



#### **OCCASION**

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



#### **DISCLAIMER**

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

#### FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

#### **CONTACT**

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org



#### Control Ambiental Profesional del Norte S.A. de C.V.

Lago Tana # 60, Col Huichapan, Delegación Miguel Hidalgo, Distrito Federal, C.P. 11290, MEXICO.

Tel/Fax (52) 5552342831/5552342830

www.capdelnorte.com



## FOURTH REPORT Final Report on Technicians Training

Contract No. 2005/075.



PROJECT No. MP/MEX/04/031

National CFC Phase-out Plan Refrigeration Sector in Mexico-Technicians Training.

December 7, 2005.

Biól, Edgar Daniel Salmerón C.

Ing. Martin Salas Martinez

Revised by:

Lic. Agustín Sánchez

# TECHNICIANS TRAINING FINAL REPORT

**ORGANIZED BY:** 

CONTROL AMBIENTAL PROFESIONAL DEL NORTE, S.A. DE C.V.

**JOINTLY WITH:** 

OZONE PROTECTION UNIT OF THE SECRETARIAT OF ENVIRONMENT AND NATURAL RESOURCES,

UNITED NATIONS FOR INDUSTRIAL DEVELOPMENT ORGANIZATION

**AND** 

**ELECTRICAL ENERGY SAVINGS TRUST** 

FINANCED BY:

MULTILATERAL FUND FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL









Mexico, from October 24th to November 30th, 2005.

December, 2005.

#### TABLE OF CONTENTS

1.0.		CUTIVE SUMMARY	
2.0.	BACK	KGROUND.	3
3.0.		ETIVOS	
4.0.	EXPE	ECTED RESULTS	5
5.0.	PART	ICIPANTES	6
6. <b>0.</b>	METH	HODOLOGY	7
7.0.		TENTS	
8.0.	RESU	JLTS, RECOMMENDATIONS AND CONCLUSIONS	
	A.	RESULTS	10
	В.	RECOMMENDATIONS.	11
	C.	CONCLUSIONS	12
9.0.	FOLL	OWING PLAN	12
10.0.	CONS	SULTANCY REFERENCES:	13
ANN	EXE	A	15
ANN	EXE	В	24
ANN	EXE	C	25
ANN	EXE	D	35

#### 1.0. EXECUTIVE SUMMARY

The Electrical Energy Savings Finance Programme (Programa de Financiamiento para el Ahorro de la Energía Eléctrica, PFAEE) and the Integral Systematic Savings Programme (Programa de Ahorro Sistemático Integral, ASI), have as their main objective to give finantial help to domestic users of the Comisión Federal de Electricidad (CFE), for them to substitute their old refrigeration and air conditioning equipment for new more efficient and electricity consumeless equipment that do not harm the ozone layer.

During these Courses a link was stablished between the operation of the PFAEE/ASI and the National CFC Phase-out Plan, promoted by the National Ozone Protection Unit (Unidad de Protección a la Capa de Ozono, OPU) of SEMARNAT, in order to acheive two major objetctives: a) Energetic saving when a substitution and disposal of old efficientless refrigeration and air conditioning equipments is being made; b) To protect the ozone layer when good practices are applied during CFC recovery and storage that is container within those equipments, avoiding their release to the atmosphere.

Course contents allowed to review many aspects from the environmental point of view to protect the ozone layer, as well as the integration of such Good Practices within the diary operation of Storage Centres.

This effort was complemented with the equipment and tools delivery to each of the Storage Centres for them to perform good practices during CFC recovery, storage and final disposal, likewise equipment and tools demostration for their correct use and the practices performed by the attendants under the supervisión of instructors.

The National CFC Storage Network was created, through fitting out 10 Regional CFC Storage Centres, located in 10 cities all over the country, which will have the responsibility and capacity to receive recoverd gas that other Local Storage Centres will send, the one that will be sent to a facility that withholds proper equipment and infrastructure to reclaim or destroy recoverd CFC.

Finally, it is worth to mention that with the performance of these Courses of Good Practices for Management, REcovery, Storage and Final Disposal of CFC and Used Lube Oils, the efforts of two institutions that carry out very important projects for our country development were strengthened: Electrical Energy Savings Trust (Fideicomiso para el Ahorro de la Energía Eléctrica, FIDE) and National Ozone Protection Unit (Unidad de Protección a la Capa de Ozono, OPU) of the Secretariat of Environment and Natural Resources (Secretaría del Medio Ambiente y Recursos Naturales, SEMARNAT).

#### 2.0. BACKGROUND.

In Mexico, currently, substitution of domestic low energetic efficiency refrigeration and air conditioning equipment of the Comisión Federal de Electricidada users' is being performed, through the Electrical Energy Savings Finance Programme (Programa de Financiamiento para el Ahorro de la Energía Eléctrica, PFAEE) and the Integral Systematic Savings Programme (Programa de Ahorro Sistemático Integral, ASI). Both Programmes have the goal to substitute around 6 million equipments, which implies the recovery of great quantities of used refrigerant lube oils and of refrigerant gases, mainly CFC-12 and in some cases HFC-134a, contained in refrigerators; and HCFC-22, contained in air conditioning equipment.

Once these equipment have been substituted, they are sent to the Storage Centres, were they are stricken off when the compressor is being destroyed, and the refrigerant gas and used lube oil recovery is performed.

In this sense, the National Ozone Protection Unit (OPU) of SEMARNAT, is now following up the National ODS Refrigerants Elimination Plan, with help of the Multilateral Fund for the Montreal Protocol implementation, through the United Nations Industrial Development Organization (UNIDO). Among the projects that derive from this plan we can find the PFAEE/ASI Storage Centre Technicians Training Project.

To guarantee that the technicians who operate the Storage Centrer perform Good Practices in handling, recovery, storage and final deposal of chlorofluorcarbons (CFC's) and used lube oils, FIDE, OPU and UNIDO accorded to deliver 9 training courses to 90 Storage Centres, inviting SEMARNAT, PROFEPA and FIDE/ASI, representatives, in order to update a total of 260 people.

#### 3.0. OBJETIVOS.

To know the importante of the ozone layer, depletion causes, and environmental and human health implications for its depletion.

To inform the Storage Centres of the national legal and normative frame surrounding the activities being performed there.

To know the international response that has been carried out to control and eliminate ozone depleting substances, stablished by the Vienna Convention and the Montreal Protocol, as well as the commitments that Mexico must accomplish.

To know the efforts made by the countries who have signed the Montreal Protocol to revert the ozone layer damage.

To know the strategies, programmes, projects and rules as part of our contry national response to control and eliminate ozone depleting substance consume.

Update the knowledge and practices of the technicians of the FIDE/ASI Programme, for CFC and used lube oil recovery, handling, storage, and final deposal.

To know the technologies available to make proper disposal of recoverd refrigerant gases and used lube oil from the equipment that has been substituted.

Equip with adequate equipment and tools to 90 Storage Centers so that they perform good practices during the recovery, storage and handling of refrigerant gases.

