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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-third Meeting
Geneva, 5-9 July 2004

PROJECT PROPOSALS: ARGENTINA

This document consists of the comments and recommendations of the Fund Secretariat on the following project proposals:

Fumigant

- Methyl bromide phase-out in tobacco and non-protected vegetable seedbeds (fourth tranche) UNDP

Production

- CFC production closure plan: 2003 and 2004 work programmes World Bank

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**PROJECT EVALUATION SHEET
ARGENTINA**

SECTOR: Fumigant ODS use in sector (2003): 245.7 ODP tonnes

Sub-sector cost-effectiveness thresholds: n/a

Project Title:

(a) Methyl bromide phase-out in tobacco and non-protected vegetable seedbeds (fourth tranche)

Project Data	Fumigant
Enterprise consumption (ODP tonnes)	
Project impact (ODP tonnes)	16.00
Project duration (months)	12
Initial amount requested (US \$)	467,000
Final project cost (US \$):	
Incremental capital cost (a)	
Contingency cost (b)	
Incremental operating cost (c)	
Total project cost (a+b+c)	467,000
Local ownership (%)	
Export component (%)	
Amount requested (US \$)	467,000
Cost effectiveness (US \$/kg.)	29.19
Counterpart funding confirmed?	
National coordinating agency	Instituto Nacional de Tecnología Agropecuaria and OPROZ
Implementing agency	UNDP

Secretariat's Recommendations	
Amount recommended (US \$)	467,000
Project impact (ODP tonnes)	16.00
Cost effectiveness (US \$/kg)	29.19
Implementing agency support cost (US \$)	35,025
Total cost to Multilateral Fund (US \$)	502,025

PROJECT DESCRIPTION

Background

1. The Executive Committee has approved the following two investment projects for the phase-out of methyl bromide (MB) in Argentina, covered under one agreement:
 - (a) Phase-out of 331 ODP tonnes of MB used in strawberries, flowers and protected vegetables, under UNIDO's implementation. The project was approved at the 30th Meeting of the Executive Committee at a total cost of US \$3,183,390 and disbursed in full to the Government of Argentina; and
 - (b) Phase-out of 178.8 ODP tonnes of MB used in tobacco and non-protected vegetable seedbeds, under UNDP's implementation. The project was approved at the 36th Meeting of the Executive Committee at a total cost agreed in principle of US \$3,588,000. So far, the Executive Committee has approved three tranches of the project and has disbursed US \$2,187,000 to the Government of Argentina.
2. The Government of Argentina has submitted for the consideration of the Executive Committee at its 43rd Meeting, the 2003 progress report on the implementation of the project for the phase-out of all remaining soil uses of MB in tobacco seedbeds and open-field (non-protected) seedbeds of vegetables (tomatoes, peppers, eggplants and others) and the 2004 work programme, with a request for funding of the fourth tranche at a cost of US \$467,000 plus US \$35,025 in agency support costs.

Progress report

3. In 2003, the Instituto Nacional de Tecnologia Agropecuaria (INTA) and the Ozone Unit, with the assistance of UNDP, implemented the third tranche of project to phase-out MB in the tobacco and field vegetable seedbeds in Argentina. Following the deep economic crisis faced by Argentina in 2002, tobacco sector expanded its planted area in 2003; however, overall consumption of MB nevertheless dropped.
4. Several activities undertaken during 2003 allowed for the phase-out of 29.05 ODP tonnes, i.e., 8 ODP tonnes more than that required in the project's agreed conditions. Action was taken to ensure that MB reductions achieved through the project's implementation during 2002 and 2003 were sustainable permanent reductions that can be subtracted from Argentina's national aggregate consumption of MB.
5. The main activities implemented between April 2003 and March 2004, included: monitoring MB imports and uses; communication with stakeholders resulting in the signature of agreements with the Government with a commitment to completely phase-out MB in this sector by 2007; training of 1,810 farmers and 65 technicians on the use of MB alternatives; technical assistance to 18,000 growers; bidding and procurement of equipment for the 2003-2004 production season; organization of the second national forum for the tobacco sector to discuss national policy development; and development and implementation of a media campaign for

awareness-raising. Also, counterpart contributions were received for procurement and distribution of materials and equipment.

Proposed activities

6. With the funds for the fourth tranche, it is proposed to train at least an additional 20 agricultural trainers and 5,000 growers, purchase inputs and materials for the 2004-2005 season to achieve the phase-out of an additional 16 ODP tonnes of MB; continue coordination with the Secretariats of Environment and Agriculture to design regulations for controlling imports of MB for the coming years; and continue with awareness-raising activities and development of training materials and publications.

7. Work would focus on provinces where reductions during the first two years of implementation were less significant, and in areas in the open-field vegetables sector where MB consumption is concentrated.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

8. The Secretariat noted the comprehensive nature of the report submitted by UNDP on behalf of the Government of Argentina.

