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الأمم المتحدة

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الأمم المتحدة
للبيئة



اللجنة التنفيذية للصندوق المتعدد الأطراف
لتنفيذ بروتوكول مونتريال
الاجتماع الخامس والأربعين
مونتريال، 4-8 نيسان/ أبريل 2005

مقترح بمشروع: الأرجنتين

تتكون هذه الوثيقة من تعليقات وتوصيات من أمانة الصندوق عن مقترح بمشروع الآتي:

إزالة:

- استراتيجية لازالة التدريجية لانتاج الـ CFC-11 و الـ CFC-12: البنك الدولي برنامج سنوي لعام 2005

لأسباب اقتصادية، لقد تمت طباعة هذه الوثيقة بعدد محدد، فيرجى من المندوبين أن يأخذوا نسختهم معهم الى الاجتماع وألا يطلبوا نسخا إضافية.

برنامج عمل سنوي لعام 2002 والتحقق من انتاج الـ CFC لعام 2004 لدى مصنع FIASA

خلفية الموضوع

1- ان اللجنة التنفيذية في اجتماعها الـ 38 في عام 2002 وافقت من حيث المبدأ على مبلغ إجمالي قدره 8.3 مليون دولار أمريكي لتنفيذ اتفاق يتعلق بقطاع الانتاج في الأرجنتين، وصرفت الشريحة الأولى البالغ قدرها 0.5 مليون دولار أمريكي للمشروع. وعلى أثر ذلك، صرفت اللجنة التنفيذية شريحتي 2003 و 2004 في الاجتماع الرابع والأربعين بعد أن اقتصرت بفضل التحقيق أن FIASA أنجزت أهداف انتاج الـ CFC لـ 2002 و 2003 كما هي مبينة في الاتفاق قد تم تحقيقها. وحدود الانتاج السنوي من الـ CFC وشرائح التمويل المنصوص عليها في الاتفاق مبينة بالتلخيص في الجدول الآتي:

السنة r	2002	2003	2004	2005	2006	2007	2008	2009	2010	المجموع
أقصى حد مسموح به في الانتاج (طن متري)	3,020	3,020	3,020	1,647	1,647	686	686	686	0*	
تمويل الصندوق المتعدد الأطراف مليون دولار	0.5	3.5	0	0.3	2	0	1	1	8.3	
أجر الوكالة مليون دولار	0.02	0.11	0.09	0.12	0.10	0.12	0.12	0.047	0.727	

(*) فيما عدا أي انتاج من الـ CFC تكون الأطراف قد وافقت عليه للوفاء بأية استعمالات جوهرية في الأرجنتين

2- ان البنك الدولي يطلب من الاجتماع الخامس والأربعين الافراج عن شريحة تمويل 2005 البالغة 0.3 مليون دولار أمريكي وما يرتبط بها من تكاليف المساندة البالغة 0.12 مليون دولار أمريكي. ووفقا لشروط الاتفاق، التي تقتضي القيام بتحقيق على يد هيئة مستقلة من انجاز أهداف الانتاج السنوية قبل الافراج عن شريحة التمويل التالية، فان البنك الدولي يقدم تحقيقا لانتاج الـ CFC على يد FIASA في 2004.

3- ان ما قدمه البنك الدولي يشمل برنامج عمل 2005 وتقرير التحقق من انتاج الـ CFC لدى FIASA لعام 2004 (مرفقة).

التحقق من انتاج 2004 للـ CFC لدى FIASA

4- ان التحقق جرى في يناير 2005 على يد السيد Jorge Corona، وهو خبير استشاري من المكسيك، كان الرئيس المشارك للجنة TEAP للخيارات التقنية في مجال المذيبات، ولكنه لم يكن يملك فيما يبدو خبرة مباشرة في انتاج الـ CFC. وتضمن الفريق كذلك محاسبا من شركة محاسبة محلية. ويتضمن التقرير تقريرا من الخبير الاستشاري التقني عن التفتيش الفيزيقي للمصنع وعن العملية التكنولوجية وعن وضع المصنع وعن

العملية التكنولوجية وعن وضع المصنع وتقريراً من المحاسب عن انتاج الـ CFC وعن استهلاك الـ CTC و HF كمواد تغذية الانتاج، وهذه البيانات مأخوذة عن طريق فحص البيانات المالية.

5- ان التقرير الفني يصف أولاً بايجاز العملية التكنولوجية وانتاج الـ CFC في المصنع، ويعلق على أن المصنع لم يكن لديه نظام لاسترداد الـ CTC و HF والـ CFC-13 الزائدة عن الحاجة، حيث أن ذلك امر مكلف، ونتيجة لذلك، يطلق هذه الكيماويات في الهواء. ووجد المراجع أنه لا يوجد أجهزة لقياس التدفقات في المصنع، لتفقي أو تقصي استهلاك المواد المستعملة لتغذية الانتاج، والمنتجات الوسيطة والمنتجات النهائية، ولكن قيل له أن أجهزة قياس التدفق سوف تتركب في المستقبل القريب. ولم يتسن الحصول الا على بيانات تخص الاستهلاك اليومي لمواد التغذية وانتاج الـ CFC، عن طريق وزن صهاريج التخزين وصهاريج المنتجات على موازين. ورفع عدد من العينات لاجراء اختبارات عليها في المعمل، ولكنه قال أنه لم يستطع أن يضمن ذلك بيانات الدفق في الساعة من انتاج المصنع، للحصول على بيان مستقل عن الانتاج. بيد أنه شعر أنه، تمشياً مع البيانات المالية التي لا تضارب فيها الخاصة باستهلاك مواد تغذية الانتاج والـ CFC المنتجة، أنها بيانات كافية لاستمداد نتائج منها.