#### 4.0. EXPECTED RESULTS.

With the implementation of these training courses, it is expected to obtain the following results:

- Storage Centres will guarantee electrical energy saving since they will make the correct inhabilitation of inefficient domestic refrigeration and air conditioning equipment, fulfilling their obligations stablished by the FIDE/ASI Programme.
- Likewise, Storage Centres will adequate their facilities and procedures to accomplish with rules, regulations and legislation at the federal, state and municipal level.
- On the other hand, Storage Centres will avoid CFC emissions to the atmosphere applying good practices in handling, recovery, storage, and final disponsal of recoverd refrigerant gases and used lube oils.
- From this point, Storage Centres will identify refrigerant gases that will be recovered not to mix and/or contaminate them. Once this has been done, recovered refrigerant gases will be stored adequately, attending applicable rules, as well as Good Practices that will be learned during the courses.
- With the National CFC Storage Network, Storage Centres will send their recovered refrigerant gases to the Regional CFC Storage Centre, to ease sending of these wastes to final disposal, whether for recycling, regeneration or destruction.
- By their side, Regional Centres will control recovered gases to send them for its final disposal to a facility with proper infrastructure and equipment for recycling, reclaim or destruction of recoverd CFC.
- Storage Centres will achieve their obligations and they will report to the corresponding instance within the stablished periods of time, quantifications of the inhabilitated equipment, as well as the amount of recovered refrigerant gas and used lube oils for each of them, using the formats they were handed over.

- Supervision and Coordination of the FIDE/ASI Programme, as well as the responsables and technicians of the Storage Centres, will standardize and apply procedures and rules stablished in the operation instructives of both programmes, incorporating good practices they will learn during the Course.
- SEMARNAT and PROFEPA representants will acquire a better knowledge of the activities being developed at Storage Centres and will make recommendations to the participants for them to regularize their documents and facilities to handle properly used oils.

#### 5.0. PARTICIPANTES.

A total of 281 persons were registered that assisted 9 training courses. This number corresponds to 170 assistants of the Storage Centres; 52 FIDE/ASI supervisors, 32 PROFEPA State Delegation Representatives; and 27 SEMARNAT State Delegation Representatives.

On part of the Storage Centers, to whom this course was directed, the academic level that the attendees hold comprises from basic high school to a superior technical level. On the other hand, the FIDE, SEMARNAT, and PROFEPA functionaries, have academic bachelors degrees and/or posgraduate degree.

In Annexe A is presented the Training course's attending list.

For the delivery of the courses, the instructors were the Biol. Edgar Daniel Salmerón Carreño. Eng. Antonio Acho Corona and Ch. Eng. Julio Enrique Reyes Sáenz.

On the other hand, Eng. Martin Salas Martinez and B.D. Agustin Sanchez Guevara, both from the Ozone Protection Unit (OPU), of SEMARNAT, informed the participants of the National Response.

Additionally, Eng. Mauricio Trejo, UNIDO Representative in Mexico, who was responsible of formalizing the delivery of donated equipment, explaining to the Storage Center's people in charge, their obligations according to the clauses of the loan contract.

For the official closure event, we had the presence of special guests such as M.Sc. Ana Maria Contreras Vigil, General Director of SEMARNAT's Air Quality, and Emissions and Contaminant Transference Registry; B.D. Jose Antonio Urteaga Dufur, FIDE's Programmes Subdirector; Eng. Jose Luis Bastos, Coordinator of the Federal Sea and Ground Zones and Coastal Areas, on behalf of PROFEPA in Veracruz; and B.D. Agustín Sanchez, OPU National Coordinator.

#### 6.0. METHODOLOGY.

This theory/practice course lasted for 10 ½ hours, beginning at 8:30 h, with a welcome message on behalf of the organizers, and concluding at 19:00 h, with the diploma delivery. In Annexe B the Program of the Course is included.

During the theory session, diapositives and three-dimensional animations were used, as well as two videos very applicable to the course.

During the practical session the participants were taught for the appropriate usage of the equipment and tools that were delivered in donation. Likewise, the participants performed their practices with the equipment and tools.

Previous to the end of each course, 30 minutes were dedicated so that the attendees could make comments, questions and suggestions openly, in several subjects related to ozone layer protection and FIDE/ASI Programme's Operation. FIDE/ASI, SEMARNAT and PROFEPA gave answers to doubts and questions of the participants and made recommendations for their Storage Centres operate according to stablished procedures and normativity. Finalizing, participation constancies were delivered and the group photo was taken with all the attendees.

In the city of Veracruz, the last training course was performed and in this city, the official course closure ceremony was held. During the closure distinguished functionaries of SEMARNAT, PROFEPA, FIDE and UNIDO were present.

In Annexe C, representative pictures of each of the Courses are attached, likewise some of the official closure event.

#### 7.0. CONTENTS.

During the Course, alter leveling the knowledge of the attendees, one of the main objectives was the sensibilization, as for adequate handling of CFC and the environmental implications that are entailed from improper use of these substances.

n this sense, the manner in which the course program was structured, allowed to revise the concept of the ozone layer, up to the recommendations for Good Practices for CFC recovery. For such purpose, slides were useful to present the content of the Course Manual, in a summarized and more visual manner to facilitate comprehension and take advantage of the time in practice as much as possible.

In first place, before initiating the course we spoke about the Life Cycle that products we use on a daily basis have, highlighting that in the phases of this cycle diverse environmental impacts are caused and diverse types of residues. The Course focused mainly on the last two phases, which are Use and Disposal.

As far as usage, referred to low energy-efficiency equipment, it was boarded in a general manner what FIDE is, as well as the programmes that it promotes for saving electric energy, amongst we can find the PFAEE/ASI. On this regard, operation requisites of Storage Centres were mentioned and the importance of the creation of these programmes.

On this first point the participants were asked if they knew the environmental problematic that wrong CFC and used lube oils handling implied, and if they knew the answer that had been generated at international level. With this, the Course Objectives were discussed, where delivery of the equipment on behalf of OPU and UNIDO was highlighted.

Following, we talked about the Ozone Layer, its importance and the causes of its depletion. In this theme, animations and illustrations were used with the finality to make more comprehensible the fact of how CFC are responsible of the ozone layer depletion. The ozone layer hole phenomenon was highlighted at the north pole as well as at south pole, likewise the consequences that brings increase of UV-B radiation pass.

To complement this theme, the video "The Ozone Layer in an Essay Tube" was used, which has a duration of 9 min. 58 sec., produced by FONDOIN and the University of Los Andes of Venezuela, provided by OPU. In this Final Report, a CD with this video is included.

Afterwards, the International Response theme, which has generated upon the discovery of the ozone layer depletion, was treated. In this chapter, Mexico's commitments with the international community through the Montreal Protocol were revised, and the role of the Multilateral Fund for the implementation of elimination measures of ODS was mentioned.

The theme of National Response was presented by B.D. Agustin Sanchez, National Coordinator of OPU, and Eng. Martin Salas Martinez, National OPU Refrigerants Plan Coordinator, who highlighted the importance of the support received on behalf of the Multilateral Fund, through UNIDO, as well as commitments upheld and the advancement in complying with ODS elimination. Closing their participation with the projection of a video titled "The Ozone Layer", produced by SEMARNAT, where it is achieved that the attendees identify the importance of their actions for the compliance of Mexico's Commitments. In the present report, a copy of this video is included.

The revision of the Judicial Normative Frame, allowed commenting on the aspects that all attendees should contemplate, mainly the Storage Centres, as far as handling hazardous wastes, as in the case of used lube oil. Here the proceedings and documents that should be complied and the obligation derived from their activity were revised.

The following theme dealt with Good Practices that are applicable to the activities performed at Storage Centres, where we went on about the precautions that should be taken in consideration while handling, recovering, storing and final deposal of the CFC and used lube oils.

Finally, the first part of the Course concluded with the integration of Good Practices in the operational procedures of the Storage Centres, involving administrative aspects they should not forget because of being a fundamental aspect for their operation.

During the practical session, the participants were taught the adequate usage of the equipment and tools that were delivered on behalf of UNIDO. Concluding this, the attendees were invited to perform the recovery of refrigerant gas under the supervision of the instructors.

Back in the training room, the attendees were invited to manifest their doubts, questions or suggestions, related to what was seen in the course, and a resume of lessons learned was made. Regarding what could not be revised because it was not one of the objectives of the Course, it was requested that the attendees wrote their questions, suggestions or comments, in the formats that were handed to them for these purposes, with the finality to make the reach the corresponding instance.

