the second phase of the project activity, the replacement of three steam furnaces and the furnace of Unit CR 140 is forecasted to July 2011.

C.1.1. Starting date of the project activity:

>>

The event that defines the starting date of the project activity is when the decision of replacing the equipments was taken, following the directions of paragraph 76 of 33th Meeting of the Executive Board that the data to be adopted should be the oldest among the dates referring to the implementation, construction and decision making for the beginning of the project.

So, the starting date is 12/02/2007.

C.1.2. Expected operational lifetime of the project activity:

>>

21 years – 0 months

C.2 Choice of the crediting period and related information:
C.2.1. Renewable crediting period
C.2.1.1. Starting date of the first crediting period:

>>

01/07/2008

C.2.1.2. Length of the first crediting period:

>>

7 years – 0 months

C.2.2. Fixed crediting period:
C.2.2.1. Starting Date:

>>

Not applicable

C.2.2.2. Length:

>>

CDM – Executive Board

Not applicable

CDM – Executive Board

SECTION D. Environmental Impacts

>>

D.1. If required by the host party, documentation on the analysis of the environmental impacts of the project activity:

>>

Yara Brasil Fertilizantes S/A Project complies with the environmental regulations of the country. The plant has the required environmental license issued by the State regulator agency, Fepam. The scope of the license includes the whole project activity. The license is currently renewable and it is available and reviewed under request.

The furnace of Unit CR 120 was licensed by the state environmental agency and the same will be done in the second phase of the project activity.

The ashes generated in the process of biomass burning will be mixed to the fertilizers raw materials, using, in this way, the nutrients contained in them.

Yara Brasil Fertilizantes S/A industrial facility of Rio Grande is ISO 14,001 certified, another evidence that all activities are in line with applicable requirements, including legislation and Yara Brasil standards.

D.2. If the environmental impacts are considered significant by the project participants or by the host party, please provide conclusions and all references to support documentation of environmental impact assessment undertaken in accordance with the procedures as required by the host party:

>>

This project activity doesn't present environmental impacts and does not request an environmental impact assessment.

It was simply required an Instalation License by the state environmental agency.

CDM – Executive Board

SECTION E. Stakeholders' comments:

>>

E.1. Brief description of how comments by local stakeholders have been invited and compiled:

>>

The project proponent invited the local stakeholders for comments about the project activity. Several organizations and entities were invited for comments about the project activity:

- Rio Grande City Hall.
- Rio Grande City Council.
- Rio Grande Environmental Department
- Fepam – State Environmental Agency
- Public Affairs' local office
- FBOMs - National NGOs representative
- Centro de Indústrias do Rio Grande
- Chamber of Commerce of Rio Grande
- Associação dos amigos e moradores do Bairro Centro
- Associação dos moradores e amigos da Quarta Secção da Barra.

E.2. Summary of the comments received:

>>

E.3. Report on how due account was taken of any comments received:

>>

CDM – Executive Board

Annex 1**CONTACT INFORMATION ON PARTICIPANTS IN THE PROJECT ACTIVITY**

Organization:	Yara Brasil Fertilizantes S/A
Street/P.O.Box:	Maximiano Fonseca
Building:	2001
City:	Rio Grande
State/Region:	Rio Grande do Sul / South
Postal Code:	96.204-040
Country:	Brazil
Telephone:	+55 53 3293-4300
FAX:	
E-Mail:	
URL:	www.yarabrasil.com.br
Represented by:	Adonis Junqueira
Title:	Projects Supervisor
Salutation:	Mr.
Last Name:	Junqueira
Middle Name:	
First Name:	Adonis
Department:	Projects
Mobile:	+55 53 8116-0099
Direct FAX:	
Direct Phone:	+55 53 3293-4327
Personal E-Mail:	Adonis.junqueira@yara.com

CDM – Executive Board

Organization:	Pro Carbono Consultoria Ambiental Ltda
Street/P.O.Box:	Rua Jerônimo Coelho 102, conjunto 51
Building:	ISMA
City:	Porto Alegre
State/Region:	Rio Grande do Sul / South
Postal Code:	90.010-240
Country:	Brazil
Telephone:	+55 51 3228-8657
FAX:	
E-Mail:	procarbono@procarbono.com.br
URL:	www.procarbono.com.br
Represented by:	Marcos Cardoso da Cunha
Title:	Projects Director
Salutation:	Mr.
Last Name:	Cunha
Middle Name:	Cardoso
First Name:	Marcos
Department:	Projects
Mobile:	+55 51 9933-1273
Direct FAX:	+55 51 3286-6106
Direct Phone:	
Personal E-Mail:	marcos.cunha@procarbono.com.br

Annex 2

INFORMATION REGARDING PUBLIC FUNDING

No public funding is used in the project activity.