6- ذكر أن الصيانة ضعيفة نظراً لقلّة الاستثمار حيث أن المصنع سوف يغلق في المستقبل القريب، ونتيجة لذلك، هناك توقعات كثيرة عن العمل. وضعف الفعالية يعزى أيضاً الى نسبة الـ CFC-12/CFC11 التي يتغير قدر محسوس منها من الـ 40/60 المقررة الى 5/95 في المائة للوفاء بطلبات السوق.

7- ان تقرير المحاسب ناقش أولاً المحدودية التي اصطدمت بها في عملية المراجعة. فلم تستطع أن تتحقق من بيانات قوائم جرد الاغلاق الخاصة بالمواد الخام وبالمنتجات النهائية لأن هذه تعد فقط يوم 30 نوفمبر من كل عام الى جانب الكشوف المالية. ولم يكن متاحاً لها أن تحصل على المحفوظات الحسابية المدموغة أو على اليومية التي تدمغ في السجل العام للتجارة، ووجدت تقارير الانتاج اليومي غير مطابقة للاستمارات السابق ترقيمها أو الموقع عليها.

8- استعملت المحاسبة ملخصات شهرية واختارت أشهر يونيه ويوليه ونوفمبر وديسمبر كعينات للمراجعة. وغطى الفحص محفوظات استهلاك مواد تموين الانتاج وانتاج الـ CFC وفواتير المبيعات والمشتريات، والمقادير المتوفرة في البداية في عملية الجرد، ولكن دون المقادير المتوفرة عند الاغلاق، حيث أن للكشف المالي لن يكون متاحاً قبل 30 نوفمبر من كل عام.

9- أيدت المحاسبة انتاج الـ CFC على أساس شهري وسنوي، وأن التغير التراكمي في الجرد الخاص بالـ CFC يوازي الانتاج السنوي وبيانات المبيعات. وأيدت كذلك أن التغير التراكمي في قائمة جرد المواد الخام الرئيسية يتمشى مع انتاج الـ CFC، سواء الانتاج الشامل أو الانتاج في كل موسم.

10- وخلصت عملية المراجعة أن الـ FIASA أنتجت 3 015 طن متري من الـ CFC في 2004، وهو قدر يقل عن هدف 3 020 طن الوارد في الاتفاق. وتم تقسيم الانتاج اللى مفردات هي 112 طم للـ CFC-11 و 2 904 طم للـ CFC-12. وباعت FIASA في 2004 مقداراً يبلغ 1 837 طم في السوق الداخلي و 1 378 طم كصادرات. وذهبت الصادرات أساساً الى البرازيل وباراغواي وشيلي ومصر.

11- ان البيانات التي تم تجميعها لدى فريق التحقق مقدمة باستعمال الشكل المقرر في الخطوط الارشادية للتحقق من ازالة انتاج الـ ODS، وهي تشمل بيانات عن الانتاج شهرا بشهر للـ CFC-11 و الـ CFC-12 وعدد أيام الانتاج ونسب استهلاك مواد التموين الى انتاج الـ CFC ولنتاج الـ HCFC-22، وتغيير مقادير قوائم الجرد بالنسبة للـ CTC والـ HF المستعملة كموايد تموين، كطريقة للتحقق من صحة انتاج الـ CFC.

برنامج العمل السنوي لعام 2005

12- ان برنامج العمل السنوي لعام 2005 يبدأ ببيان موجز لنتائج برنامج عمل 2004. ومن الانجازات الرئيسية في 2004، انشاء نظام التراخيص الوطني بموجب مرسوم من الرئيس رقم 1609، بشأن واردات وصادرات الـ ODS في نوفمبر 2004. وتنفيذ هذا النظام هو مسؤولية مشتركة بين وزارة البيئة والجمارك، وسيكون قائما على أساس تسجيل المستوردين والمصدرين. وتم التوقيع على اتفاق المنحة بين الحكومة والبنك الدولي، ومهد الطريق الى تنفيذ الخطة القطاعية. وجرت أيضا دراسة لاحتمالات السوق لـ FIASA، وتعزيز رصد انتاج الـ CFC قد جرى كجزء من برنامج المساعدة التقنية.

13- ان برنامج العمل المقترح لعام 2005 يتضمن هدفا لانتاج الـ CFC من FIASA، والسياسة المطلوب أن تطبقها الحكومة لتنفيذ خطة ازالة انتاج الـ CFC، والأنشطة المزمعة للمساعدة التقنية. وهدف انتاج الـ CFC لـ 2005 هو 1 647 طن ODP، وهو رقم يقل بـ 50 في المائة عن خط الأساس الالزامي بموجب الحدول الزمني للمراقبة الذي يفرضه بروتوكول مونتريال، ويتمشى مع الهدف الوارد في الخطة القطاعية. وتكفل الحكومة انجاز الهدف بايجاد حد أقصى للانتاج، يسانه القانون الوطني 24.040/1991، الذي أنشأ رقابات على انتاج الـ ODS ومبيعاتها. وبالإضافة الى ذلك، ستقوم الحكومة ابتداء من 1 يناير 2005 بادخال نظام التراخيص الخاص ب واردات وصادرات الـ ODS، الذي سيتضمن ايجاد سجل لمستوردي ومصدري الـ ODS ويخصص حصصا سنوية، تديرها وزارة البيئة وتطبقها الجمارك.

