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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-eighth Meeting
Montreal, 3-7 April 2006

# PROJECT PROPOSAL: VENEZUELA

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

Production

- Phased reduction and closure of the entire CFC production: 2006 annual programme — World Bank

# VERIFICATION OF THE 2005 CFC PRODUCTION AT PRODUVEN AND THE 2006 ANNUAL IMPLEMENTATION PROGRAMME

## Introduction

1. The Executive Committee at its 44th Meeting in 2004 approved in principle a total of US $16.5 million for the implementation of the Agreement for the Venezuela CFC production sector, and disbursed the first tranche of US $3.3 million to the project. Subsequently the Executive Committee further approved the 2005 annual work programme and disbursed another US $8.1 million at the 46th Meeting in 2005, after being satisfied with the verification of the CFC production at the CFC producing plant, Produven, in 2004. Under the Agreement, the Government of Venezuela is committed to closing down the entire CFC production capacity at Produven, the country's sole CFC producing plant by the end of 2006. The main elements of the Agreement are presented in Table 1.

Table 1

| Year | 2004 | 2005 | 2006 | 2007 | 2008 | TOTAL |
|---|---|---|---|---|---|---|
| Max. annual allowable production (MT) | 4,400 | 2,913 | 2,913 | 0 | 0 | 10,226 |
| TOTAL MLF grant (US$ million) | 3.30 | 8.1 | 1.75 | 2.3 | 1.05 | 16.50 |
| PRODUVEN (*) | 3.2 | 8 | 1.65 | 2.2 | 1 | 16.05 |
| TA (FONDOIN) | 0.1 | 0.1 | 0.1 | 0.1 | 0.05 | 0.45 |
| Agency fees | 0.2475 | 0.6075 | 0.1312 | 0.1725 | 0.0787 | 1.2375 |

(*) Labor compensation will be paid according to the requirements of the Venezuelan laws, and will be absorbed by PRODUVEN.

2. The World Bank is submitting to this Meeting, on behalf of the Government of Venezuela, the request for the release of the 2006 tranche of US $1.75 million and the associated support cost of US $131,200. In accordance with the terms of the Agreement, which required an independent verification of the achievement of the target in 2005, the World Bank has submitted a report on the verification of the CFC production at Produven in 2005 as well as the 2006 annual work programme (both are attached).

## Verification of the 2005 CFC production in at Produven

3. The verification was carried out in March 2005 by Mr. Vogelsberg Jr., a technical consultant who had been conducting CFC production verifications for the World Bank in China and other countries, and another accounting firm which focused on the financial records of the company.

4. The auditor briefly described the CFC production process employed in the plant, covering the supply of the key raw materials, the actual technical route of CFC production, the transfer of finished product to storage, and the packaging of the finished products into transportable containers. There was also a description of the record keeping at the plant of the consumption of raw materials and the finished products. The plant imported all the key raw materials, namely CTC and HF and transported them by truck from the ports to the plants, which

were documented through receipts with sequence numbers. All the receipts were checked and determined as accurate.

5. The verification focused on the purchase and consumption of CTC as the main checking point for validating the CFC production level, because the Government had a very tight control on the importation of CTC. Produven was the only authorized importer of CTC for the production of CFCs and had to apply for a CTC import license 3-5 times a year. All imports had to be closely inspected by Customs before Produven could bring them into the country. Actually the plant was unable to produce the 2005 quota because the Government could not issue the CTC import license fast enough.

6. The auditor examined the CTC/CFC production ratio and determined it to be 1.378 against an industry norm of 1.272, or 92.3% of the yield. Based on the CTC/CFC ratio and the actual CFC production in 2005 at 2,451.4 MT against the allowable target of 2,913 MT, the auditor determined that there was little chance of the plant exceeding its production target.

7. The auditor noted that the plant had a 101 days producing CFC and about another 35 days of producing HCFC-22, which was about 40% of the plant capacity. However the plant ran at a high rate when it was producing and as a result achieved stable conditions.

8. The results of the verification showed that Produven produced 2,451.4 MT of CFCs in 2005, which was broken down into 248.2 MT of CFC-11 and 2,203 MT of CFC-12. This was significantly below the annual maximum allowable production level of 2,931 MT as provided for in the Agreement for 2005.