9. According to the progress report, in 2003 the total MB consumption in Argentina was 245.7 ODP tonnes. This consumption was 10.7 ODP tonnes below the maximum allowable MB consumption agreed by the Government of Argentina (i.e., 256.4 ODP tonnes). In the tobacco and protected vegetables sectors, the amount of MB phased-out in 2003 was 29 ODP tonnes (9 ODP tonnes more than the amount that was agreed by the Government), in spite of a 19 per cent growth in the area of tobacco production. However, the MB consumption in the strawberries, flowers and vegetable sectors increased by almost 50 ODP tonnes above the level agreed by the Government of Argentina for those sectors.

10. Although the UNIDO project addressing strawberries, flowers and protected vegetables is not being reported on at the current meeting, in view of the potential impact on the overall MB Agreement, further explanation was sought on the reasons for the increased consumption of MB in these sectors. In this regard, the Secretariat was informed that in 2003, efforts on the part of the MB lobby and the issue of critical use exemptions for non-Article 5 countries challenged the implementation of the MB phase-out projects in Argentina. The Government of Argentina indicated that additional details concerning the increase in MB consumption in these sectors would be provided at the time the progress report on the implementation of the UNIDO project is submitted to the Executive Committee.

11. The Secretariat noted that in accordance with the Agreement between the Government of Argentina and the Executive Committee, the Government has the flexibility to organize and implement the two projects covered by the Agreement in order to meet the MB consumption limits specified in the Agreement (i.e., 256.4 ODP tonnes). In this regard, the project for MB

phase-out in tobacco and non-protected vegetables is achieving phase-out in excess of the agreed conditions for the project and the total consumption level in the overall Agreement is being met.

RECOMMENDATION

12. The Secretariat recommends blanket approval of the project proposal with associated support costs at the funding level shown in the table below:

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Methyl bromide phase-out in tobacco and non-protected vegetable seedbeds (fourth tranche)	467,000	35,025	UNDP

AUDIT ON THE PRODUCTION OF CFCS AT FIASA PLANT IN ARGENTINA

13. The Executive Committee at its 38th Meeting in 2002 approved in principle a total of US \$8.3 million for the implementation of the Agreement for the Production Sector in Argentina, and disbursed the first tranche of US \$0.5 million to the project. The annual CFC production limits and the funding tranches are summed up in the following table.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Max, allowable production (metric tonnes)	3,020	3,020	3,020	1,647	1,647	686	686	686	0*	
MLF funding \$ million	0.5	3.5	0	0.3	2	0	1	1		8.3
Agency fees \$ million	0.02	0.11	0.09	0.12	0.10	0.12	0.12	0.047		0.727

(*) save for any CFC production that may be agreed by the Parties to meet essential uses for Argentina

14. In accordance with the terms of the Agreement which requests independent verification of the achievement of the annual production targets, the World Bank is submitting the verification of CFC production by FIASA in 2002 and 2003.

15. The World Bank is requesting the disbursement of the support cost of US \$110,000 for 2003 and US \$90,000 for 2004. It is presumed that the 2003 tranche of US \$3.5 million is being requested, although there is no specific mention of this in the submission. The 2004 annual programme is not being submitted.

Verification of the 2002 and 2003 CFC production in Fiasa

16. The verification was carried out in February 2004 by a consultant, Antonio Cristoero. The report includes an executive summary, the report proper and the data presented in the format prescribed in the guidelines for verifying ODS production phase out, which was approved by the Executive Committee in 2000. The report first briefly describes the history of FIASA, which is a swing plant capable of producing CFCs and HCFC-22. However due to the low productivity and high operational cost, the plant stopped HCFC production after 2000. The verification consists of a plant inspection and a review of records.

17. The plant inspection covered visits to the raw material and final product storage areas and the area for production. The site inspection examined the storage capacity and the sizes of packaging used by the plant. The consultant looked at the reactors and distillation towers at the production area and concluded that the owner had adequate investment to ensure safety till the CFC production ceased.

18. The report first provided the review of records of raw material purchases since all the CTC and HF needed for CFC production were imported from Spain and Brazil. The invoices were compared to consumption, monthly closing stocks, and local sales. The invoices of the company were also checked against official import records. The consultant then examined the sales record of CFC and reported that 50 percent of the production had been exported, mostly to

Brazil, and also to other countries in South America like Chile, Uruguay and Paraguay. There had been some export to southeast Asia lately. In 2003 domestic sales went up due to contraction of other markets and peso devaluation. The verification examined a sample of 3 months of import and export sales records.