14- ان البرنامج السنوي لـ 2005 يزمع عددا من أنشطة المساعدة التقنية لمساندة الخطة القطاعية ويشمل تدريب موظفي الحكومة على ادارة خطة الازالة الوطنية واصدار خطوط ارشادية لتفكيك معدات FIASA، واستكشاف فرص الأعمال البديلة لـ FIASA والقيام بحملات لتوعية الجمهور.

15- بالنسبة لرصد تنفيذ الخطة القطاعية، ستقوم وحدة تنفيذ المشروع بوزارة الصناعة والتجارة بتعيين موظف مهني لفترة من الوقت كي يزور FIASA ويتحقق من دفاتر الانتاج مرة في الشهر.

16- من مبلغ الـ 3.5 مليون دولار التي صرفت من الصندوق، هناك أكثر من مليون دولار تم صرفها للـ FIASA، وتم الاتفاق على جدول زمني لصرف الرصيد المتبقي مع المصنع. والـ 0.3 مليون دولار من برنامج عمل 2005 سيتم صرفها الى المؤسسة على أساس تنفيذ الخطة السنوية لانتاج الـ CFC. وفي المرفق الأول أربعة جداول فيها تفاصيل مختلف مكونات برنامج 2005.

تعليقات الأمانة

17- كان هناك عدد من الأسئلة بشأن الجزء التقني من تقرير المراجعة. ان المراجع التقني لم يقيم بوصف الاجراء الذي اتبعه في ممارسة المرجحة، وأقسام المصنع التي قام بالتنفيذ عليها، ولم يبين حجم وأنواع الاختبارات التي قام بها. وعلق على أن المصنع لا يملك أجهزة قياس التدفقات لتقني أو تقصي استهلاك مواد التموين أو المنتجات النهائية، ولكنه لم يحدد المدى الذي يؤثر فيه ذلك في عملية مراجعته. وذكر أنه لم يستطع أن يعتمد على بيانات التدفق الانتاجي في المصنع في الساعة الواحدة، للحصول على بيانات مستقلة عن الانتاج، ونتيجة ذلك اعتمد على البيانات المالية لممارسة عملية التحقق. وأدى ذلك الى تخفيض محسوس في فعالية اسهامه في عملية التحقق.

18- قامت المحاسبة بمراجعتها للتقارير المالية بطريقة أقرب الى الناحية المهنية بمناقشة الاجراء الذي اتبعته وحجم العينة التي استعملتها والحدود التي اصطدمت بها في عملها. وكان الأمر سيكون أفضل لو كانت ناقشت وقع هذه الحدود على فعاليتها في اجراء عملية التحقق. وأيدت ألا تضارب بين البيانات المجمعة الشهرية والسنوية الخاصة باستهلاك مقادير تموين الـ CTC و انتاج المنتجات النهائية.

19- وفي المرفق الثاني يقصد من شكل التبليغ الذي وافقت عليه اللجنة التنفيذية أن يحفظ تاريخ نتائج التحقق منذ سنة البداية للاعتماد على ذلك في المقارنات والمراجعة غير أن نتائج التحقق لعامي 2002 و 2003 لم تدرج في الجداول.

20- ان برنامج العمل السنوي لعام 2005 يقترح هدفا أقصى مسموحا به للـ CFC، يتمشى مع ما جاء في الاتفاق، كما يقترح عددا من التدابير السياسية الموجودة والجديدة التي جرى تطبيقها لتسهيل تنفيذ برنامج العمل. ويزم مع البرنامج أيضا عددا من الأنشطة التقنية المساعدة في 2005، بما في ذلك استكشاف فرص السوق المستقبلية لـ FIASA ووضع خطوط ارشادية لتفكيك المصنع في المستقبل. وأسوة بما جاء في البرامج السابقة، هناك نظام للرصد المستمر لانتاج الـ CFC في المصنع، من جانب الحكومة.

توصيات

1- توصي الأمانة اللجنة التنفيذية اذا شأعت بما يلي:

(أ) أن تطلب من البنك الدولي أن يتبع في عمليات المراجعة المستقبلية الخطوط الارشادية بشأن التحقق من ازالة انتاج الـ ODS الذي أقرته اللجنة التنفيذية ويكفل الخبرة اللازمة في فريق التحقق، ويكفل التماسك في بيانات التحققات في البلدان التي يقوم فيها البنك بتنفيذ خطط لازالة انتاج الـ ODS،

(ب) أن توافق اللجنة التنفيذية على برنامج عمل 2005 السنوي بمستوى يبلغ 0.3 مليون دولار أمريكي، وما يرتبط به من تكاليف المساندة البالغة 0.12 مليون دولار أمريكي للبنك الدولي، في ضوء نتائج التحقق ولا سيما التحقق المالي القائل بأن انتاج الـ CFC في FIASA في 2004 كان يبلغ 3 015 طن متري، وهو مقدار يقل عن هدف 3 020 طن متري الوارد في الاتفاق.