Annex 3

BASELINE INFORMATION :

The information regarding baseline is described in the article B4

Annex 4

MONITORING INFORMATION

The information regarding monitoring is described in the article B7

Annex 5**INFORMATION ON THE VISIT OF PRO CARBONO IN THE YARA**

To: Cc:
Subject: Fw: Crédito Carbono
Attach: i g] Crédito de Carbono.doc [21 ,OKB]

Lúcio Souza
 Yara Brasil Fertilizantes S/A Fone: +55 53 3293 4349 53 9963 0620
 — Forwarded by Lúcio Souza/Yara on 2007-11-21 08:57

Lúcio Souza/Yara
 2006-04-1708:21 To
 Marco Brizolara/Yara@Yara, Fabiane Aires/Yara@Yara, Adónis
 Junque,ra/Yara@Yara, Leandro Sinott/Yara@Yara, Carlos
 Pizzol/Yara@Yara cc Julimar Souza/Yara@Yara
 Subject Crédito Carbono

Senhores

Bom Dia

Está previsto para quarta-feira às 13H30, apresentação do tema Crédito Carbono pela Pro-Carbono representada pelo Eng° Sartori, como já havia Noticiado em e-mail anterior, o tema é atual e interessante. Segue anexo rápida introdução ao tema.

(See attached file: Crédito de Carbono.doc) Lúcio

----- Forwarded by Lúcio Souza/Yara on 17/04/2006 08:00 -----

euclidessartori@procar
 bono.com.br To: Lucio.Souza@yara.com
 cc: Subject: Crédito Carbono
 13/04/200616:27

Caro Lúcio

Confirmamos para o dia 19/04 as 13h 30min a reunião.

Atenciosamente,

Euclides Sartori

NOTICE: This e-mail transmission, and any documents, files or previous E-mail messages attached to it, may contain confidential or privileged information. If you are not the intended recipient, or a person Responsible for delivering it to the intended recipient, you are Hereby notified that any disclosure, copying, distribution or use of Any of the information contained in or attached to this message is STRICTLY PROHIBITED. If you have received this transmission in error, Please immediately notify the sender and delete the e-mail and attached Documents. Thank you.

Annex 6

OPERATION LICENCE OF RIO GRANDE UNIT



1/1

LICENÇA DE OPERAÇÃO**LO N.º 8449/2006-DL**

A Fundação Estadual de Proteção Ambiental, criada pela Lei Estadual n.º 9.077 de 04/06/90 e com seus Estatutos aprovados através do Decreto n.º 33.765, de 28/12/90, registrada no Ofício do Registro Oficial em 01/02/91, no uso das atribuições que lhe confere a Lei n.º 6.938, de 31/08/81, que dispõe sobre a Política Nacional do Meio Ambiente, regulamentada pelo Decreto n.º 99.274, de 06/06/90 e com base nos autos do processo administrativo n.º 13508-05.67/05-2, expede a presente LICENÇA DE OPERAÇÃO que autoriza o:

EMPREENDIMENTO: 913, **CODRAM:** 2020,40,
EMPREENDEDOR: YARA BRASIL FERTILIZANTES S/A,
ENDEREÇO: Av. Almirante Maximiano Fonseca, n.º 2.001 – Distrito Industrial,
MUNICÍPIO: Rio Grande - RS,

a promover a operação relativa
 à atividade de: FABRICAÇÃO DE FERTILIZANTES, com 232.000 m² de área útil total e 389 empregados,

localizada: na Av. Almirante Maximiano Fonseca, n.º 2.001 – Distrito Industrial, no município de Rio Grande - RS.