19. FIASA produced CFC-11 and CFC-12 in the same reactor and achieved the optimum performance with a ratio of 60/40 for CFC-12/CFC-11. However in 2002 and 2003, the plant had increased the production of CFC-12 to 96 percent, with 4 percent for CFC-11. For 2002, the production mix was 2,887 MT of CFC-12 and 128 MT of CFC-11. For 2003, the production mix was 2,885 MT of CFC-12 and 133 MT of CFC-11. The plant had to import 510 MT CFC-11 from Mexico in 2003 to meet its commitment to its client. Since FIASA had destroyed the daily logs for raw material consumption and CFC production after the compilation of the monthly records, the consultant relied on the monthly records but requested that the plant maintain daily logs for future verification.

20. The verification concluded that FIASA produced 3,015 MT in 2002 and 3,018 MT in 2003, which were both below the targets of 3,020 MT as set in the Agreement.

21. The data collected by the verification team are presented using the format in the guidelines for verifying ODS production phase out which includes month-by-month production of CFC-11 and CFC-12, number of days of production, consumption ratios of feedstock to CFC and HCFC-22 production, inventory change of feedstock of CTC and HF as a way of validating the CFC production.

The 2004 work programme

22. Not submitted.

Comments of the Secretariat

23. The Secretariat provided to the World Bank comments on the verification report and requested the submission of the 2004 annual work programme. However the Secretariat did not receive a reply to its comments from the Bank as at the time of writing. A summary of the comments is presented below.

Qualification of the verification team

24. “The guidelines and standard format for verification of ODS production phase-out” (the Guidelines), approved by the Executive Committee stipulate that the Consultants conducting the verification should have:

- one team member familiar with accounting practice and financial auditing (typically a certified public accountant “CPA”) and
- one team member who is a technical expert with experience relevant to the ODS production to be audited.

25. The Report indicated that only one consultant conducted the audit and did not include the academic background and experience of the consultant. Since this is the first time that this consultant had carried out the audit, the World Bank should provide a CV that describes the academic background and industrial and commercial experience of the consultant.

CFC-11 and CFC-12 Production

26. The Report indicates that FIASA produced 128 and 133 metric tonnes (MT) of CFC-11 in 2002 and 2003 respectively; and 2,887 and 2,885 MT of CFC-12 in 2002 and 2003 respectively. A comparison of FIASA’s CFC-11 and CFC-12 historic production ratios is presented in the table below.

FIASA’s CFC-11 and CFC-12 Production Ratios

Year	CFC 11	CFC 12
	%	%
2003	4.4	95.6
2002	4.2	95.8
2000	21.8	78.2
1999	26.6	73.4
1998	34.4	65.6
1997	42.2	57.8

27. FIASA reduced CFC-11 production between 1997 to 2000 from about 42% to 22% of the combined CFC-11/CFC-12 stream in response to market conditions; however, the ratios of CFC-11 to CFC-12 remained above 20%. The Report indicates that in 2002 and 2003 FIASA dropped CFC production to 4.2% and 4.4% respectively; this is a drastic drop. The Consultant needs to explain the measures taken by FIASA to accomplish that drop in CFC-11 production.

28. To increase CFC-12 content of the production stream, the operator typically increases the ratio of hydrogen fluoride (HF) to carbon tetrachloride (CTC) and adjusts the operating conditions accordingly. However, as the HF to CTC ratio is increased, the amount of CFC-13 (chlorotrifluoromethane) produced increases. Therefore, the Consultant needs to report the amount of CFC-13 produced and explain how FIASA disposed of the CFC-13 produced, which also an ozone-depleting substance (Annex B of the Montreal Protocol).

CTC Stocks

29. The Consultant presented the monthly CTC opening stocks, procured amounts, and closing stocks in Annex 1 for 2002 and 2003. However, he showed CTC opening stocks, procured amounts, and closing stocks specifically for CFC-11 production, and a different set of CTC opening stocks, procured amounts, and closing stocks specifically for CFC-12 production. Since the CFC-11 and CFC-12 are co-produced in the same reactor, the Consultant should explain how he can track the CTC stocks for CFC-11 as separate from CTC stocks for CFC-12.

The 2004 annual work programme

30. The World Bank did not consider it necessary to submit a 2004 annual work programme and stated that what would be needed for 2004 was just to maintain the CFC production target.

31. However the terms of the Agreement require the submission of an annual work programme for the continued funding of the phase out plan. The annual work programme also provides the planned activities to be implemented by the government in respect of the supporting policies as well as technical assistance activities. These activities will be very important for the year 2004 since this is the last year before Argentina has to reduce its CFC production to 50% of its baseline level; it is also important to know what controls the Government will be introducing on the control of the import and export of CFCs.