**STRATEGY FOR GRADUAL PHASEOUT OF
CFC-11 & CFC-12 PRODUCTION IN
ARGENTINA**

2005 ANNUAL PROGRAM

OPROZ / UEPRO
AND

THE WORLD BANK

January 2005

1. DATA

Country	Argentina		
Year of plan	2005		
No. of years completed	2		
No. of years remaining under the plan	6		
Total ODS to be phaseout through the Strategy for Gradual Phaseout of CFC -11 & CFC -12 Production in Argentina	CFC – 11 + CFC – 12 : 3,020		
	ODS 3:		
	ODS 4:		
ODS Production for the Previous year (MT)		Target	Actual
	CFC 11/12	3,020	3,016
CFC production independently verified	Yes		
Target ODS Consumption for the year of the plan (MT)	CFC 11/12 : 1,647 MT		
Total MLF funding approved for the Plan	US\$ 8.3 Million		
Total funds released so far			
		Funding	Disbursed (*)
Total funding disbursed on annual plans	Year 2002	500,000	53,548.00
	Year 2003	3,500,000	1,012,000.00
	Year 2004	0	0
	Year 2005	300,000	0
	Total released	4,300,000	1,065,548.00
Level of funding requested for this AP	US\$ 300,000		
Support costs	US\$ 120,000		
Lead implementing agency	The World Bank		
Co-operating agency (ies)	UEPRO		
	OPROZ (Secretariat of Environment and Sustainable Development)		

(*) Disbursements have recently started after the signature, in November 2004, of the Sub Grant Agreement between the Government of Argentina (GOA) and FIASA.

A: INTRODUCTION

Provide a brief general overview on the status of the implementation of the NOPP/SOPP and recent progress, new initiative, achievements etc.

- 1 In compliance with the Montreal Protocol, the Government of Argentina (GOA) should fulfill the obligations on phasing-out CFC-11&12 production by 2010. The CFC Production Phase-out Plan for Argentina was approved at the 38th meeting of the Executive Committee (ExCom) of the Multilateral Fund for the implementation of the Montreal Protocol and involves a sole production facility at Frio Industrias Argentinas S.A. (FIASA). The table below summarizes the phase out schedule as per the Agreement between the ExCom and the Government of Argentina (GOA):

Table1: Phase-out schedule as per the Agreement with ExCom:

Year	CFC-11 and CFC-12		MLF funding (in Mill USD)	
	Target	Actual	Project funding	Support costs
2002	3,020	3,015	0.5	0.02
2003	3,020	3,018	3.5	0.11
2004	3,020	3,016	0	0.09
2005	1,647		0.3	0.12
2006	1,647		2.0	0.10
2007	686		0	0.12
2008	686		1.0	0.12
2009	686		1.0	0.047
2010	0		0	0
Total	3,020 (Total impact)	3,020 (Total impact)	8.30	0.727

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

- 2 Along with the Annual Plan, the World Bank has submitted the findings of the independent external audit for the 2004 CFC production at FIASA. This report, includes information to support the accomplishment of the proposed maximum production targets in this period.
- 3 Measures required by the GOA and FIASA during the review of the Annual Plan 2004 were comprehensively addressed by the company.
- 4 The Sub-grant Agreement (SGA) between the GOA and FIASA was signed in November 26 , 2004.
- 5 Argentina will reduce its maximum CFC production level as agreed for 2005 to 1,647 MT, and will maintain this production level until 2006.

B: 2005 ANNUAL PROGRAM

1. ACTIVITIES IMPLEMENTED FROM THE 2004 ANNUAL PROGRAM

The government of Argentina implemented several activities related to the implementation of the 2004 annual program, the list of activities were as follows:

Research for Market prospects: A comprehensive study on the conditions of the market for FIASA was funded. This studied allowed FIASA to identified areas were its activities could be diversified. This study also supported GOA in identifying sources of CFC alternatives through the implementation of an alternative production project.

Equipment purchase: The Government of Argentina, procured equipment for UEPRO in order to facility monitoring activities related to the production of CFC at FIASA during 2004 and in future years.

Facilitating monitoring capabilities and compliance with the agreement between Argentina and the Executive Committee of the MLF: This activity is under implementation and aims at controlling in a more effective way the handling of raw material as well as the production of CFC at FIASA. The proposed monitoring system has supported the Government of Argentina to production levels as agreed on the 2003 agreement.

Disbursements: The GOA, requested about 30% of the approved compensation funds in 2004. The balance is expected to be disbursed during 2005.

Facilitating monitoring capabilities and compliance with the agreement between Argentina and the Executive Committee of the MLF: This component was partially implemented by UEPRO. Three monitoring activities were implemented during

2004, in order to verify FIASA's compliance with the 2004 CFC Production agreed caps.

2. Programs expected to be implemented during Annual Plan 2005

In accordance with the results from audit report attached to this AP, the GOA has complied with the maximum production levels for the 2004. OPROZ though UEPRO has continued with its monitoring activities using its enhanced systems to support this compliance

The phase-out plan under implementation includes the following activities:

- (a) Phasing out CFC production by 2010;
- (b) Dismantling FIASA's CFC production agreed equipment;
- (c) Monitoring achievement of each year's production under the maximum cap agreed with ExCom
- (d) Implementation of policy measures and technical assistance activities to support the plan in a sustainable permanent manner

For 2005, the following activities are expected to take place:

2.1 Policies, regulations etc. and governmental actions and initiatives

- (e) Import / Export licensing System: The National ODS licensing system was established in November 19, by the Presidential decree No. 1609 of November 17, 2004 and is being enforced since January 1, 2005. The system is based on a national registry of ODS importers and exporters and will be located, administrated by the Secretariat of Environment and enforced by the Customs, Quotas will be allocated based on historic import/export volumes, following ODS consumption restrictions established by the Montreal Protocol.
- (f) Annual Production caps: Argentina have been in compliance with the Montreal Protocol phased-out schedules for 2004, and has been enforced by the Secretariat of Environment. Legally, the controls are supported by the National Law No. 24.040 /1991 which establishes controls to the production and commercialization of ODS.