Com as condições e restrições:

1-esta licença revoga a Licença de Operação n.º 697/2006-DL, de 19 de janeiro de 2006;

2-a área construída total da empresa é de 61.637,25 m²;

3-a empresa possui capacidade máxima mensal para fabricar 92.000 t de fertilizantes granulados;

4-a capacidade máxima de armazenamento de ácido sulfúrico é de 32.000 t em dois tanques com capacidade de 22.000 t e 10.000 t e a de ácido fosfórico é de 20.000 t em dois tanques de 10.000 t cada um;

5-a empresa deverá dar continuidade ao preenchimento das *planilhas de produção*, conforme modelo em anexo, devendo apresentá-las, à FEPAM, **semestralmente, durante o período de validade desta licença (as mesmas encontram-se disponíveis na home-page da FEPAM: www.fepam.rs.gov.br, em *Serviços, Licenciamento Industrial*);**

6-o transporte de produtos perigosos, utilizados ou produzidos no processo industrial da empresa, só poderá ser realizado por veículos licenciados pela FEPAM para Fontes Móveis com potencial de poluição ambiental;

7-a empresa deverá apresentar, no prazo máximo de 60 (sessenta) dias, relatório técnico devidamente assinado pelo responsável, informando quais as medidas tomadas pela empresa, em atendimento ao Plano de Ação constante no Anexo II do Relatório de Auditoria Ambiental apresentado a esta Fundação e datado de abril de 2004;

8-quanto aos efluentes líquidos:

8.1-os efluentes líquidos provenientes das lavagens de equipamentos, drenagens dos lavadores de gases e das águas pluviais contaminadas, após tratamento, **deverão ser totalmente recirculados; caso haja necessidade técnica de lançá-los no canal de acesso ao Porto de Rio Grande, a FEPAM deverá ser previamente comunicada, e os mesmos deverão atender aos seguintes padrões de emissão (conforme Portaria n.º 05/89-SSMA/RS), para o lançamento em corpos hídricos:**

PARÂMETROS	PADRÃO DE EMISSÃO A SER ATENDIDO
Temperatura	inferior a 40 °C
Sólidos Sedimentáveis	até 1 ml/l, em Cone Imhoff, 1 hora
pH	entre 6,0 e 8,5
DQO	até 405 mg/l
Sólidos Suspensos	até 135 mg/l
Óleos e Graxas	até 10 mg/l
Fósforo Total	até 1,0 mg/l P
Nitrogênio Total	até 10 mg/l N
Fluoretos	até 10 mg/l F

Cor: não deve provocar alterações visuais significativas no corpo receptor;

8.2-os efluentes líquidos sanitários, após tratamento, **deverão ser totalmente recirculados; caso haja necessidade técnica de lançá-los no canal de acesso ao Porto de Rio Grande, a FEPAM deverá ser previamente comunicada, e os mesmos deverão atender aos seguintes padrões de emissão (conforme Portaria n.º 05/89-SSMA/RS), para o lançamento em corpos hídricos.**

Fundação Estadual de Proteção Ambiental Henrique Luis Roessler/RS

Rua Carlos Chagas, 55 – Fone: (51) 3225-1588 – FAX: (51) 3212-4151 – CEP 90030-020 – Porto Alegre – RS – Brasil



2/2

PARÂMETROS	PADRÃO DE EMISSÃO A SER ATENDIDO
Temperatura	inferior a 40 °C
Sólidos Sedimentáveis	até 1 ml/l, em Cone Imhoff, 1 hora
pH	entre 6,0 e 8,5
DBO	até 150 mg/l
Sólidos Suspensos	até 150 mg/l
Óleos e Graxas	até 10 mg/l


Cor: não deve provocar alterações visuais significativas no corpo receptor;

9-quanto às emissões atmosféricas:

- 9.1-a empresa fica proibida de queimar óleo lubrificante usado conforme determina a RESOLUÇÃO CONAMA N° 09 de 31/08/93, que estabelece em seu artigo 7°, "todo óleo lubrificante deverá ser destinado à reciclagem";
- 9.2-a empresa deverá atender aos seguintes padrões de emissão, conforme determina a Portaria 20/88 - SSMA/RS:
- 9.2.1-**material particulado:** 150 mg/Nm³ em cada chaminé;
- 9.2.2-**amônia:** 32 mg/Nm³ em cada chaminé;
- 9.2.3-**fluoretos:**
- 9.2.3.1-100 g/t P₂O₅ (unidades de TSP e SSP);
- 9.2.3.2-100 g/t P₂O₅ (demais unidades);
- 9.3-os níveis de ruído gerados pela a atividade industrial deverão estar de acordo com a NBR 10.151, da ABNT, conforme determina a Resolução CONAMA N°01, de 08/03/1990;
- 9.4-a empresa deverá dar continuidade à realização de amostragens em chaminés **semestralmente**, *de todos os pontos de emissão* e realizar as respectivas análises químicas (NPK) dos produtos fabricados durante as amostragens, sendo que as análises não poderão ser realizadas pela própria empresa; a FEPAM deverá ser comunicada, com uma **antecedência mínima de 30 (trinta) dias** das datas da realização das amostragens;
- 9.5-a empresa deverá tomar as providências necessárias para minimizar as emissões atmosféricas, com previsão de redução ou paralisação das atividades, em casos de acidentes, paradas operacionais, reinício de operações, ou em situações especiais, como quando da ocorrência de fenômenos de inversão térmica ou outras situações que determinem à FEPAM tal exigência; deverá ainda, enviar a esta Fundação, relatório técnico referente ao cumprimento desta exigência, *sempre que estas situações ocorrerem*. Os referidos relatórios deverão ser entregues **no prazo máximo de 10 (dez) dias** após a ocorrência das mesmas;
- 9.6-a empresa deverá cumprir com o estabelecido na reunião realizada na sede da FEPAM, em 06/10/2006, ou seja, apresentar **até o dia 06/11/2006** um Plano Operacional Conjunto visando que a tomada de decisão, quanto à redução ou parada de produção, ocorra sem a necessidade de acionamento externo;
- 9.7-a empresa deverá realizar treinamento contínuo para todos os funcionários que trabalham na produção e na operação dos sistemas de controle ambiental, visando otimizar o desempenho das fábricas quanto ao controle de suas emissões;
- 9.8-a empresa deverá realizar monitoramento da qualidade do ar em estação localizada junto ao corpo de Bombeiros do Distrito Industrial de Rio Grande, por um **período mínimo de 1 (hum) ano**, conforme condições estabelecidas em reunião realizada em 22/02/2005 nesta Fundação, devendo, ao final deste período, apresentar relatório técnico conclusivo à FEPAM; deverá ainda, manter a FEPAM informada sobre o andamento das análises, através do envio de relatórios trimestrais;
- #### 10-quanto aos resíduos sólidos industriais:
- 10.1-a empresa deverá segregar, identificar, classificar e acondicionar os resíduos sólidos gerados para a armazenagem provisória na área da empresa, observando as NBR 12.235 e NBR 11.174, da ABNT, em conformidade com o tipo de resíduo, até posterior destinação final dos mesmos;
- 10.2-as lâmpadas fluorescentes usadas deverão ser armazenadas íntegras, embaladas individualmente, em papel ou papelão de origem e acondicionadas de forma segura para posterior transporte a empresas que realizem sua descontaminação;
- 10.3-a empresa deverá verificar o licenciamento ambiental das empresas para as quais seus resíduos são encaminhados e atentar para o seu cumprimento, pois, conforme o Artigo 9º do Decreto Estadual n.º 38.356 de 01/04/98, a responsabilidade pela destinação adequada dos mesmos é da fonte geradora, independente da contratação de serviços de terceiros;
- 10.4-a empresa deverá dar continuidade ao preenchimento da "**Planilha Trimestral de Resíduos Sólidos Industriais Gerados**" para a totalidade dos resíduos gerados (a Planilha encontra-se disponível na home-page da FEPAM: www.fepam.rs.gov.br, em Licenciamento Ambiental / Formulários / Planilhas de Acompanhamento /Planilhas por Setor Industrial) e encaminhá-la à FEPAM, devidamente assinada pelo responsável legal da