#### 8.0. RESULTS, RECOMMENDATIONS AND CONCLUSIONS.

#### A. RESULTS.

With the themes revised during the Course, all Storage Centres reaffirmed their role to serve two initiatives, in benefit of society and environment. First of all, to promote electrical energy saving by guarantee of inhabilitation of low energy efficient equipment, watching that equipments that are received comply with characteristics stablished by PFAEE/ASI.

Secondly, to practice ODS refrigerant gases recovery, using basic equipment that UNIDO donated, for which they avoid that CFC contained in substituted equipment are released to the atmosphere. With it, they contribute to stratospheric ozone concentrations may recover sooner and major UV-B exposure-risks are reduced.

All attendees knew the international response being generated, and the strategies and programmes that Mexico has carried out to comply with the acquired commitments from signature of Montreal Protocol.

With the presence of State Delegations' representatives of SEMARNAT and PROFEPA, Storage Centres could resolve their questions as for the requisites they must comply with for used lube oil handling and storage, considered as a hazardous waste in mexican legislation and normative. Likewise, they had the chance to meet these employees, whom they will turn to in case of specific doubts of their Storage Centres.

90 Storage Centres were equipped, which received the basic necessary equipment for an efficient operation for recovery and storage of refrigerant gases. All of them were explained of their obligations as favoured from this donation and they were highlighted in care they must have with tools and equipment received.

With the effort made with these Courses, Storage Centres will recover refrigerant gases applying Good Practices learned, in order to them be co-processed afterwards or, if is the case, to be sent for destruction.

For that purpose, Storage Centres were informed as for what they must comply with to promote reclaiming/recycling of recoverd refrigerant gases, highlighting the importance of acquiring some gas analyzer/identifier, to prevent mixtures and/or gas contamination.

On the other hand, National CFC Storage Network was created with 10 Regional Centres, which were favoured with two 350 kg containers, as well as an electronic gas analyzer/identifier, and two additional sets of service manifold.

Respect this, Regional CFC Storage Centres have the capacity to receive recovered gas from any of local Storage Centres, and will send it to final disposal, whether if destruction or coprocessing. In both cases, they must assure it will be with a company that owns adecuate technology and infrastructure for it.

Suggestions/comments/questions sheets were processed and we list the most frequent in Annexe D.

#### B. RECOMMENDATIONS.

All Storage Centres must pay attention on the requirements for recovery, storing and final disposal of refrigerant gases and, based on their needs, they must acquire adecuate equipment and tools for it.

Likewise, Storage Centres must apply Good Practices on their diary jobs. On the other hand, they must consider environmental implications involved in dismantling of received equipments.

#### C. CONCLUSIONS.

As mentioned above, from the mexican legislation and normative point of view, Storage Centres are responsibles of adecuate handling of generated wastes, like recoverd refrigerant gases. Doing it in the wrong way, compromiso them from the judicial point of view, with administrative and/or penal punishments. For such reason, all the ones who are dedicated to this activity, have an obligation to look for the solution of final disposal of these gases, which must be approved by OPU.

Recovery, storage and final disposal of refrigerant gases activity, is an environmental service that, as might have been confirmed by the attendees, requires a minimum of necessary equipment as prepared and actualized personnel. These requirements imply operational costs to Storage Centres, for which FIDE Programme Coordinations, must revise the quotes being payed, not to compromise their functionality.

Otherwise, it is necessary for FIDE/ASI Supervisions as for SEMARNAT and PROFEPA, to work closer to Storage Centres to guarantee they comply with obligations implied from their activity.

Finally, it is worth to highlight that with realisation of this national training journey, the begining of interinstitutional cooperation was achieved, which is very important for progress of our country. This link was possible, thanks to the will of all the involved and the intervention of such a trascendental institution for this purpose, like UNIDO.

#### 9.0. FOLLOWING PLAN.

All Storage Centres, Regional or Local, will be verified periodically by ONUDI, to confirm proper use of tools and equipment they received by loan. One year after, counting from delivery, tools and quipment will become automatically property of Storage Centres to whom they were delivered.

#### 10.0. CONSULTANCY REFERENCES:

- Programa de las Naciones Unidas para el Medio Ambiente. 1994. Buenos procedimientos en refrigeración. Manual de instrucción. PNUMA IMA. Francia
- Programa de las Naciones Unidas para el Medio Ambiente, 1999. Directrices para los sistemas de recuperación y reciclaje. PNUMA IMA. Francia.
- Programa de las Naciones Unidas para el Medio Ambiente. 2001. Capacitación Nacional en Buenas Prácticas en Refrigeración. Una guía de apoyo para las UNO. PNUMA IMA. Francia.
- Programa de las Naciones Unidas para el Medio Ambiente. 1998. Guía para la aplicación de los códigos de buenos procedimientos: Sector Refrigeración. PNUMA IMA. Francia.
- Programa de las Naciones Unidas para el Medio Ambiente. 2001. Manual de Capacitación de Oficiales de Aduana. PNUMA IMA. Francia.
- Programa de las Naciones Unidas para el Medio Ambiente. 2003. Manual de los Tratados Internacionales para la Protección de la Capa de Ozono. 6ª ed. PNUMA. Francia.
- Coopers & Lybrand, et al., 1990. CFC's and halons alternatives and the scope for recovery for recycling and destruction. United Kingdom.
- Hester, R.E. ed. 2000. Causes and environmental implications of increased UV-B radiation. The Royal Society of Chemistry. United Kingdom.
- Dossat, R.J. 1963. Principios de Refrigeración. CECSA. México.
- Cooper & Williams, B. 1989. Commercial, Industrial, Institutional Refrigeration Design, Installation and Troubble Shooting. Prentice Hall. U.S.A.
- Gosling, C.T. 2005. Applied Air Conditioning and Refrigeration. Ed. Pergamon. U.S.A.
- Stoecker, WF & JW Jones. 1982. Refrigeration and Air Conditioning. 2a ed. McGraw-Hill Book Co. U.S.A.

#### Internet web pages:

- Secretaría del Medio Ambiente y Recursos Naturales, Unidad de Protección a la Capa de Ozono (www.semarnat.gob.mx/dgca.html)
- United Nations Environmental Programme, Technology, Industry and Economy Division (www.uneptie.org)
- Programa de las Naciones Unidas para el Medio Ambiente (www.pnuma.org)
- United Nations for Industrial Development Organisation (www.unido.org)
- NASA-Ozone Watch (<a href="http://ozonewatch.gsfc.nasa.gov/index.html">http://ozonewatch.gsfc.nasa.gov/index.html</a>)
  Dra. Cristina Cortinas de Nava (<a href="http://www.cristinacortinas.com">www.cristinacortinas.com</a>)
  - Echarri, L. 2004. Libro electrónico de Ciencias de la Tierra y del Medio Ambiente (www.tecnun.es/Asignaturas/Ecologia/Hipertexto/indice.html)

## ANNEXE A

#### CONTROL AMEIENTAL PROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN GUADALAJARA, JALISCO ON OCTOBER 24, 2005.