2.2 Technical assistance activities for 2005

The technical assistance component (\$500,000) will be implemented throughout the project implementation (up to 2010). The following activities will be implemented during 2005:

- *Supporting the GOA to strengthen technical capacity of local staff:* This will include training of GOA staff, plus workshops for various participants in the phase-out program, including training in reclamation and re-cycling;
- *Public Awareness campaign:* This activity will support the ozone protection communication strategy prepared by OPROZ, and is linked to other activities currently being implemented by OPROZ;
- *Develop environmental guidelines for dismantling of the FIASA agreed equipment :* A set of environmental guidelines to address environmental friendly activities regarding the plant dismantling will be developed by the government of Argentina.
- *Develop a legal framework to address work compensation schedules for the closing enterprise:* As the project includes labor compensation of the employees lay off of their duty by the closure of the enterprise, a legal framework and estimations of the amount of the compensation will be develop.
- *Technical assistant to FIASA:* This component aims at supporting FIASA to implement substitute production in Argentina outlined in the technical proposals approved by the ExCom.

The terms of reference and work schedule will be agreed with World Bank prior to initiating work.

2.3 Project Management Unit

The existing project coordination unit established at UEPRO will continue its activities. However, UEPRO will allocate on a part-time basis one professional staff position for maintaining technical, financial and statistical records to manage this phase-out program. The consultant will visit the plant on a regular basis, at least once every four weeks, to verify production logs.

2.4. Compensation to FIASA

The US\$3.5 Million was approved to be disbursed to the enterprise in 2004. A total of US\$ 1,012,000 has been disbursed to the enterprise and an schedule to disbursed the remaining funds from the US\$ 3.5 million has been agreed with the company. There are several tranches under the ExCom agreement which will be disbursed accordingly.

Additional \$500,000 approved by the Executive Committee for the Implementation of the Montreal Protocol are being used in Technical Assistance for the Government as detailed above.

For this Annual Plan 2005, a request of 300,000 is being made according to the Agreement between the GOA and the ExCom. These resources will be disbursed based on the accomplishments by FIASA of the 2004 CFC production caps of the same agreements. These accomplishments were certified by an independent team of auditors, of which its report is annex to this plan.

ANNEX 1
PROPOSED ACTIVITIES IN THE 2005 ANNUAL PROGRAM

TABLE 1A: POLICIES AND REGULATIONS

Proposed policy/regulation	Estimate costs	Ministry/Agency to be in charge	Planned date of effectiveness
Import / Export licensing system		Secretariat of Environment and Sustainable Development	Done
Production caps		OPROZ / UEPRO	Accomplished/ Continuing as of 2005

TABLE 1B TECHNICAL ASSISTANCE ACTIVITIES AND TRAINING ACTIVITIES

Name of TA/Training activity	Estimated costs	Duration
Supporting the GOA to strength technical capacity of local staff;	10,000	1 Year
Public Awareness	20,000	1 Year
Develop environmental guidelines for dismantling of the FIASA's agreed equipment	15,000	1 Year
Develop a legal framework to address work compensation schedules for the closing enterprise	10,000	
Facilitating monitoring capabilities and compliance with the agreement between Argentina and the Executive Committee of the MLF.	45,000	1 Year
Technical assistance for alternatives to CFC	100,000	1 Year

TABLE 1C: PROJECT MANAGEMENT UNIT

Name of activity	Estimated costs	Duration
One professional staff part-time;	8,000	1 Year

TABLE 1D: COMPENSATION TO FIASA

Name of activity	Estimated costs	Duration
Signature of SGA with FIASA	300,000	2005

(*) The total amount of the Sub Grant Agreement is \$7.8 Million and will be disbursed in tranches according to the Agreement between the ExCom and the GOA.

ANNEX 2

Contact Agency/Organization and person in charge of managing the national import/export licensing system.

Secretariat of Environment and Sustainable Development

Oficina Programa Ozono (OPROZ)

Miguel Angel Craviotto

Laura Berón

Tel. 54 11 43 48 8425 / 8413

E-mail: mcraviotto@medioambiente.gov.ar

Secretariat of Industry and Commerce

Marcelo Vita

UEPRO (Project Implementation Unit)

Tel. 54 11 43 49 3728

e-mail: mavita@mecon.gov.ar

**AUDIT PROCESS FOR THE CLOSURE OF THE CFC PRODUCTION
SECTOR IN ARGENTINA
(FRIOINDUSTRIAS ARGENTINAS S.A.;FIASA) PLANT IN VILLA
MERCEDES, SAN LUÍS, ARGENTINA)**

**Prepared for:
WORLD BANK
UEPRO**

Prepared by:

**Jorge Corona (Consultant)
Gisela Holgado (Accountant; Shilton, Weyer y Asociados, Argentina.)**

Buenos Aires, January 15, 2005

1 OBJECTIVE

To conduct an Audit on the Production of CFCs at Frioindustrias Argentinas S.A. FIASA in accordance to the Agreement for the Argentina Production Sector and the Guidelines of the Executive Committee for the Implementation of the Montreal Protocol ExCom, with regards to monitoring CFC Production closure for year 2004, according to the attached "Terms of Reference" and the "Draft Guidelines and Standard Format for Verification of ODS Production Phase-Out." The schedule of maximum allowable production of CFC is as follows:

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	0.12	.10	.12	.12	.04	

Note: FIASA is the only manufacturer of CFCs in Argentina.