Recommendations

15. The Secretariat is not in a position to make a recommendation pending the receipt of feedback from the World Bank.

**AUDIT ON THE PRODUCTION OF CFC's AT FIASA
(FRIOINDUSTRIAS ARGENTINAS) PLANT IN VILLA
MERCEDES, SAN LUIS, Argentina**

**Prepared for:
WORLD BANK**

**Prepared by:
Antonio Cristodero**

Buenos Aires, February 25, 2004

1 SUMMARY

The objective of the audit was to verify FIASA's CFC's production closure starting with the years 2002 and 2003, according to the schedule described below, included on the CFC production closure agreement called "Strategy for gradual phase-out of CFC-11 & CFC-12 production in Argentina" signed by the government of Argentina and the Montreal Protocol at the 38th meeting of the Executive Committee for the implementation of the Montreal Protocol.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Max, allowable production (Tons of CFC)	3,020	3,020	3,020	1,647	1,647	686	686	686	0*
MLF funding \$Mil	0,5	3,5	0	0,3	2	0	1	1	
Agency fees, \$ Mil	,02	,11	0.09	,09	.10	.09	.12	.017	

During the visit to Villa Mercedes plant at FIASA, the following activities were done:

- Inspection of the whole plant for taking notice of its general status in reference to maintenance, specially in the Reactor/Distillation sector.
- Inspection of raw materials and final product storage areas.
- Inspection of the filling plant, where the final product is packed into half ton-tanks, cylinders and disposable cans (dac's).
- Review of imports, consumption and sales of raw materials (CTC and HF).
- Review of annual raw material stocks at the beginning and at the end of each year.
- Review of monthly production records.

The audit process was based on the "Guidelines and standard format for verification of the ODS production Phase-out", provided by the Executive Committee for the Implementation of the Montreal Protocol.

The controls, review and comparisons that were done during the audit, allow to affirm that FIASA's CFC's annual production in 2002 and 2003 were 3,015 MT and 3,018 respectively. Each of both quantities did not exceed the quota of 3,020 MT set as a maximum production level by the Montreal Protocol.

2 INTRODUCTION

The FRIO INDUSTRIAS ARGENTINA plant was built by Liquid Carbonic Argentina and other two minority partners during 1986, and begun to operate at commercial level during 1988.

In 1995 Praxair bought Liquid Carbonic, including FIASA plant.

Two years later, in 1997, Praxair sold FIASA's plant to the present owner, Pamcor from Rio Tercero, Córdoba, Argentina.

Although the plant is able to produce HCFC-22, it is no competitive due to low productivity and high operation costs. The last HCFC-22 production was only 98 MT in year 2000.

The CFC's annual production was increased from 1,500 MT at the beginning of the 90's, up to 2,600/3,000 MT between 1995 and 2001.

The current payroll at FIASA plant is 27 workers: 12 in the production area, 6 in the filling sector, 3 in maintenance, 1 in the laboratory, 2 supervisors and 1 production manager.

At the plant 5 different areas can be observed: Administration/laboratory section, raw materials storage area, final product storage sector, filling area and production sector (reactor/distillation column).

3 PLANT INSPECTION

3.1 Raw Materials Storage Area

The raw materials storage capacity inside the plant is 2,400 MT of CTC and 140 MT of HF. These two products are imported principally from Spain and Brazil.

The capacity of HF storage is sufficient for one month CFC's production. In the case of having more stock, they have to rent external storage sites. There have been some cases where they have had to rent storage sites for CTC.

Take notice that the raw material stocks mentioned in the Annex include raw materials located at Villa Mercedes and the amount stored outside the plant.

3.2 Final Product Storage Area

At the plant there are 5 stationary tanks with a total capacity of 480 MT and 3 trucks with a total capacity of 120 MT.

For CFC-12, they have 450 half ton-tanks and 3,000 cylinders of 69 kg.

Additionally, they have an important stock of around 30,000 disposable cans (dac's) of 13.6 kg.

Based on this information, the total CFC-12 storage capacity is 1,430 MT, 600 MT in bulk and 830 MT in commercial packaging.

The CFC-11 is usually sold in disposable drums of 70 kg and 290 kg. Also, small quantities are sold in half ton-tanks and dac's of 13.6 kg.

3.3 Production Area (Reactor/Distillation)

The maintenance of this sector is acceptable. It has been designed by the plant owners that the investments assigned to this area are to guarantee the normal safety conditions and maintain the production rate to reach the quota of 3,020 MT for 2003.

The reduction on the production quota of 45% for 2005/6 and 73% for 2007/8/9 confirm these trends.

Under normal operation conditions, the plant works with two reactors. The secondary reactor improves the production efficiency and the HF consumption. In 2003 the plant worked 269 days versus 201 days worked in 2002. Moreover, the HF specific consumption in 2003 was 20% higher than the 2002 consumption.

4 REVISION OF PURCHASES, SALES AND PRODUCTION RECORDS

4.1 Raw Materials Purchases

As it was mentioned above, FIASA imports the CTC and the HF from Spain and Brazil. The CTC purchase is generally in big volumes.