No.	CITY	N# ME	INSTITUTION
1	IURUAPAN	IALVAREZ FRANCISCO JAVIER	ICENTRO DE ACOPIO
2	ICOLIMA	IAMABLE SANTIAGO MARCO ANTONIO	CENTRO DE ACOPIO
3	JALISCO	BARRAGAN B. JAIME	CENTRO DE ACOPIO
4	JALISCO	CALDERON CHAVEZ LUIS MANUEL	CENTRO DE ACOPIO
5	ICOLIM <b>A</b>	ICASTANEDA RODRIGUEZ JOSE	CENTRO DE ACOPIO
6	JALISCO	CASTILLO SERAFIN HECTOR	CENTRO DE ACOPIO
<del></del> -	JALISC <b>O</b>	CENICEROS DE AVILA MIGUEL ANGEL	CENTRO DE ACOPIO
8	NAYARI <b>T</b>	IDELGADILLO AGUIAR CESAR	CENTRO DE ACOPIO
<u> </u>	JALISCO	DELGADO HERNANDEZ JOSE ROBERTO	CENTRO DE ACOPIO
10	COLIMA	ESTRADA VALENCIA ANTONIO	SEMARNAT
11	JALISCO	FLORES GALLARDO ALBERTO	CENTRO DE ACOPIO
12	IURUAPAN	IGARCIA PARRA MIGUEL WILFRIDO	FIDE
13	JALISCO	GAYTAN SANDOVAL MARTIN ALVARO	SEMARNAT
14	MORELIA	HERNANDEZ ESTRELLA ALEJANDRO	FIDE
15	JALISCO	HERNANDEZ GUZMAN ERIC	FIDE
16	IPTO, VALLARTA	HERNANDEZ VENEGAS FABRICIO	CENTRO DE ACOPIO
17	URUAPAN	JUAREZ BEGUERISSE AARON	CENTRO DE ACOPIO
18	MORELIA	MALDONADO ALVAREZ CARLOS FRANCISCO	CENTRO DE ACOPIO
19	MORELIA	MALDONADO ALVAREZ MARIO ALBERTO	CENTRO DE ACOPIO
20	IRIO VERDE	MARTINEZ FLORES JOSE ALEJANDRO	CENTRO DE ACOPIO
21	RIO VERDE	MARTINEZ VENTURA TERESO	CENTRO DE ACOPIO
22	JALISCO	MONTELONGO CASANOVA HECTOR	PROFE <b>PA</b>
23	ICd, VALLES	NAVARRO MANZANO ALBERTO	CENTRO DE ACOPIO
24	URUAPAN	PINTOR GUARDIN JORGE	02111111 <u>0</u>
25	JALISCO	QUINTERO COVARRUBIAS JESUS	CENTRO DE ACOPIO
26	URUAPAN	IQUINTERO SANCHEZ FELICIANO	CENTRO DE ACOPIO
27	PTO. VALLARTA	RAMIREZ TORRES LAZLO AXEL	FIDE
28	S, LUIS POTOSI	RIVERA SIERRA ARMANDO	CENTRO DE ACOPIO
29	S. LUIS POTOSI	RODRIGUEZ RIVERA HERIBERTO	CENTRO DE ACOPIO
30	COLIMA	ROLON LLAMAS REBECA	PROF <b>EPA</b>
31_	INAYARIT	RUIZ RIOS BRAULIO	CENTRO DE ACOPIO
32	JALISCO	ISAHAGUN RUIZ JOAQUIN	CENTRO DE ACOPIO
3 <b>3</b>	ICd. VALLES	ISANCHEZ CARRILLO MARTIN	CENTRO DE ACOPIO
34	JALISC <b>O</b>	SOTO CASTAÑEDA MARIA TERESA	PROFE <b>PA</b>
35_	JALISCO	TENORIO CRUZ ANTONIO	CENTRO DE ACOPIO
3 <b>6</b>	PTO. VALLARTA	VACA TORRES FELIPE	CENTRO DE ACOPIO
37	JALISC <b>O</b>	VALERA PEREZ SAUL	CENTRO DE ACOPIO
38	ZAMOR <b>A</b>	VAZQUEZ RUIZ LUIS FERNANDO	CENTRO DE ACOPIO
39	ZAMORA	VAZQUEZ SANCHEZ ARTURO	CENTRO DE ACOPIO
40	NAYARIT	VELAZCO PEREZ MYRIAM G.	SEMARNAT
41	MICHOAÇAN	VERA AMAYA JAIME	SEMĀR <b>NĀT</b>
42	JALISC <b>O</b>	VICENCIO LOPEZ KARLA LILIANA	PROFE <b>PA</b>
43	IMICHOACAN	VILLASEÑOR GOMEZ ARTURO E.	PROFE <b>PA</b>

#### CONTROL AMBIENTAL FROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN LEÓN, GUANAJUATO ON OCTOBER 27, 2005.

No.	CITY	N/ ME	INSTITUTION
1	AGUASCALIENTES	IAGUIRRE MUNOZ ARTURO	FRIO FAST
2	CELAY <b>A</b>	ICACIQUE TORRES FRANCISCO RAMON	FIDE
3	LEON	ICAMARILLO MIGUEL REFUGIO	PROFEPA
4	LEON	ICERRO VELAZQUEZ JOSE HUMBERTO	CONTROL AMBIENTAL PROFESIONAL
5	QUERETARO	CORTES ABERTO	CERSA -
6	CELAYA	DURAN RIVERA JOSE MIGUEL ANGEL	CONTROL AMBIENTAL PROFESIONAL
7	ZACATECAS	IGALVAN MENDIETA ERASMO JOEL	ZACATECAS
8 1	AGUASCALIENTES	GARCIA MARTINEZ GERARDO	FRIO FAST
ě	DF	GARÇIA PEREZ MARTIN	COMITÉ ORGANIZADOR
ğ	QUERETARO	GONZALEZ SALOMON ALFREDO	SERVIFRIO
10	QUERETARO	IGONZALEZ SALOMON JORGE FRANCISCO	ISERVIFRIO
11	SAN LUIS POTOSI	IGUEVARA COLORES CARLOS FRANCISCO	GUEVAR <b>A</b>
12	AGUASCALIENTES	IGUTIERREZ DIAZ JUAN PABLO	FRISAN
13	ZACATECAS	HIRIARTT ESTRADA HUGO ALBERTO	SEMARNAT
14	QUERETARO	JIMENEZ EVA ARACELY	SEMARNAT
15	CELAYA	MARTINEZ GONZALEZ GONZALO	CONTROL AMBIENTAL PROFESIONAL
16	SAN LUIS POTOSI	MARTINEZ HERNANDEZ MIGUEL GABRIEL	GUEVAR <b>A</b>
17	QUERETARO	MARTINEZ MALAGON GUSTAVO	FIDE
18	SAN LUIS POTOSI	MARTINEZ MARTINEZ LUIS OCTAVIO	MARTELEC
19	LEON	MARTINEZ VEGA ROBERTO ABEL	PROFEPA
20	SAN LUIS POTOSI	IMORENO MARTINEZ EDER URI <b>EL</b>	MARTELEC
21	ZACATECAS	NAVALLE SORIANO JAVIER	FIDE
22	ZACATECAS	OLAGUE GARCIA SALVADOR	ZACATECAS
23	OUERETARO	OLGUIN ROBLES HECTOR	CERSA
24	AGUASCALIENTES	PALLAS GUZMAN JOSE SANTIAGO	FRISAN
25	LEON	PEÑA LOPEZ URIEL ALEJANDRO	CERSA
26	ZACATECAS	RAMIREZ JESUS	PROFEPA
27	LEON	ROCHA AGUIRRE MARIO CARLOS	FRIO FAST
28	OUERETARO	RODRIGUEZ ARGUELLO EDUARDO	PROFEPA
29	AGUASCALIENTES	ROSALES BAUTISTA FRANCISCO	FRIO FAST
30	GUANAJUATO	ROSALES RETANA MARIO	PROFEPA
31	AGUASCALIENTES	RUVALCABA ARELLANO LUIS FELIPE	SEMARNAT
32	SAN LUIS POTOSI	SERRANO FLORES MIGUEL ANGEL	SERVIFRIO SEMARNAT
33	GUANAJUATO	ISOLIS VERONICA	PROFE <b>PA</b>
34	LEON	TORRES DELGADO CESAR ALEJANDRO	CONTROL AMBIENTAL PROFESIONAL
35	LEON	VAZQUEZ HERNANDEZ JOSE DE JESUS	ISRAEL
36	AGUASCALIENTES	VERDIN BARBA CARLOS ALBERTO	ISRAEL
37	AGUASCALIENTES	VERDIN BARBA ISRAEL	ISRAEL
38	AGUASCALIENTES	VERDIN NAVARRO JOSE DE JESUS	FIDE
39	CELAYA	ZEDILLO VELOZ GEORGINA	IFIDE

#### CONTROL AMBIENTAL FROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN MONTERREY, NUEVO LEÓN ON OCTOBER 31, 2005.