2 PERSONS CONTACTED

UEPRO

Guillermo J. Bidone
Asesor Tècnico PRESAO
Ministerio de Economía y Producción
Secretaría de Industria, Comercio y de la Pequeña y Mediana Industria

FIASA

Alfonso Salvador Silva
Presidente (President)

Raúl A. Gobbato
Gerente (Manager)

Oder Acebedo
Jefe de Producción (Manufacturing Manager)

3 SUMMARY

Previous Audits have been conducted in years 2002 and 2003 by the Auditor Antonio Cristodero. The present Audit is to update the information with 2004 figures and to certify that the

production of CFC-11 and CFC-12 by FIASA is in compliance with the Agreement "Strategy for gradual phase-out of CFC - 11 & CFC - 12 production closure" 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 " considering the CFCs production and feedstock uses (mainly CTC and HF), during 2004.

In order to perform the Audit, a site visit was made to FIASA plant, located in Villa Mercedes, San Luis, Province in Argentina. The Audit was performed by Jorge Corona, technical consultant who is familiar with CFC producing plants in Mexico (Quimobásicos S.A. de C.V.), and by the Argentinean accounting firm Shilton Weyers & Asociados, represented by Mrs. Gisela Holgado.

The visit to the plant took place from January 12 - 13, 2004.

After carefully studying the information supplied by FIASA, collected and revised by the auditor team, and taking into consideration the present plant conditions and apparent operational status, both by direct observation and by communications with the plant manufacturing manager Oder Acebedo, it was concluded that the 2004 production of CFC -11 was of 112.18 M tones and CFC-12 of 2,903.83. The total CFCs production was of 3,016.01 M tones, which is in compliance with the Argentina Production Sector presented at the 38th Meeting of the Executive Committee for the implementation of the Montreal Protocol, which states that the Maximum Allowable Production of CFCs for FIASA during year 2004 should be 3,020 M tones.

4 PLANT INSPECTION

The plant was inspected following the attached Flow Sheet. It consists mainly of two reactors, where CTC reacts with HF in the presence of antimony pentachloride as catalyst producing a blend of CFC-11 and CFC-12, a reaction column, HCl recovery section, neutralizing and drying columns, CFC-11 and 12 recycling section with the required compressors and a distillation column, where CFC-11 and CFC-12 are separated. If a higher amount of CFC-12 is required, CFC-11 is recycled for further fluorination. There is no recovery system for excess CTC, HF nor CFC-13, which is produced as an undesirable byproduct, and these substances are vented into the atmosphere.

It is important to mention that during the visit, the plant was not operating because of the lack of CTC (it is supposed to arrive at the end of January), therefore it was not possible to verify on site production of CFCs, or monitoring plant production during a certain period making conciliation of figures with those reported in the accounting books. Besides that, there are no flow meters in the plant for any of the main feedstock, intermediate products and final products. (UEPRO has already agreed to get support from the technical component of this project the installation in FIASA's plant of flow meters so that in the future more reliable information of use of feedstock and finished products can be supplied. The flow meters will be supplied during the next months.

The present way to have an approximate figure for CTC day to day consumption and CFC production is that the storage tanks (only those feeding the reactors), of CTC and that of CFCs recently produced, are mounted on scales.

Taking into account the lack of precise equipment to monitor the CFC production, the procedure followed was based on the "Draft Guidelines and Standard Format for Verification of ODS Production Phase-Out.". The audit aims at monitoring variables such as temperature and pressure in the different production stages (reactors, distillation columns etc), which can be read in the computer in the control room, and opening or closing the valves by hand. Samples of products taken in several locations are sent to the laboratory to assist process control. During the visit it was not possible to integrate hourly in-plant flow rate data, over time, to get an independent data of production.

However, the consistency found in the accounting audit between daily feedstock consumption rates and final CFCs production amounts in the same period, is an indication that the lack of more precise plant information was not instrumental for getting a sufficiently reliable yearly consumptions and production.

The plant maintenance has suffered detriment during the last years, because of lack of motivation of the owners to invest in a plant that will be closed in 2010, so that most maintenance procedures have been limited to those required to keep the operation as safe as possible and minimizing shut-down times, but in many times at several locations there are CTC and other products leaks, reducing plant efficiency. Other sources of materials losses (vented into the atmosphere), are the frequent shut downs of the plant for maintenance, either planned or caused by emergencies.

Other aspect which has been considered, because in many CFC-11 and 12 plants has been identified as an undesirable by product, is the case of CFC-13. This substance has an ODP of 1, and is controlled by the Montreal Protocol as a substance of Annex B Group I, so that in theory should be recovered and destroyed. This is an expensive procedure, and FIASA is not performing this activity, and undetermined amount could be vented into the atmosphere unintentionally by FIASA . No formal evaluation has been made to determine the amount of this product generated.

Another important issue relevant to the plant operation, is that the original design was made considering CFC-11/CFC-12 production at an optimal ratio of 40/60. In the measure that production departs from this ratio, the plant efficiency is deteriorated. At present, the plant is working at about 5/95 ratio because of market reasons, and the efficiency suffers accordingly. Some of the reasons for the loss of efficiency, are that in the reactors a higher proportion of HF has to be added, and that the excess of CFC-11 produced, has to be recycled for further fluorination.