9. 2006 would be the last year that Produven would produce CFC-11/12 and production is expected to cease by 2007. It was reported by the auditor that the plant would continue to produce HCFC-22 as allowed under the agreement with the Executive Committee. The auditor was shown the plan to reconfigure the plant accordingly, which included the removal of some of the equipment but retaining most of it for the HCFC production.

10. The data collected by the verification team were presented using the format set out in the guidelines for verifying ODS production phase out, which includes month-by-month production of CFCs and HCFC-22, number of days of production, consumption ratios of feedstock to CFC and HCFC-22 production, inventory changes in CTC and HF feedstock supplies as a way of validating the CFC production.

**The 2006 work programme**

11. The 2006 work programme included two parts, a short summary on the 2005 annual programme and the proposed 2006 annual work programme.

12. In 2006 the plan would continue implementing the policies which had been enacted, especially the decree on the ban of ODS imports, and the technical assistance initiatives. The most important objective of the plan is to ensure the achievement of the CFC production reduction target for the year. The Government would continue the enforcement of the CFC production cap for Produven and would allocate one professional staff on a full-time basis to

visit the plant and review the records no less than once every 4 weeks. There would be public awareness campaigns to assist in this and other ozone related activities. Efforts would be made to train workers at Produven to assist them in being competitive in the labour market, and to assess the impact of CFC production closure on the related market sectors. Annex I provides in tabular form the proposed activities in 2006 and a cost estimate and date of completion.

13. Of the total US $1.75 million being requested for 2006, US $1.65 million would be disbursed to Produven to maintain the production quota and the balance of US $0.1 million will be allocated to technical assistance activities.

## SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

### COMMENTS

14. The 2006 work programme had the same allowable CFC production level as in 2005 according to the agreement, and would be the last year that CFC would be produced in the country. From the assisting policies which had been put in place, there was a good chance that the plan would achieve its 2006 target. It is particularly worth mentioning the control on CTC imports, which has effectively put the CFC production under close monitoring.

15. Since 2006 would be the last year that the country would produce CFCs, it would be important that the government and the auditors work to propose a course of action for the continued monitoring of CFC production after 2006. This monitoring system should include the remaining inventory of CFC, CTC and HF at the end of 2006, the list of equipment that has to be removed and dismantled, the list of equipment that would be retained for HCFC production, and the necessary checks that have to be made to ensure the sustainability of the closure of CFC production.

16. The verification was done by a consultant who had relevant expertise and extensive experience in carrying out similar verifications. We commend the World Bank's effort to standardize the verification exercise across the countries where they are implementing production sector projects. The methodology of focusing on the country's CTC import control and the actual CTC consumption data as the main check point for CFC production was a valid one. It was also noted by the consultant that there was inadequate preparation made prior to the on-site verification.

17. In accordance with the practice of presenting the verification reports on CFC production, the Secretariat included only the aggregate data, and not the detailed monthly breakdown of the CFC production and consumption of CTC and HF. However the data could be made available to any member of the Executive Committee upon request.

### RECOMMENDATIONS

18. The Secretariat recommends that the Executive Committee:

(a) Takes note of the verification report of the CFC production at Produven in Venezuela for the year 2005;

(b) Approves the 2006 work programme of the Venezuela CFC production phase-out Agreement at US $1.75 million with US $131,200 support costs for the World Bank, in view of the fact that Venezuela had achieved the CFC production reduction target in 2005 as confirmed by the verification;

(c) Requests the World Bank to make available to the consultant data that are needed to conduct an effective verification prior to the on-site inspection, in accordance with the guidelines approved at the 32nd Meeting of the Executive Committee; and

(d) Requests the World Bank and the Government of Venezuela to include a proposal in the 2007 annual work programme for a scheme for continued monitoring of CFC production at Produven to sustain the production closure after 2006.