No.	CITY	NAME	NOITUTITENI
	NUEVO LEON	ALVARADO DUSSAUGE ALEJANDRO	SERVICIOS ECOLOGICOS CORPORATIVOS DE MANTTO SA CV
	REYNOSA	ALVAREZ MARTINEZ MARIO FELIX	MABE MEXICO, S. DE R.L
	CD. JUAREZ	BARCENAS GUTIERREZ RENE	SERVI-PLUS
	TAMAULIPAS	CARRERA HERNANDEZ ELIA FRANCISCA	PROFEPA
	COAHUILA	CERVANTES BALDERAS JUANA MARIA	SEMARNAT
	CHIHUAHUA	CHAVIRA SANDOVAL DANIEL	ECOMETALIKA
	CHIHUAHUA	CHAVIRA SANDOVAL SILVIA	ECOMETALIKA
	CHIHUAHUA	COSTILLA ROSAS CARLOS OSVALDO	SERVIPLUS
	NUEVO LEON	ELIZONDO CASANOVA EVANGELINA	REFRICLIM RECICLADORA
	NVO. LAREDO	FLORES MUÑOZ JUAN	CONFORT DIGITAL, SA DE CV
	PIEDRAS	GARCIA AQUINO ROGELIO	COM. E IMP. DE PIEDRAS NEGRAS, SA DE CV
	TORREON	GARCIA MORALES JONHATAN	CONT. Y FAB. DE TORREON, SA DE CV
13	COMEZ PALACIO	GATTAS MERCADO CARLOS JACOBO	GASA
	NUEVO LEON	GONZALEZ FLORES BEATRIZ	PROFEPA
	CD. VICTORIA	GONZALEZ OVIEDO ANTONIO	CLIMAS PEGOSA, S. DE R.L.
	REYNOSA	GUERRERO TORRES JOSÉ LUIS	SERVICIOS AMBIENTALES DE REYNOSA
	CD. JUAREZ	HANFF GONZALEZ MAX	ECOLAM
	INUEVO LEON:	HERNANDEZ FORTANELLI SERGIO	SERVICIOS ECOLOGICOS CORPORATIVOS DE MANTTO SA CV
	NUEVO LEON	HERNANDEZ LOZANO ANTONIO	FIPATERM
	CHIHUAHUA	HERRERA GARCIA HECTOR ARMANDO	FIPATERM
	NUEVO LEON	ISORDIA CASTRUITA HUGO	FIPATERM
	SALTILLO	JIMENEZ LOPEZ GABRIEL	SERVICIOS ECOLOGICOS CORPORATIVOS DE MANTTO SA CV
	NUEVO LEON	LOZANO CARREÑO EUGENIO	REFRICLIM RECICLADORA
	CHIHUAHUA	LUCERO ARAMBULA JAIRO	ECOMETALIKA
	NUEVO LEON	MARTINEZ BRAVO MARIO HUMBERTO	FIPATERM
	NUEVO LEON	MERCADO CABAZOS EMMANUEL	SEMARNAT
	NUEVO LEON	MERCADO SANDOVAL JESUS	FIPATERM
	PIEDRAS	MUÑOZ FERNANDEZ JOSE MARIA	COM. E IMP. DE PIEDRAS NEGRAS, SA DE CV
	REYNOSA	NORIEGA CASTILLO JOSE MAGDALENO	MARE MEXICO, S. DE R.L
	MATAMOROS	NORIEGA SUAREZ HERNAN ULISES	CLIMAS ECOLOGICOS Y CONSERVACION DEL MEDIO
	CHIHUAHUA	PALMA ORTIZ MIGUEL	ECOMETALIKA
	ICOAHUILA	REYES VAQUERA VICTOR RODRIGO	PROFEPA
	NUEVO LEON	SALDIVAR SALDIVAR RICARDO GUADALUPE	SERVICIOS ELECTROMECANICOS SALDIVAR SA CV
	CHIHUAHUA_	SANCHEZ BOCANEGRA RODOLFO	FIPATERM
	GOMEZ PALACIO	SANDOVAL DE LA ROSA JORGE HECTOR	GASA
	TAMAULIPA\$	TORRES CABALLERO MIGUEL ANGEL	SEMARNAT
	CHIHUAHUA	ZAZUETA AVENDAÑO FRANCISCO JAVIER	RECICLAJES DE CHIHUAHUA

#### CONTROL AMBIENTAL PROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN CUERNAVACA, MORELOS ON NOVEMBER 7, 2005.

No. CITY	NA ME	INSTITUTION
1 GUERRERO	IAGUIRRE ESPINOSA ROSALBA	LOURDES DE LA TORRE
2 GUERRERO	CATALAN FLORES SABINO	SERVICIOS ESPECIALIZADOS DE
3 DF	CRUZADO MARTINEZ ALBERTO	ISEMARNAT
4 IMORELOS	DIAZ HERNANDEZ ELIGIO	FRANCISCO GONZALEZ SALOMON
5 IMORELOS	IGARCIA MARTINEZ JULIA ESTHER	SEMARNAT
7 IGUERRERO	GARCIA RODRIGUEZ MARTIN	PROTECCION AMBIENTAL DEL PACIFICO
8 GUERRERO	GONZALEZ SALOMON ANA MARIA	SERVIFRIO
9 MORELOS	IGONZALEZ SANTOS IVAN	ICAP DEL NORTE, SA DE CV
10 'DF	HERNANDEZ CANO HERMAN	ICAP DEL NORTE, SA DE CV
11 MORELOS	MARTINEZ NORIEGA JULIO CESAR	FIDE
12 MORELOS	IORTIZ MORALES URIEL	PROFEPA
13 (GUFRRERO	IREYES ACEVEDO JUAN ANTONIO	SERVIFRIO
14 :DF	IRIOS SANTELIZ JOSE GUADALUPE	ICAP DEL NORTE, SA DE CV
15 IDF	IRIOS TORRES MARIO ALBERTO	ICAP DEL NORTE, SA DE CV
16 IGUERRERO	IRODRIGUEZ FLORES JUAN PABLO	IPROFE <b>PA</b>
17 IDF	SALAS MARTINEZ MARTIN	SEMARNAT
18 !GUERRERO	SALAZAR ALVEA MARIA GUADALUPE	SEMARNAT
19 DF	ISALMERON VIEYRA DANIEL	CAP DEL NORTE, SA DE CV
20 IGUERRERO	SANCHEZ BOLEAGA OLIVER ORLANDO	FIDE
21 !DF	TREJO MENDOZA MAURICIO	IONUDI
22 IGUERRERO	UREÑA MOLINA ABRAHAM	LOURDES DE LA TORRE
23 IMORELOS	VAZQUEZ SILVA FAUSTO	FRANCISCO GONZALEZ SALOMON
24 MORELOS	ZARAGOZA HERNANDEZ VICTOR	CAP DEL NORTE, SA DE CV
25 IDF	ZULBARAN ALPIZAR JORGE	CAP DEL NORTE, SA DE CV

#### CONTROL AMBIENTAL FROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN VILLAHERMOSA, TABASCO ON NOVEMBER 14, 2008.