5 PRODUCTION, CFC-11 AND CFC-12

	Year 1	Year 2	Year 3
	2002	2003	2004
CFC-11	128	133	112
CFC-12	<u>2,887</u>	<u>2,885</u>	<u>2,904</u>
Total	<u>3,015</u>	<u>3,018</u>	<u>3,015</u>
Feedstock			
HF	1,094	1,311	1,219
CTC	4,148	4,531	4,182
Ratio			
HF/CFC	0,36	0,43	0,40
CTC/CFC	1,37	1,50	1,38

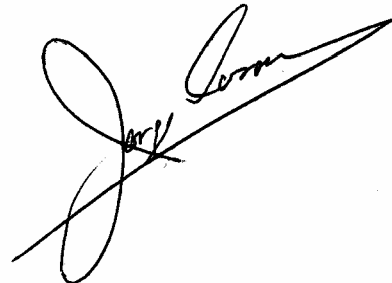
6 SALES

	<u>Domestic</u>	<u>Export</u> *	<u>Total</u>
CFC-11	291	46	337
CFC-12	1,546	1,332	2,879

* Exports were mainly to Brazil, Paraguay, Chile and Egypt.

7 OTHER RAW MATERIALS EXPORTS, IMPORTS, SALES

These figures can be seen in Annex 1 and in the Accountant's report.



Jorge Corona

Buenos Aires, January 17, 2005.-

ACCOUNTING REVIEW

UNITED NATIONS ENVIRONMENT PROGRAMME

I .OBJECTIVE AND SCOPE

The objective of this report is to detail the task performed pursuant to United Nations Environment Programme, exclusively related to accounting aspects, for verification of the “ODS production” phase-out of the company FRIO INDUSTRIAS ARGENTINA S.A. The term under analysis is from January 1, 2004 to December 31, 2004.

The scope of the accounting review included compliance with sections 11(i), 11(ii), 11(iii) and 12 (i), 12 (iii), 12 (iv), 12 (v), 12 (vi) contained in the “Draft Guidelines and Standard Format for Verification of ODS Production Phase-Out” dated October 24, 2000:

The two-day fieldwork was carried out in FRIO INDUSTRIAS ARGENTINA S.A. industrial plant, located in Villa Mercedes – Province of San Luis- on January 11 and 12, 2005. On such days the plant was closed due to vacation.

The accounting review approach was oriented to verifying the information provided by the Company, with supporting documentation and accounting records. For that purpose, prior to our visit, we prepared and sent to the Company a detailed report of all the accounting information deemed necessary to meet the objectives we have set.

Appendix I prepared by the Company, which contains the information subject to this accounting review, is attached and signed by us for its identification.

SCOPE RESTRICTIONS

When carrying out the task, we found that it was not possible to implement certain accounting auditing procedures deemed necessary to validate the analysed information, such as:

- It was not possible to obtain the appraised listings of inventories at starting and closing of raw material and manufactured products under analysis, since according to the Company, such information is only prepared on November 30 every year to prepare the financial statements. As a consequence, we were unable to check the balances of the inventory mentioned against the accounting records.
- The selected sales invoices were verified against the books (not stamped Sales VAT) only by viewing the invoice date and number. We were not allowed to verify the invoiced amounts since the prices and customer’s names are deemed confidential by the Company.

- We were not able to verify the information against stamped accounting records (Journal) since it was not available for checking.
- The production daily reports do not correspond to prenumbered or signed forms.
- Owing to the limited time we had to carry out this review and considering the volume of information to be checked, we were unable to analyse 100% of the operations under analysis. Therefore, we carried out the task by selecting samples -the results of which are reported in the following section.

III. DEVELOPMENT

These are the task we performed in each point subject to our review:

Confirm production quantities and raw material consumption from production log.

The “monthly production summaries” made by the Company were viewed. Such summaries include “ODS products” production and related raw material consumption.

We selected the months of June, July, November and December 2004 as the sample of the information to be reported; these months record the highest level of production. We verified day by day the daily production and raw material consumption amounts reported in the “monthly production summaries” against the daily production reports prepared by the Company.

No worth mentioning remarks arose from such task, except that the production reports do not correspond to the prenumbered or signed forms. The outcome of our task may be summarized as follows:

	CFC-11	CFC-12	Total
Total production in 2004 (in TN) reported by the Company in Appendix I, section C	112	2904	3016
Production verified against daily reports (in TN)	59	1580	1639
Percentage verified out of the total quantity	53%	52%	54%

	HF	CTC	Total
Total consumption in 2004 (in TN) reported by the Company in Appendix I, section C	1220	4183	5403
Consumption verified against daily reports (in TN)	620	2135	2755
Percentage verified out of the total quantity	51%	51%	51%

Verify sales and acquisition of monitored ODS products against financial records.

A detailed report of “ODS products” sales made by the Company was viewed.

We selected the months of June, July, November and December 2004 as the sample of the information to be reported. We selected a sample of operations randomly and the sold units were verified against the sales invoices. Besides, the invoice date and number was viewed in the Sales VAT book (not stamped).

No worth mentioning remarks arose from such task, except that the amounts of the selected invoices could not be verified against the books. The outcome of our task may be summarized as follows:

	TN
CFC-11 Sales year 2004 reported by the Company in Appendix I, section DIC	337
CFC-12 Sales year 2004 reported by the Company in Appendix I, section DIC	2.879
Total	3.216
Sales verified against documentation	1.248
Percentage verified out of the total quantity	39%

Verify stock at the beginning and the end of year against financial records.