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# STRATEGY FOR GRADUAL PHASE-OUT OF CFC-11 & CFC-12 PRODUCTION IN VENEZUELA

## 2006 ANNUAL PROGRAM

FONDOIN / PRODUVEN

AND

THE WORLD BANK

**FEBRUARY 2006**

1. DATA

| | | | |
|---|---|---|---|
| **Country** | Venezuela | | |
| **Year of plan** | 2006 | | |
| **No. of years completed** | 2 | | |
| **No. of years remaining under the plan** | 3 | | |
| **Total ODS to be phased-out through the Strategy for Gradual Phased out of CFC - 11 & CFC -12 Production in Venezuela** | CFC – 11 + CFC – 12 : 10,226 MT | | |
| **ODS Production for the** | | Target | Actual |
| **Previous year (2005)** **(MT)** | CFC 11/12 | 2,913 | 2,451.4 |
| **CFC production independently verified** | Yes | | |
| **Target ODS Production for the year of the plan (MT)** | CFC 11/12 : 2,913 MT | | |
| **Total MLF funding approved for the Plan** | US$ 16.50 Million | | |
| **Total funds released so far** | US$11.4 Million* | | |
| | | Funding | Disbursed (*) |
| **Total funding disbursed on annual plans** | Year 2004 | 3,300,000 | 3,300,000 |
| | Year 2005 | 8,100,000 | 8,100,000 |
| | Year 2006 | 1,750,000 | 0 |
| | Year 2007 | 2,300,000 | 0 |
| | Year 2008 | 1,050,000 | 0 |
| | Total released | 16,500,000 | 11,400,000 |
| **Level of funding requested for this AP** | US$1,750,000 | | |
| **Support costs** | US$ 131,200 | | |
| **Lead implementing agency** | The World Bank | | |
| **Local Co-operating agency (ies)** | FONDOIN | | |
| | PRODUVEN | | |

(*) Disbursements will start after the signing of the Grant Agreements

# 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 Venezuela (GOV) should fulfill its obligation to phase-out production of CFC-11&12 by 2010. The CFC Production Phase-out Plan for Venezuela was approved at the 44th meeting of the Executive Committee (ExCom) of the Multilateral Fund for the implementation of the Montreal Protocol and involves a single production facility at Productos Halogenados de Venezuela C.A. (PRODUVEN). The table below summarizes the phase out schedule as per the Agreement between the ExCom and the GOV:

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

| Year | 2004 | 2005 | 2006 | 2007 | 2008 | TOTAL |
|---|---|---|---|---|---|---|
| Max. annual allowable production (MT) | 4,400 | 2,913 | 2,913 | 0 | 0 | 10,226 |
| TOTAL MLF grant (US$ million) | 3.30 | 8.1 | 1.75 | 2.3 | 1.05 | 16.50 |
| PRODUVEN (*) | 3.2 | 8 | 1.65 | 2.2 | 1 | 16.05 |
| TA (FONDOIN) | 0.1 | 0.1 | 0.1 | 0.1 | 0.05 | 0.45 |
| Agency fees | 0.2475 | 0.6075 | 0.1312 | 0.1725 | 0.0787 | 1.2375 |

* Labor compensation will be paid according to the requirements of the Venezuelan laws, and will be absorbed by PRODUVEN

2 Venezuela has been in compliance with the Montreal Protocol phase-out schedule for 2005, which has been enforced by FONDOIN and the Ministry of Environment and Natural Resources. Monitoring and enforcement by these institutions will continue during 2006.

3 Along with the Annual Plan, the World Bank has submitted the findings of the independent external audit for the 2005 CFC production at PRODUVEN. This report includes information to support the accomplishment of the proposed maximum production targets in this period.

4 Venezuela will maintain its CFC production level as agreed for 2006 at 2,913 MT, and will cease production by 2007.

## B: 2006 ANNUAL PROGRAM

# 1. ACTIVITIES EXPECTED TO BE IMPLEMENTED DURING THE 2006 ANNUAL PROGRAM

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

(a) Phasing out CFC production by 2007;

(b) Dismantling PRODUVEN's CFC production capacity;

(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 2006, the following activities are expected to take place:

## 1.1 Policies, regulations etc. and governmental actions and initiatives

As mentioned in the 2005 annual program, the Import / Export licensing system for controlled substances was established in 2004 through presidential Decree 3228. The system is enforced by the Ministry of Environment and Natural Resources and the Customs Office. Technical assistance is required to strengthen the Customs Officers to avoid illegal traffic.

## 1.2 Technical assistance activities for 2006

The technical assistance component ($450,000) will be implemented throughout the project implementation (through 2008). Most of the activities defined in the annual plan for 2005 and will continue implementation during 2006. In addition, the following activities are proposed for the 2006 annual program:

- *Technical assistance to prevent illegal trade of CFCs.* This component will provide technical assistance to the customs office to prevent illegal traffic of CFCs.