No.	CITY	NAME	INSTITUTION
	IVILLAHERMOSA	ALEJANDRO RAMON MARTIN	SERV. Y MANTTO DE AIRES ACOND, Y REFRIG.
2	VILLAHERMOSA	ARIAS CORDOBA TITO EVELIO	PROFEPA
3	VILLAHERMOSA	CADENA VALENZUELA VERONICA	PROFEPA
4	TAPACHULA	CHANG VELAZOUEZ CARLOS	ITECNOLOGICO DE TAPACHULA
5	TAPACHULA	CIGARROA LOPEZ EDGAR	IASI
	VILLAHERMOSA	GARCIA ORTIZ JOSE MANUEL	ISERVI REFRIJ.R.
	HUIXTLA	HERRERA ALTUZAR LEOPOLDO	JUAN FRANCISCO SUAREZ
8	DAXACA	JARQUIN MENDOZA NOEL ENRIQUE	SEMARNAT
9	CHIAPAS	JIMENEZ MORENO NOE	SEMARNAT
10	VILLAHERMOSA	LOPEZ ALVAREZ JOAQUIN	ISERV. Y MANTTO DE AIRES ACOND. Y REFRIG.
	i1 APACHULA	LOPEZ CALVO AMEL ANGEL	ITECNOLOGICO DE TAPACHULA
	IOAXACA	MARISCAL MARTINEZ ETELBERTO	ID'SUMAC
	VILLAHERMOSA	MARTINEZ ESCUDERO GLENDA NURI	SEMARNAT
	OAXAC <b>A</b>	MATADAMAS CRUZ INOCENCIO	PROFEPA
	ANIMAS TRUJANO	MEZA REYES MIGUEL ANGEL	CAP DEL NORTE SA CV
	ICHIAPAS	MONTEJO VAZQUEZ PRÖSPERO E.	PROFEPA
	STA CRUZ JOJOCATLAN	O'FARRIL JOSE ANTONIO	CONTROL ECOLOGICO AMBIENTAL
	VILLAHERMOSA	REYES ACUNA GUADALUPE	SEMARNAT
	VILLAHERMOSA	IRODRIGUEZ TEOFANI ALEJANDRO	. ASI
	CHIAPAS _	ISOLIS HERNANDEZ JOSE DAVID	SEMARNAT
	HUIXTLA	SUAREZ CANCINO JUAN FRANCISCO_	JUAN FRANCISCO SUAREZ
	ANIMAS TRUJANO	TORRES JUAREZ JOSE RODRIGO	CAP DEL NORTE SA CV
	VILLAHERMOSA	VAZQUEZ SANCHEZ JOEL	SERVI REFRI J.R.
	TUXTLA GUTIERREZ	ZAVALA ZAVALA LUIS OCTAVIO	LUIS OCTAVIO ZAVALA

#### CONTROL AMEIENTAL PROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN HERMOSILLO, SONORA ON NOVEMBER 21, 2005.

No.	CITY	NAME	INSTITUTION
1	HERMOSILLO	ACOSTA REY BLANCA XOCHITL	PROFEPA
- 2	HERMOSILLO	ALVARADO ALEJANDRO	REFRIEQUIPOS DE SONORA
3	AOLOVANI	ALVARO IEARRA ARTURO	CLIMAIRE SAIDE CV
4	IGUAYM <b>AS</b>	IBADILLA CARLOS JAIME	FRIO DEL PACIFICO DE EMPALME
5	HERMOSILLO	BURTON FLORES OSWALDO	DISTHER COOL
6	IMEXICALI	CAMEZ CONTRERAS ENRIQUE	SEMARNAT
7	ICD. OEREGON	CONANT TOMAS ERNESTO	WINDMASTER
8	GUAYMAS	DUARTE FEDERICO	MULTIDISEÑOS
9	iGUAYMA <b>S</b>	IGARCIA MARTINEZ ALBERTO	MULTIDISEÑOS
10	(HERMOSILLO	IGUEVARA ZAMORANO RICARDO	ASt
11	ENSENADA	INIGUEZ NUNO FELIX DE JESUS	INDUSTRIAS NAVALES MEXICANAS, SA DE CV
12	IMEXICALI	MANRIQUEZ TORRES ARMANDO	PROTECCION AL MEDIO AMBIENTE
13	MEXICALI	MARTINEZ REYES JUAN ARTURO	RECICLADORA DE METALES VAZQUEZ S. DE R.L. DE C.V.
14	IMEXICALI	MEZA SANDOVAL MIGUEL	PROTECCION AL MEDIO AMBIENTE
	IGUAYMAS	REYES VEGA JUAN CARLOS	FRIO DEL PACIFICO DE EMPALME
16	iHERMOSILLO	RODRIGUEZ OYAMA LUIS ALBERTO	REFRIEQUIPOS DE SONORA
17	IMEXICALI	RUIZ ESPINOZA JESUS	ASI
	TIJUANA	SALGUERO ROSAINZZ MARIO	INDUSTRIAS NAVALES MEXICANAS, SA DE CV
19	NOGALES	SOTO YEPIZ EDGAR	EL CAASINO
20	CD. OBREGON	VALDEZ LEYVA RUBEN	WINDMASTER
21	INOGALES	VALENZUELA SOMBRA GERMAN	EL CAASINO
22	IMEXICALI	VAZQUEZ ALVAREZ JUAN MANUEL	RECICLADORA DE METALES VAZQUEZ S. DE R.L. DE C.V.
23	HERMOSILLO	VERDUGO TORRES JESUS OCTAVIO	DISTHER COOL
24	INAVOJOA	VIGUEIRAS VALENZUELA JESUS	CLIMAIRE SAIDE CV
25	IHERMOSILLO	AGUIRRE SYMONDS RAUL	ASI
26	HERMOSILLO	ALVAREZ CORONADO VINCIO	ASI
27	AOLOVANI	GARCIA PEREZ RUBEN DARIO	ASI
28	AOLOVANI	IGUERRERO LUNA MIGUEL	ASI
29	IGUAYM <b>AS</b>	SANCHEZ NAVARRETE ADALBERTO	ASI