It was not possible to obtain the appraised listings of inventories at starting and closing of raw material and manufactured products under analysis, since according to the Company, such information is only prepared on November 30 every year to prepare the financial statements. As a consequence, we were unable to verify the balances of the inventory mentioned against the accounting records.

However, we verified the stock at the beginning of the year against those on December 31, 2003 reported in FIASA’s audit report submitted the previous year. The details of such information are:

	CFC-11	CFC-12	Total
Stock at the beginning of the period (in TN) reported by the Company in Appendix I, section DIC	655	1395	2050
Stock verified against auditing report 31/12/03 (in TN)	655	1395	2050
Percentage verified out of the total quantity	100%	100%	100%

	HF	CTC	Total
Stock at the beginning of the period (in TN) reported by the Company in Appendix I, section DIC	(11,6+450,4)	(34+2124)	2620
Stock verified against auditing report 31/12/03 (in TN)	462	2158	2620
Percentage verified out of the total quantity	100%	100%	100%

Review the accuracy of the record information system.

With the purpose of carrying out the current review, we requested the Company to make the Purchases VAT, Sales VAT and Journal books available to us.

The Purchases and Sales VAT were prenumbered but not stamped at the Public Registry of Commerce. The information in those books could be verified although we want to emphasise that it was not possible to view the invoices amounts in the Sales VAT book.

Moreover, we were not able to view the Journal stamped at the Public Registry of Commerce, which constitutes an important accounting document when carrying out the accounting control, since the Purchases and Sales VAT books are not stamped.

Audit daily production records for monitored ODS production and “key” feedstock consumption data.

We refer back to the content of section III. 1) above.

Confirm production of monitored ODS on a monthly and yearly basis.

We refer back to the content of section III. 1) above.

Confirm that cumulative inventory change of monitored ODS corresponds to annual production and sales data.

To be able to verify the evolution of the “ODS production” inventory, we verified the changes in it, as follows:

- Initial Inventory (we refer to the content of III. 3) above.
- Production (we refer to the content of III. 1) above.
- Sales (we refer to the content of III. 2) above.

The consumption of R11 to produce R12 was verified against the production reports.

We were not able to verify the reductions against any supporting accounting record or documentation nor the final stock, as mentioned in section III. 3) above.

Confirm that cumulative inventory change of “key” raw material is consistent with production, both overall and per campaign.

To be able to verify the evolution of the inventory of the main raw material for the manufacturing of “ODS products”, we verified the changes in it, as follows

- Initial inventory (we refer to the content of III. 3) above.
- Consumption (we refer to the content of III. 1) above

Purchases

The increase in units resulting from the purchases of the term was analysed by viewing the samples of selected invoices and by their verification in the Purchases VAT book (not stamped) of the year 2004. No worth mentioning remarks arose from the mentioned task. The outcome of our work may be summarized as follows:

Raw material purchases reported by the Company	5.738
(This information is included in Appendix I, section DIC, in the column “Procured or added to stock or sales”)	
Verified Purchases	3.013
Percentage verified out of the total quantity	52 %

Sales

The reduction due to raw material sales, mainly of CTC, produced in March, May, June, July and September 2004, was analysed by selecting a sample of operations at random. We verified the units sold against the sales invoices. Besides, the invoices date and number were viewed in the sales VAT book (not stamped).

No worth mentioning remarks arose from such task, except that the amounts of the selected invoices could not be verified against the books. The outcome of our task may be summarized as follows

Raw material sales reported by the Company	(2.092)
(This information is included in Appendix I, section D. II, in the column “Procured or added to stock or sales”)	
Verified sales	629
Percentage verified out of the total quantity	30 %

Other items

According to the Company, there was a reduction in stock due to consumption of raw material (HF and CTC) for the manufacturing of other products not subject to analysis in this report. Such information could not be verified against any supporting accounting record or documentation.

As to reductions, it was not possible to verify them against any supporting accounting record or documentation, nor could we verify the final stock, as mentioned in section III. 3) above.

A handwritten signature in black ink, consisting of a large, sweeping loop that ends in a smaller, tighter loop above it.

Annex 2

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 : Ing. Jorge Corona De la Vega
Functional Title : Consultor Técnico
Member(s) :
Name : Shilton, Weyers & Asoc.
Functional Title : Auditores Contables
Date of Plant Visit : 11 y 12/01/05
Duration of Visit : 2 días

*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 3 2004
CFC-11	1	3636			112
CFC-12	1	5022			2904
CFC-13					
CFC-113					
CFC-114/115					
Raw Materials Production***					
HF Consumption					1220
CTC Consumption					4183

*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 3 2004
Quota (CFC 11 + CFC 12)			3020
Opening Stock at beginning of year			655
Procured			0
Production			112
Loss			-208
Sales			337
Closing stock at end of year			222

*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 3 2004
Quota (CFC 11 + CFC 12)			3020
Opening Stock at beginning of year			1395
Procured			0
Production			2904
Loss			-5
Sales			2879
Closing stock at end of year			1415

*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 2004	Year 4	Year 5	Year 6*
CFC-11							
HF/CFC-11 ratio				19.69/112 0,1758			
CTC/CFC-11 Ratio				135.52/112 1,2100			
CFC-12							
HF/CFC-12 Ratio				1199.86/2904 0,4132			
CTC/CFC-12 Ratio				4047.32/2904 1.3937			

* Till the year of the verification

Operational days per year

Type of Production	Baseline Year Projection	Year 1	Year 2 2003	Year 3 2004	Year 4	Year 5	Year 6*
CFC-11 / 12	345			214			

*Till the year of the verification.