Fundação Estadual de Proteção Ambiental Henrique Luís Roessler/RS

Rua Carlos Chagas, 55 – Fone: (51) 3225-1588 – FAX: (51) 3212-4151 – CEP 90030-020 – Porto Alegre – RS – Brasil


3/3

empresa, com periodicidade **trimestral**, nos meses de **janeiro, abril, julho e outubro** durante o período de validade desta licença;

10.5-a empresa está autorizada a enviar lâmpadas fluorescentes e de vapor de sódio usadas para a empresa BRASIL RECYCLE LTDA, localizada no Estado de Santa Catarina, conforme condições e restrições da AUTORIZAÇÃO Nº 238/2002-DL, de 21/11/2002; salientamos que as *datas de envio dos referidos resíduos deverão ser informadas*, quando da apresentação das "Planilhas Trimestrais de Resíduos Sólidos Industriais Gerados" à FEPAM, em cumprimento ao item 06 da referida autorização;

10.6-o transporte dos resíduos Classe I, gerados na empresa, somente poderá ser realizado por veículos licenciados pela FEPAM para Fontes Móveis com potencial de poluição ambiental, devendo ser acompanhado do respectivo "Manifesto de Transportes de Resíduos – MTR", conforme Portaria FEPAM n.º 47-95/98, publicada no DOE em 29/12/98;

10.7-a empresa deverá manter à disposição da fiscalização da FEPAM, comprovante de venda de todos os resíduos sólidos que forem vendidos e comprovante de recebimento por terceiros de todos os resíduos que forem doados com as respectivas quantidades, **por um período mínimo de 02 (dois) anos**;

11-quanto aos riscos industriais:

11.1-a empresa deverá cumprir, em sua totalidade, com o **Plano de Contingências** apresentado a esta Fundação e datado de maio de 2002, bem como deverá mantê-lo atualizado junto à FEPAM durante o período de validade desta licença;

11.2-a empresa deverá manter *atualizado* e à disposição da Fiscalização da FEPAM, Alvará do Corpo de Bombeiros Municipal, de conformidade com as Normas em vigor, relativo ao sistema de combate a incêndio.

Com vistas à renovação da LICENÇA DE OPERAÇÃO, o empreendedor deverá apresentar:

1-requerimento solicitando a renovação da Licença de Operação;

2-cópia desta licença;

3-o formulário ILAI - Informações para Licenciamento de Atividades Industriais devidamente preenchido e atualizado em todos os seus itens (o formulário encontra-se disponível na home-page da FEPAM: www.fepam.rs.gov.br, em *Licenciamento Ambiental/ Formulários/ Licenciamento/ Indústrias/Atividades Industriais-ILAI*);

4-comprovante de pagamento dos custos dos Serviços de Licenciamento Ambiental, conforme Resolução N.º 003/2003 – Conselho de Administração da FEPAM de 29/07/2003, publicada no DOE em 31/07/2003.

Havendo alteração nos atos constitutivos, cópia da mesma deverá ser apresentada, imediatamente, à FEPAM, sob pena do empreendedor acima identificado continuar com a responsabilidade sobre a atividade/empreendimento licenciado por este documento.

Este documento licenciatório perderá sua validade caso os dados fornecidos pelo empreendedor não correspondam à realidade ou algum prazo estabelecido nas condições acima seja descumprido.

Esta Licença não dispensa nem substitui quaisquer alvarás ou certidões de qualquer natureza exigidos pela legislação Federal, Estadual ou Municipal, nem exclui as demais licenças ambientais.

Esta licença deverá estar disponível no local da atividade licenciada para efeito de fiscalização.

Data de emissão: Porto Alegre, 09 de novembro de 2006
 Este documento licenciatório é válido para as condições acima até: 01 de setembro de 2009

Este documento licenciatório foi certificado por assinatura digital, processo eletrônico baseado em sistema criptográfico assíncrono, assinado eletronicamente por chave privada, garantida a integridade de seu conteúdo e está à disposição no site www.fepam.rs.gov.br.

Identificador do Documento: 236691

Fundação Estadual de Proteção Ambiental Henrique Luís Roessler/RS
 Rua Carlos Chagas, 55 – Fone: (51) 3225-1588 – FAX: (51) 3212-4151 – CEP 90030-020 – Porto Alegre – RS - Brasil