#### CONTROL AMBIENTAL PROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN CULIACÁN, SINALOA ON NOVEMBER 24, 2005.

		T. BIARS	INSTITUTION
No.	CITY	NAME	
1_1_	CULIACAN	CASTILLO GUERRERO ALBERTO	MAS FRIO
2	MAZATLAN	CASTILLO PARTIDA JOSE ROSALIO	CLIMAIRE, SA DE CV:
	CULIACAN	CHAVEZ TIRADO VICTOR HUGO	TRIED, SA DE CV
	CULIACAN	ESPINOZA LOPEZ OCTAVIO	SEMARNAT
	ILOS MOCHI <b>S</b>	FARIAS JOSE JAVIER	FARNEY
	CULIACAN	FERRERIRO RAMIREZ ARTURO	MAS FRIO
7_	LOS MOCHIS	FLORES GALLEGOS LORENZO	MARTINEZ CHATARRA
8	CULIACAN	GAMEZ MALDONADO GABRIEL	ASI
9	CULIACAN	GUARDADO VELAZOUEZ ALFREDO	PROFEPA
10	CULIACAN	GUEVARA ZAMORANO RICARDO	ASI
11	IGUASAV <b>E</b>	INZUNZA MORENO RAMON ALFREDO	CAP DEL NORTE SA DE CV
12	IGUASAVE	LEAL MORENO HORACIO	CAP DEL NORTE SA DE CV
13	MAZATLA <b>N</b>	LOPEZ ROJO VICTOR	CLIMAIRE, SA DE CV
14	CULIACAN	MACIAS MUNOZ PEDRO	ASI
15	BC. SUR	MARQUEZ GONZALEZ DANI <b>EL</b>	SEMARNAT
. 16	LOS MOCHIS	MARTINEZ VAZQUEZ JOSE MARIA	MARTINEZ CHATARRA
17	CULIACAN	MORENO QUIROZ MARCO ANTONIO	PROFEPA
18	BC. SUR	MUÑOZ VEGA DANIEL	PROFEPA
19	LA PAZ	TEJEDA SANTILLAN JUAN	REFRITEC DE BAJA CALIFORNIA, SA DE CV
20	LA PAZ	VEGA JAIME ARTURO	REFRITEC DE BAJA CALIFORNIA, SA DE CV
21	BC. SUR	VERDUGO OLACHEA GERMAN	ASI
22	CULIACAN	CHAIDEZ VALENZUELA LUIS LEONARDO	ASI
23	CULIACAN	IRIBE GONZALEZ JORGE	ASI
24	CULIACAN	MORENO MORENO MOISES	ASI
25	LOS MOCHIS	OSUNA PARENTE JUAN DANIEL	ASI
26	CULIACAN	SERNA VEGA CRISTIAN PAUL	ASI
27	MAZATLAN	TOLOSA HUERTA ADRIAN	ASI
28	GUASAVE	ZAZUETA AHUMADA EDGAR	ASI

#### CONTROL AMBIENTAL PROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN MÉRIDA, YUCATÁN ON NOVEMBER 28, 2005.

No.	CITY	NAME	INSTITUTION
1	QUINTANA ROO	AGUILAR CAHUICH SERGIO IVAN	ASI
2	CAMPECHE	CANUL EK JULIO CESAR	ASI
3	MERIDA	DOMINGUEZ MARENCO ALFONSO	SEMARNAT
4	QUINTANA ROO	GARCIA ESQUIVEL JOSE LUIS	JORGE LUIS GARCIA ESQUIVEL
	MERIDA	HERNANDEZ JORGE ALEJANDRO	CREDICLIMAS, S DE RL
6	MERIDA	LOPEZ MAY CARLOS	ASI
7	MERIDA	MEDINA PIÑA ELVIRA GUAĐALUPE	PROFE <b>PA</b>
8	MERID <b>A</b>	PARRA CORONADO NATIVIDAD	ASI
9	QUINTANA ROO	PECH CASANOVA DIONISIO ALBERTO	PROFE <b>PA</b>
10	MERI <b>DA</b>	RAMIREZ MANUEL JESUS	CREDICLIMAS, S DE RL
11	MERIDA	SALAS GAMBOA JAVIER IGNACIO	PROFE <b>PA</b>
12	CAMPECHE	SAN MIGUEL MANZANO JULIO EDUARDO	JULIO EDUARDO SAN MIGUEL MANZANO
13	MERID <b>A</b>	SEPULVEDA JOSE LUIS	SEPULVEDA
14	CAMPECHE	SOLEMAN SILVAN ALBERTO	MA. DEL SOCORRO GONZALEZ CASTILLO
15	CAMPECHE	SOLEMAN SILVAN MOISES	MA. DEL SOCORRO GONZALEZ CASTILLO
16	MERIDA	SUASTE RIVAS ISRAEL ALEJANDRO	ASI
17	QUINTANA ROO	YAM CARDENAS CINTHYA YARENI	SEMARNAT

#### CONTROL AMBIENTAL PROFESIONAL DEL NORTE, SA DE CV STORAGE CENTRES AND PERSONNEL LIST FOR THE COURSE IN VERACRUZ, VERACRUZ. ON NOVEMBER 30, 2005.

No.	CITY	NAME	INSTITUTION
1	STA ANA CHIAUTEMPAN	AMADOR BELLO JAIME	SERVICIO RAMOS REFRIGERACION
2	POZA RICA	ARGÜELLES NAVARRETE FERNANDO	POZA RICA REFRIGERACION, SA DE CV
3	ACAYUCAN	BLANCO PULIDO EZEQUIEL	SERVICIO DEREFRIGERACION Y MANTTO
4	ACAYUCAN	BLANCO PULIDO MANUEL	SERVICIO DEREFRIGERACION Y MANTTO
5	XALAPA	CARMONA VALERIO ROSA	FIDE
6	ITEHUACAN	CERDA FUENTES JORGE	TECNODEOMESTICA TEHUACAN
7	XALAP <b>A</b>	CEVALLOS HUERTA DANIEL	CAP DEL NORTE, SA DE CV
8	(TLAXCALA	CUANALAO CABALLERO RUBEN	FID <b>É</b>
9	XALAP <b>A</b>	CUEVAS GARCIA JESUS	CAP DEL NORTE, SA DE CV
10	VERACRUZ	ESPINO RODRIGUEZ JUANA	FIDE
11	APIZACO	FERNANDEZ MENDEZ RAYMUNDO	CERSA
12	!COATZACOALCOS	GAMBOA HERNANDEZ JOSE ANTONIO	CONSTRUCCIONES Y SERVICIOS DE LA CUENCA
13	ICOATZACOALCOS	GAMBOA NAVARRETE ANTONIO	CONSTRUCCIONES Y SERVICIOS DE LA CUENCA
14	VERACRU <b>Z</b>	GONZALEZ MARTINEZ JOSE	PROF <b>EPA</b>
15	XALAP <b>A</b>	GONZALEZ VAZQUEZ JULIO CESAR	CAP DEL NORTE, SA DE CV
16	HUEYOTITLAN	HERNANDEZ ELIZALDE ANDRES	D SUMAC
17	APIZAC <b>O</b>	HERNANDEZ HERNANDEZ REY	CERSA
18	MINATITLAN	HERNANDEZ MEDRANO RICARDO	MEDRANO AIRE ACONDICIONADO
19	IMINATITLAN	HUMBRERAS MEDRANO JAVIER	MEDRANO AIRE ACONDICIONADO
20	PUEBLA	JIMENEZ GARCIA LUZ MARIA	CAP DEL NORTE, SA DE CV
21	IPUEB <b>LA</b>	JUAREZ MARTINEZ JUAN LUIS	FIDE
22	TEHUACAN	MACÍAS GAYTÁN MIGUEL ANGEL	TECNODEOMESTICA TEHUACAN
23	TLAXCALA	MARQUEZ DE LA ROSA MAXIMILIANO	SEMARNAT
24	DF	MARTINEZ GONZALEZ GONZALO	CAP DEL NORTE SA DE CV
25	iPUEBL <b>A</b>	MIRANDA ANGEL	SEMARNAT
_26	ICOATZACOALCOS	MORALES ESTRADA JUAN CARLOS	FIDE
27	IPOZA RICA	NAVA RANGEL JUAN	POZA RICA REFRIGERACION, SA DE CV
28	TLAXCALA	ORTIZ PEREZ JORGE ENRIQUE	PROFEPA
	XALAPA	PELAYO MIRANDA DORA LUZ	CAP DEL NORTE, SA DE CV
	HUEYOTITLAN	PIÑON GARCIA PEDRO	D SUMAC
31	STA ANA CHIAUTEMPAN	RAMOS RAMOS ROGELIO	SERVICIO RAMOS REFRIGERACION
	IPOZA RICA	VILLEGAS MARQUEZ CRISTINA	FIDE
33	VERACR <b>UZ</b>	VIZCAINO PRIMO ABUNDIO	FIDE

## ANNEXE B

Good Practices in Handling, Recovering, Storage, and Final Disposal of Chlorofluorocarbons (CFC's) and Used Oils in PFAEE/ASI Storage Centres.