For the year 2002, because of the high 2001 remnant stock, they imported 1,408 MT of CTC in one operation. During 2003, FIASA bought 6,647 MT in 11 import operations.

With respect to HF, each purchase was between 30/50 MT. During 2002 they imported 620 MT, and in the year 2003 they imported 1,578 MT.

During the visit to the plant, all the purchases invoices were reviewed and, based on the consumptions and small local resale, all this information was compared with the monthly closing stocks. During some months, closing stocks are negatives because of were resale and not imports.

Information on CTC and HF imports informed by FIASA was compared with official records of imports. No differences were founded between both figures.

In order to conduct a verification of the above statement, FIASA imports were calculated from the imports official records, and no differences were founded between both figures.

4.2 CFC's Sales

FIASA exports almost 50% of its CFC's production. Currently, the most important market is Brazil, and in less quantities others countries of South America (Chile, Uruguay and Paraguay). Lately FIASA has being exporting to SE Asia .

During 2003 the percentage of local sales grew, because of the peso devaluation and other market contraction. With these new figures, FIASA improved their operation costs and became more competitive. During the last months big CFC's distributors get their CFC from FIASA instead of importing it.

The exports figures are generally in big volumes, so there are a few export monthly operations (between 5 and 15).

On the domestic market their sales are from only 1 disposable can of 13.6 kg to 20 MT in bulk . Based on this situation, there are about 100-200 monthly invoices, depending on the season of the year.

Three months of local sales and three months of exports for each year were revised during the visit. Monthly sales data was compared with figures informed by FIASA and no differences were founded.

4.3 CFC's Production

At FIASA's the production of CFC is continuous and production campaigns are long. Daily or monthly production can be regulated based on technical conditions, but other factors have influence this implementation, such as raw materials stocks policies, final product stock policy, sales forecast, financial situation, etc.

CFC-12 and the CFC-11 are produced simultaneously by the reaction between the CTC and HF. The plant performance is strongly related to the desired proportion of CFC-12/CFC-11 , and its optimum is around 60/40. During 2002 and 2003 the plant was operated to produce the higher CFC-12 possible proportion (96% against 4% of CFC-11). In 2003 FIASA imported 510 MT of CFC-11 from Mexico. This situation was done due to CFC-11 low production and the need of supplying the substance to their customers. However, in 2003 CFC-11 final stock was 655 MT.

At FIASA's plant, the CTC/HF consumption, CFC's production and other wide general information of several processes is daily recorded. This data is destroyed after being summarized in a monthly record. As a recommendation from the auditor, FIASA was asked for further inspections to keep this information until the audited year is evaluated by the independent auditor.

Doing the revision of monthly records, there were not any irregularities detected. The revised figures coincide with those informed by FIASA, and there is coherence/ balance between the produced figures and the raw materials consumptions.

5 CONCLUSIONS

During the site visit and plant inspection it was verified that the maintenance investment are only to guarantee the normal safety conditions and to maintain production rate to reach the quota of 3,020 MT for 2003 and 2004.

There is no evidence of works for increasing the production capacity.

The revision of CTC/HF imports, CFC's local sales, exports and production records didn't show differences against FIASA's reported figures.

The comparison between the CTC/HF imports official records, the CFC's exports and the local market information about FIASA participation, allow us to confirm that during 2002 the plant reached a production of 3,015 MT, and during 2003 a production of 3,018 MT was reached. This confirms that FIASA did not exceed its annual production figures agreed on the 38^o meeting of the Executive Committee for the implementation of the Montreal Protocol.

Annex I

**Questionnaire for
ODS Production Phase Out Verification (Including Gradual Closure)****A. Plant identification**

Name of Enterprise : FRIO INDUSTRIAS ARGENTINAS SA
Plant Ref. Number* : 1
Sector Plan #* :
SRI # * :
Address of the Plant : Ruta 7 Km 703 y Ruta Provincial 2 – Villa Mercedes –
San Luis – Argentina
Contact person(s) and Functional Title : Cr. Raúl Gobbato – Gerente
Telephone Number : 03571 – 424111 0351- 156145137
Fax Number : 03571 – 422351
E-mail Address : rgobbato@sinectis.com.ar

B. Verification

Team Composition :
Leader :
Name : Antonio Cristodero
Functional Title : Auditor
Member(s) :
Name :
Functional Title :
Date of Plant Visit :
Duration of Visit :

*As applicable, e.g. SRI# for China's CFC plants.

C. Plant History

Date of construction:					
ODS Products	No. of Lines	Capacity in Baseline Year*TM Projection	TM Production**		
			Baseline Year*	Year 1 2002	Year
CFC-11	1	3636		128	
CFC-12	1	5022		2887	
CFC-13					
CFC-113					
CFC-114/115					
Raw Materials Production***					
HF Consumption				1094	
CTC Consumption				4148	

*The year from which data is used for approving the ODS production phase out project.