- *Analysis of the impact of the closing of PRODUVEN on CFC markets*: This will include reviewing the market for CFCs in Venezuela and the

impacts of potential shortcomings in supply of CFCs on the different sectors;

- *Regional workshops*: This component aims at carrying out 4 regional workshops to help consumers explore the use and feasibility of CFC substitutes.

- *Public Awareness campaign:* This activity will support the ozone protection communication strategy prepared by FONDOIN. It will highlight the importance of the closing of the CFC production facility and Venezuela's contribution to the protection of the ozone layer. It will also support the main event of the International Ozone Day.

- *Technical assistance for PRODUVEN workers.* This component will help develop a program that will be aimed at providing training and technical assistance for workers laid off from PRODUVEN in order to make them competitive for new labor markets.

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

### 1.3 Project Management Unit

The existing project coordination unit established at FONDOIN will continue its activities. FONDOIN will allocate one professional staff position on a full-time basis 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.

## 1.4. Compensation to PRODUVEN

For this Annual Plan 2006, a request of US$1.75 Million is being made according to the Agreement between the GOV and the ExCom. These resources will be disbursed based on the accomplishments by PRODUVEN of the 2005 CFC production caps of the same agreement. 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 2006 ANNUAL PROGRAM

### TABLE 1A: POLICIES AND REGULATIONS

| Proposed policy/regulation | Ministry/Agency to be in charge | Planned date of effectiveness |
|---|---|---|
| Banning of ODS Imports (Decree 3228 / 04) | Ministry of Environment and Natural Resources | Done (Nov 2004) |
| Production caps | Ministry of Environment and Natural Resources & FONDOIN | Accomplished in 2004 / Continuing during 2005 |

### TABLE 1B TECHNICAL ASSISTANCE ACTIVITIES AND TRAINING ACTIVITIES

| Name of TA/Training activity | Estimated costs | Duration |
|---|---|---|
| Strengthening of Customs Office to prevent illegal traffic of CFCs | 15,000 | |
| Impact of closing CFC production on local CFC markets | 45,000 | 1 Year |
| Regional Workshops to identify alternatives to CFCs and to support the use of non-ODS. | 15,000 | 1 Year |
| Public Awareness campaign and main event for the International Ozone Day | 15,000 | 1 Year |
| Training and technical assistance for workers from PRODUVEN in order to make them competitive for the labor market | 25,000 | |

### TABLE 1C: PROJECT MANAGEMENT UNIT

| Name of activity | Estimated costs | Duration |
|---|---|---|
| One professional staff full-time | 15,000 | 1 Year |

### TABLE 1D: COMPENSATION TO PRODUVEN

| Name of activity | Estimated costs | Duration |
|---|---|---|
| Compliance with 2005 production target | 1,650,000 | 2006 |

## ANNEX 2

## CONTACT AGENCY/ORGANIZATION AND PERSON IN CHARGE OF MANAGING THE NATIONAL IMPORT/EXPORT LICENSING SYSTEM.

**Ministerio del Ambiente y de los Recursos Naturales**
**Dirección General de Calidad Ambiental**
Sr. Douglas Marin, General Director
Phone: (58 212) 408 1116
Fax: (58 212) 408 1136
E-mail: fdiaz@marn.gov.ve
Address: Centro Simon Bolivar, Torre Sur, Piso 28,
Caracas, Venezuela

**Fundación Fondo Venezolano de Reconversión Industrial y Tecnológica (FONDOIN)**

Osmer Castillo, President
Phone: (58 212) 731 3932/2992
Fax: (58 212) 731 0015
E-mail: Fondoin@Cantv.Net
Address: Avenida Libertador Centro Comercial Los Cedros Piso 5
La Florida Sur - Apartado Postal 1050
Caracas, Venezuela