**Till the year prior to the verification.

***This applies to plants where production of either HF or CTC or both is integrated.

D. Plant Activity in the Year Verified

I. Plant for Complete Closure

No. of CFC-11/12 lines closed :

Date of CFC production ceased :

Date of dismantling completed :

Verification of destruction of key components by : [Name of certifying body]

Reactor tank(s) dismantled and destroyed : Yes/No

Control and monitoring equipment dismantled and destroyed : Yes/No

Pipes dismantled and destroyed : Yes/No

Utilities dismantled and destroyed : Yes/No

Evidence of destruction (photos or videos) :

Chance of resuming production : Yes/No

Assessment by the verification team to be included in the verification report

II. Plant for gradual closure

Annual CFC-11/12 quotas, production, sales and stocks since the baseline year*

(Please use one table for each CFC product)

CFC Products (CFC-11) TM	Baseline Year*	Year 1 2002	Year
Quota (CFC 11 + CFC 12)		3020	
Opening Stock at beginning of year		272	
Procured		0	
Production		128	
Loss		18	
Sales		118	
Closing stock at end of year		264	

*The year from which data is used to approve the ODS production phase out project.

**Till the year of the verification

CFC Products (CFC-12) TM	Baseline Year*	Year 1 2002	Year
Quota (CFC 11 + CFC 12)		3020	
Opening Stock at beginning of year		1095	
Procured		0	
Production		2887	
Loss		7	
Sales		2199	
Closing stock at end of year		1776	

*The year from which data is used to approve the ODS production phase out project.

*Till the year of the verification

Annual HF/CFC TM and CTC/CFC ratios

Ratio	Baseline Year	Year 1 2002	Year 2	Year 3	Year 4	Year 5	Year 6*
CFC-11							
HF/CFC-11 ratio		22,23/128 0.1737					
CTC/CFC-11 Ratio		161/128 1.2578					
CFC-12							
HF/CFC-12 Ratio		1071,77/2887 0.3712					
CTC/CFC-12 Ratio		3987/2887 1.3810					

* Till the year of the verification

Operational days per year

Type of Production	Baseline Year Projection	Year 1 2002	Year 2	Year 3	Year 4	Year 5	Year 6*
CFC-11 / 12	345	201					

*Till the year of the verification.

Monthly CFC-11/12 production and raw material consumption*

Month of Year 2002	CFC-11	No. of operating days R11/12	CFC-11 Production	CTC/CFC-11 Ratio	CTC Opening Stock	CTC consumption	CTC Procured/or added to stock/or sales	CTC Closing Stock
Jan		18	9	1.2222	161	11	0	150
Feb		20	8	1.2500	150	10	0	140
Mar		8	4	1.2500	140	5	0	135
Apr		9	7	1.2857	135	9	0	126
May		13	5	1.2000	126	6	0	120
Jun		30	40	1.2500	120	50	0	70
Jul		13	12	1.2500	70	15	0	55
Aug		14	8	1.2500	55	10	0	45
Sept		16	6	1.3333	45	8	0	37
Oct		19	14	1.2857	37	18	0	19
Nov		21	6	1.3333	19	8	0	11
Dec		20	9	1.2222	11	11	0	0

CFC Production and CTC consumption: TM

CFC Production and HF consumption: TM

Month of Year 2002	CFC-11	No. of operating days R11/12	CFC-11 Production	HF/CFC-11 Ratio	HF Opening Stock	HF Consumption	HF Procured/or added to stock or sales	HF Closing Stock
Jan		18	9	0.1722	23	1.55	0	21.45
Feb		20	8	0.1725	21.45	1.38	0	20.07
Mar		8	4	0.1750	20.07	0.70	0	19.37
Apr		9	7	0.1714	19.37	1.20	0	18.17
May		13	5	0.1760	18.17	0.88	0	17.29
Jun		30	40	0.1750	17.29	7	0	10.29
Jul		13	12	0.1733	10.29	2.08	0	8.21
Aug		14	8	0.1725	8.21	1.38	0	6.83
Sept		16	6	0.1750	6.83	1.05	0	5.78
Oct		19	14	0.1714	5.78	2.4	0	3.38
Nov		21	6	0.1750	3.38	1.05	0	2.33
Dec		20	9	0.1733	2.33	1.56	0	0.77

* Similar tables should be provided for CFC-12

CFC Production and CTC consumption: TM

Month of Year 2002	CFC-12	No. of operating days R11/12	CFC-12 Production	CTC/CFC-12 Ratio	CTC Opening Stock	CTC consumption	CTC Procured/ or added to stock or sales	CTC Closing Stock
Jan		18	174	1.4828	2694	258	0	2436
Feb		20	153	1.4444	2436	221	0	2215
Mar		8	110	1.3545	2215	149	0	2066
Apr		9	114	1.3246	2066	151	0	1915
May		13	96	1.2917	1915	124	0	1791
Jun		30	835	1.2802	1791	1069	-1	721
Jul		13	221	1.2851	721	284	0	437
Aug		14	150	1.2933	437	194	0	243
Sept		16	201	1.4428	243	290	1408	1361
Oct		19	248	1.4556	1361	361	0	1000
Nov		21	318	1.5440	1000	491	-49	460
Dec		20	267	1.4794	460	395	49	114

CFC Production and HF consumption: TM

Month of Year 2002	CFC-12	No. of operating days R11/12	CFC-12 Production	HF/CFC-12 Ratio	HF Opening Stock	HF consumption	HF Procured/ or added to stock or sales	HF Closing Stock
Jan		18	174	0.3729	387.00	64.88	0	322.12
Feb		20	153	0.3693	322.12	56.50	53.5	319.12
Mar		8	110	0.3684	319.12	40.52	-2	276.60
Apr		9	114	0.3740	276.60	42.64	108	341.96
May		13	96	0.3725	341.96	35.76	0	306.20
Jun		30	835	0.3711	306.20	309.89	72.5	68.81
Jul		13	221	0.3737	68.81	82.59	129	115.22
Aug		14	150	0.3708	115.22	55.62	-2	57.60
Sept		16	201	0.3691	57.60	74.19	18	1.41
Oct		19	248	0.3701	1.41	91.78	120	29.63
Nov		21	318	0.3729	29.63	118.58	157.62	68.67
Dec		20	267	0.3701	68.67	98.82	69.38	39.23

Annex I

**Questionnaire for
ODS Production Phase Out Verification for 2003 (Including Gradual Closure)****A. Plant identification**

Name of Enterprise : FRIO INDUSTRIAS ARGENTINAS SA
Plant Ref. Number* : 1
Sector Plan #* :
SRI # * :
Address of the Plant : Ruta 7 Km 703 y Ruta Provincial 2 – Villa Mercedes –
San Luis – Argentina
Contact person(s) and Functional Title : Cr. Raúl Gobbato – Gerente
Telephone Number : 03571 – 424111 0351- 156145137
Fax Number : 03571 – 422351
E-mail Address : rgobbato@sinectis.com.ar

B. Verification

Team Composition :
Leader :
Name : Antonio Cristodero
Functional Title : Auditor
Member(s) :
Name :
Functional Title :
Date of Plant Visit :
Duration of Visit :

*As applicable, e.g. SRI# for China's CFC plants.

C. Plant History

Date of construction:					
ODS Products	No. of Lines	Capacity in Baseline Year*TM Projection	TM Production**		
			Baseline Year*	Year 1	Year 2 2003
CFC-11	1	3636		128	133
CFC-12	1	5022		2887	2885
CFC-13					
CFC-113					
CFC-114/115					
Raw Materials Production***					
HF Consumption				1094	1311
CTC Consumption				4148	4531

*The year from which data is used for approving the ODS production phase out project.

**Till the year prior to the verification.

***This applies to plants where production of either HF or CTC or both is integrated.

D. Plant Activity in the Year Verified**I. Plant for Complete Closure**

No. of CFC-11/12 lines closed :

Date of CFC production ceased :

Date of dismantling completed :

Verification of destruction of key components by : [Name of certifying body]

Reactor tank(s) dismantled and destroyed : Yes/No

Control and monitoring equipment dismantled and destroyed : Yes/No

Pipes dismantled and destroyed : Yes/No

Utilities dismantled and destroyed : Yes/No
 Evidence of destruction (photos or videos) :

Chance of resuming production : Yes/No

Assessment by the verification team to be included in the verification report

II. Plant for gradual closure

Annual CFC-11/12 quotas, production, sales and stocks since the baseline year*

(Please use one table for each CFC product)

CFC Products (CFC-11) TM	Baseline Year*	Year 1	Year 2** 2003
Quota (CFC 11 + CFC 12)		3020	3020
Opening Stock at beginning of year		272	264
Procured		0	510
Production		128	133
Loss		18	0
Sales		118	252
Closing stock at end of year		264	655

*The year from which data is used to approve the ODS production phase out project.

**Till the year of the verification

CFC Products (CFC-12) TM	Baseline Year*	Year 1	Year 2** 2003
Quota (CFC 11 + CFC 12)		3020	3020
Opening Stock at beginning of year		1095	1776
Procured		0	33
Production		2887	2885
Loss		7	0
Sales		2199	3299
Closing stock at end of year		1776	1395

*The year from which data is used to approve the ODS production phase out project.