# AUDIT OF CFC PRODUCTION PHASE-OUT FOR VENEXUELA'S PRODUCTION SECTOR

## (PRODUCTOS HALOGENADOS DE VENEZUELA, C.A. PRODUVEN)

### Plant in Moron City, Carabobo State, Venezuela

**Prepared for:**
**World Bank**
**FONDOIN**

**Prepared by: F. A. Vogelsberg, Consultant to World Bank**

**Assisted by: Juan de Dios Naveda and Migel Sanchez, Auditors, Naveda, Castillo & Associates.**

**Mission Time Frame:**

**January 18 - January 21, 2006**

**Plant Inspection Dates:**

**January 19-20, 2006**

**Date of Report: January 25, 2006( rev Feb 24,2006)**

**Format and Table of Contents**

- **Verification Conclusions for CFC Production in Venezuela for 2005.**
- **Annex 1 - Text Covering details of technical effect by the writer for the Produven Mission.**
- **Annex II - CFC Production Verification tables for gradual closure of Produven.**
- **Annex III = Financial Verification by Naveda, Castillo & Associates**

## 1. Mission Objective

**Conduct on site verification of CFC Production in Venezuela's Productos Halogenados de Venezuela, C.A; PRODUVEN plant according to the Agreement for the Venezuela Production Sector and the Guideline of Executive Committee for the Implementation of the Montreal Protocol Excom, with regards to monitoring production gradual closure for year 2005 according to "Terms of Reference" for Verification. The schedule of maximum allowable production of CFCs is as follows:**

| Year | 2004 | 2005 | 2006 | 2007 | 2008 | Total |
|---|---|---|---|---|---|---|
| Max. Allowed Production MT | 4,400 | 2,913 | 2,913 | 0 | 0 | |
| Total MLF grant USD Million | 3.3 | 8.1 | 1.75 | 2.3 | 1.05 | 16.5 |
| PRODUVEN | 3.2 | 8 | 1.65 | 2.2 | 1 | 16.05 |
| FONDOIN | 0.1 | 0.1 | 0.1 | 0.1 | 0.05 | 0.45 |
| Agency Fees | 0.2475 | 0.6075 | 0.1312 | 0.1725 | 0.0787 | 1.2375 |

## 2. Persons Contacted

**FONDOIN: Not Present**

**PRODUVEN**

**Carlos J. Cubedda X-Director General (Caracas)**

**Mauro Castro - Administration Manager**

**Antonio Estrada - Plant Manager**

**Yajaira De Gravis - Accounting Manager**

## 3. VERIFICATION CONCLUSIONS WITH RESPECT TO VENEZUELA'S CFC PRODUCTION BY PRODUVEN

| Type of CFC Product | Total Production | | Stocks in 2005 (MT) | | |
|---|---|---|---|---|---|
| | ODS (MT) | ODP (Tonnes) | Opening | Closing | Change |
| CFC-11 | 248.2 | 248.2 | .961 | 208.4 | +207.4 |
| CFC-12 | 2203.2 | 2203.2 | 113.4 | 752.2 | +638.8 |

The target limit for Total CFC Production is 2913 MT per the Agreement. The Verified total CFC production is 2451.4 MT or 461.6 below the target limit; 15.8% lower than allowed.

Total consumption of CTC for producing 248.2 MT of CFC-11 is 298 MT and the CTC/CFC-11 ratio is 1.202 vs (theoretical 1.12) a 91.3% yield. The consumption of CTC for producing 2,203.2 MT of CFC-12 is 3,035.4 MT and the CTC/CFC-12 ratio is 1.378 vs (theoretical 1.272); a 92.3% yield.

Consumption of HF for producing 248.2 MT of CFC-11 is 39.7 MT and the HF/CFC-11 ratio is 0.160 vs (theoretical 0.145). The consumption of HF for producing 2,203.2 MT of CFC-12 is 828.8MT and the HF/CFC-12 ratio is 0.376 vs (theoretical 0.330)

Verified monthly production data and raw materials consumption data are recorded in Annex II of this report, while the Verification process as well as assessment findings are described in Annex I

## Annex I

### General

This is the second visit by the writer to the plant. The first visit was in February 2002 to evaluate the condition and the capacity of the plant. The current visit is the first for verification as others carried out the prior year verification.

This location had apparently not been instructed to prepare specific records and documents to aid in the comparing production records to the verified financial documents. Next year's verification should be proceeded by a questionnaire containing tables so key data can be entered by the plant, returned to the verifier so they can be examined before arriving at the plant site.