**Till the year of the verification

Annual HF/CFC TM and CTC/CFC ratios

Ratio	Baseline Year	Year 1	Year 2 2003	Year 3	Year 4	Year 5	Year 6*
CFC-11							
HF/CFC-11 ratio		22.23/128 0.1737	26.4/133 0.1985				
CTC/CFC-11 Ratio		161/128 1.2578	174/133 1.3083				
CFC-12							
HF/CFC-12 Ratio		1071.77/2887 0.3712	1284,6/2885 0.4453				
CTC/CFC-12 Ratio		3987/2887 1.3810	4357/2885 1.5102				

* Till the year of the verification

Operational days per year

Type of Production	Baseline Year Projection	Year 1	Year 2 2003	Year 3	Year 4	Year 5	Year 6*
CFC-11 / 12	345	201	269				

*Till the year of the verification.

Monthly CFC-11/12 production and raw material consumption*

CFC Production and CTC consumption: TM

Month of Year 2003	CFC-11	No. of operating days R11/12	CFC-11 Production	CTC/CFC-11 Ratio	CTC Opening Stock	CTC Consumption	CTC Procured/ or added to stock or sales	CTC Closing Stock
Jan		26	9	1.2222	0	11	208	197
Feb		25	26	1.2692	197	33	0	164
Mar		29	20	1.3000	164	26	0	138
Apr		17	20	1.3500	138	27	0	111
May		26	12	1.3333	111	16	0	95
Jun		25	11	1.3636	95	15	0	80
Jul		8	4	1.3000	80	5.2	0	74.8
Aug		15	10	1.3000	74.8	13	0	61.8
Sept		27	9	1.3333	61.8	12	0	49.8
Oct		23	4	1.3000	49.8	5.2	0	44.6
Nov		27	4	1.3250	44.6	5.3	0	39.3
Dec		21	4	1.3250	39.3	5.3	0	34

CFC Production and HF consumption: TM

Month of Year 2003	CFC-11	No. of operating days R11/12	CFC-11 Production	HF/CFC-11 Ratio	HF Opening Stock	HF Consumption	HF Procured/ or added to stock or sales	HF Closing Stock
Jan		26	9	0.1889	0	1,7	38	36,3
Feb		25	26	0.1808	36,3	4,7	0	31,6
Mar		29	20	0.2000	31,6	4	0	27,6
Apr		17	20	0.2000	27,6	4	0	23,6
May		26	12	0.2083	23,6	2.5	0	21,1
Jun		25	11	0.2091	21,1	2.3	0	18,8
Jul		8	4	0.2000	18,8	0.8	0	18
Aug		15	10	0.2000	18	2	0	16
Sept		27	9	0.2222	16	2	0	14
Oct		23	4	0.2000	14	0.8	0	13,2
Nov		27	4	0.2000	13,2	0.8	0	12,4
Dec		21	4	0.2000	12,4	0.8	0	11,6

* Similar tables should be provided for CFC-12

CFC Production and CTC consumption: TM

Month of Year 2003	CFC-12	No. of operating days R11/12	CFC-12 Production	CTC/CFC-12 Ratio	CTC Opening Stock	CTC Consumption	CTC Procured/ or added to stock or sales	CTC Closing Stock
Jan		26	283	1.4523	114	411	1265	968
Feb		25	251	1.4821	968	372	0	596
Mar		29	229	1.5066	596	345	296	547
Apr		17	202	1.5198	547	307	593	833
May		26	247	1.5223	833	376	2299	2756
Jun		25	197	1.5228	2756	300	400	2856
Jul		8	104	1.5192	2856	158	0	2698
Aug		15	251	1.5418	2698	387	-26	2285
Sept		27	299	1.5050	2285	450	26	1861
Oct		23	262	1.5229	1861	399	500	1962
Nov		27	285	1.5228	1962	434	1018	2546
Dec		21	275	1.5200	2546	418	-4	2124

CFC Production and HF consumption: TM

Month of Year 2003	CFC-12	No. of operating days R11/12	CFC-12 Production	HF/CFC-12 Ratio	HF Opening Stock	HF Consumption	HF Procured/ or added to stock or sales	HF Closing Stock
Jan		26	283	0.3792	40	107,3	178	110,7
Feb		25	251	0.3996	110,7	100,3	338	348,4
Mar		29	229	0.4323	348,4	99	68	317,4
Apr		17	202	0.4604	317,4	93	101	325,4
May		26	247	0.4615	325,4	114	82	293,4
Jun		25	197	0.4619	293,4	91	104	306,4
Jul		8	104	0.4615	306,4	48	66	324,4
Aug		15	251	0.4861	324,4	122	60	262,4
Sept		27	299	0.4348	262,4	130	60	192,4
Oct		23	262	0.4580	192,4	120	214	286,4
Nov		27	285	0.4632	286,4	132	290	444,4
Dec		21	275	0.4655	444,4	128	134	450,4