### Verification Process

The two-person financial audit team from Naveda, Castillo & Associates had come to the site one day before the writer and essentially completed their audit by the time of my arrival. Hence, the only overlap occurred before I had much familiarity with the available documents.

Unlike many other plant verifications Produven and Venezuela represent a unique situation that makes CFC production Verification very easy, because of the tight controls on CTC imports. There is no CTC production in Venezuela and the only permissible importer is Produven for their CFC production. Produven must apply for a CTC import license 3-5 times/year and only after the license is granted can CTC be imported. All CTC imports are inspected closely by Customs before Produven has access to the material. The CTC is off-loaded from ships at the near by Port and placed in rented storage tanks and moved as needed to plant CTC storage by trucks. Each month the port and plant bulk CTC volumes are measured by an outside surveyor. Losses due to tank evaporation or tank heels are entered as inventory adjustments monthly.

Produven was unable to produce their 2005 CFC quota due to lack of CTC caused by Venezuelan government slow approval of CTC import licenses.

All HF is imported via the Port and trucked to the plant for use in producing CFC-11 & 12, HCFC-22 and 40% Aqueous HF.

CTC feed to the CFC plant produces CFC-11 and 12 concurrently, hence the split of CTC between products is by calculation after the monthly consumption and production figures are finalized. The auditors break down of CTC use per CFC product produced was used for the Tables showing CTC procured, consumed, as well as starting and ending stocks. The above situation also applies to HF since the HF consumed by each CFC is a month end allocation. In addition the same supply of HF is used to produce HCFC-22 when the plant is "swung over" from CFC production.

All CTC and HF movements from the port to the plant are via truck and are documented by raw material receipts that are given a sequence number so verification is very reliable. All receipts for CTC and HF were verified as accurate.

The plant is operating at less than one-half of capacity to produce the allowed CFCs and the required HCFC-22, but when they do operate they run it at high rates so the operation is more stable. Because of this, the financial accounting firm divides monthly production by 30 MT/day (rated capacity per day) and uses the result as the approximate number of operating days. However, the plant maintains bound control logbooks that note every significant activity for each shift the plant is operating. Using these logs we were able to compute the exact numbers of operating hours for each of the 9 months CFC-11 and 12 were produced. These figures are typically 2-3 days larger than the auditors method and are the values reported in this year's Annex II. The plant operated 101 24 hour days producing CFC 11 and CFC 12. The auditors report allocated 35 days to HCFC 22 production. Therefore the plant utilization was less then 40% for the year.

While the production data for 2005 shows CFC-11 produced in five months and CFC-12 in 9 months; the reality is that in four months of the nine all resultant CFC-11 was recycled back to the

reactor for conversion to CFC-12. For this reason it is not practical to examine reactor feed rates for a month to provide an independent check of the official reported production.The fact that plant CTC to CFC yields are in the 91-92% range and their reported production is about 16 % below allowable quantities assures that they have not exceed their target production level for 2005.

Official daily plant production is determined by measuring levels in the crude CFC tanks, CFC-12 refining column receivers and CFC-11 receivers. They transfer daily production to their plant bulk storages and fill containers as required to meet customer requirements or inventory goals. Hence, there is no meaningful relationship between packaged products and monthly new CFC production. They have very complete records of inventories and packaged goods so it would be possible to reconcile the annual packing activity vs customer sales, returns, new production and bulk inventories. It was concluded that this time consuming exercise was not necessary in view of other pertinent information.

Plant personnel were very cooperative and generated several different documents that I requested to aid in understanding year 2005 data, but also to reconcile some of the confusion that existed in last year's audit.

Future Activities

Produven will cease CFC-11/12 production at the end of 2006. They plan to operate the facility as an HCFC-22 plant. Towards this end we reviewed their plans to utilize much of the existing CFC Plant equipment for augmenting raw material and finished product storages. All of their reassignments seem reasonable from an engineering and commercial point of view and makes sense as it will allow cost reductions by essentially eliminating the rental of any port bulk tankage as well as provide equipment necessary for preparing and storing fluorocarbon blends that will replace CFC-12 in the refrigeration equipment after market.

They would like to retain the old steel CFC reactor as an emergency unit when repairs on the stainless steel HCFC-22 reactor are required. This is reasonable since in reality any HCFC-22 plant is capable of producing CFCs if they have access to CTC, which in Produven's case will cease at the end of 2006.