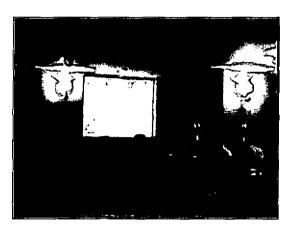
#### **PROGRAM**

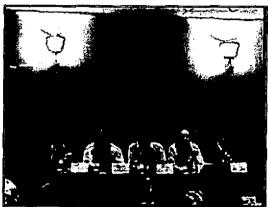
7: 00 - 8:00 8:00 - 8:30 8:30 - 8:45 8:45 - 9:00 9:00 - 9:10 9:10 - 10:00 10:00 - 11:00 11:00 - 11:20 11:20 - 12:30 12:30 - 13:00 13:00 - 14:00 14:00 - 15:00	Wellcome a PAEE Cor Pro International Good Integral Proe Quest	Breakfast Participant's Registry Wellcome and Introducing Message PAEE/ASI Programmes Course Objectives Ozone Layer Problem Solution: International and National Response. RECESS Good Practices and Integral Procedure in a Storage Centre Questions and Answers MEAL Course Objectives Analysis and Discussion	
15:00 - 15:30 15:30 - 16:00 16:00 - 17:30 17:30 - 18:00 18:00 - 18:30 18:30 - 19:00	(Incorpora D Autoevalu	Depart to SC 15:00 – 15:20 Reces	

## ANNEXE C

Place: Guadalajara, Jalisco.

Date: October 24th and November 11th, 2005.





Picture 1. View of theoretical session where distribution of training room is noticeable.

Picture 2. Exhibitors, answering while questions session in the Course.



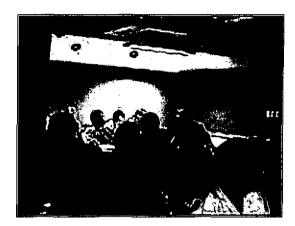


Picure 3. Attendees receiving loan equipment.

Picture 4. Attending recommendations from Eng. Martín Salas of OPU.

Place: León, Guanajuato.

Date: October 27th and November 10th, 2005.





Picture 5. Attendees in León.

Foto 6. Exhibitors attending participants questions.



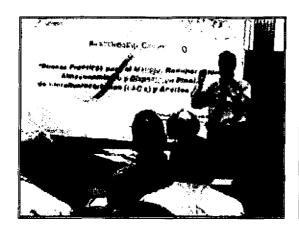


Picture 7. Instructor Julio Reyes showing equipment operation,

Picture 8. One of Storage Centres representatives, checking the tools and equipment he had received.

Place: Monterrey, Nuevo León.

Date: October 31st, 2005.

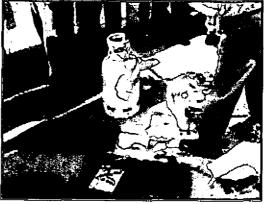




Picture 9. Instructor Daniel Salmerón during theoretical explanation of the Course.

Picture 10. View of the training room during the Monterrey Course.



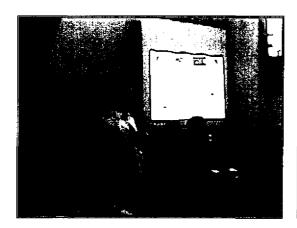


Picture 11. ITE-Mexico representative explaining the operation of equipment.

Picture 12. Tools and equipment visible to all of the attendees.

Place: Cuernavaca, Morelos.

Date: November 7th, 2005.

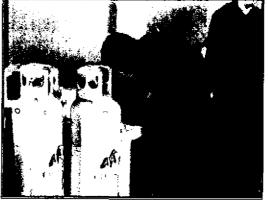




Picture 13. Wellcome message to the attendees from Eng. Antonio Acho.

Picture 14. Presentation of Eng. Martín Salas from OPU, about strategies and plans in Mexico.





Picture 15. Eng. Mauricio Trejo of UNIDO Mexico, delivering one tools and equipment *kit* .

Picture 16. Attendees receiving delivered equipment,

Place: Villahermosa, Tabasco. Date: November 14th, 2005.

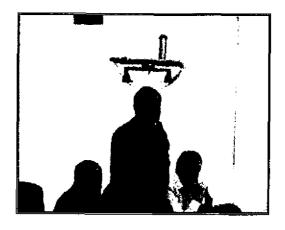




Picture 17. View of exposition and audiovisual material.

Picture 18. Audience at Villahermosa.





Picture 19. Showing service manifold funtioning.
Picture 20. Goodbye message from OPU.

Place: Hermosillo, Sonora.

Date: November 21st, 2005.





Picture 21. Commencement Ceremony.

Picture 22. Explanation of gas identification/analysis equipment.





Picture 23. Informing the responsible of the Regional CFC Storage Centre.

Picture 24. Group picture at the end of the Course.

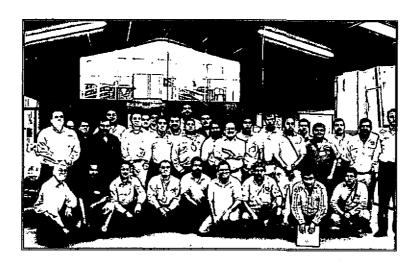
Place: Culiacán, Sinaloa. Date: November 24th, 2005.





Picture 25. Recovery machine revision of operation.

Picture 26. Inhabilitated equipment conection to recover refrigerant.



Picture 27. Group picture at the end of the practical session.

Place: Mérida, Yucatán.

Date: November 28th, 2005.



Picture 28. While 'The



Picture 29. Equipment delivery to representatives of Storage Centres.

Place: Veracruz, Veracruz.

Date: November 30th, 2005.



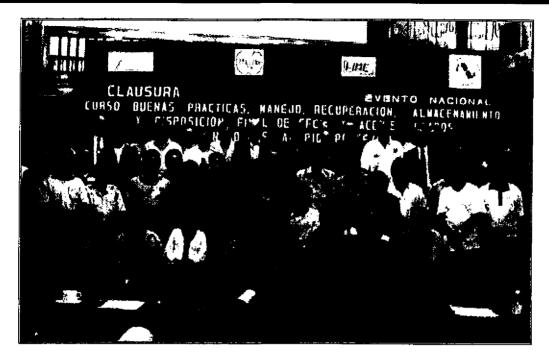


Picture 30. Equipment operation demostration to SEMARNAT authorities.

Picture 31. Operation explanation to M.Sc. Ana María Contreras, General Director of CARETC of SEMARNAT.



Picture 32. Audience at the Official Course Clorusure Event.



Picture 33. Final picture of the Official Training Course Closure Event.

### ANNEXE D

#### FOR FIDE:

- 1. It is necessary to standardize Storage Centres operation procedures, as well as Supervision and Distribution obligations.
- 2. To promote lube oil análisis to know if it can be declassified as a hazardous waste.
- 3. Previous to the authorization for stablishment of a new Storage Centre, besides electrica energy savings, it shall be informed about environmental implications that CFC and used oil recovery imply, among many others.
- 4. To agree joint visits with a SEMARNAT representative and a Programme Supervisor, to make a formality regarding obligations compliance and to guarantee an efficient operation of storage centres.
- 5. To inform SEMARNAT State Delegations, once procedures have been standardize, to guide StorageCentre's person in charge about environmental matters.
- 6. FIDE must have a public domain available list of authorized Storage Centres that are operating actually, and of Regional CFC Storage Centres. An example for this could be the list of authorized companies for handling of hazardous wastes.
- 7. ¿Is there any other programme for industrial equipment substitution?
- 8. There is a lack of difussion of the Programme, from the electrical energy savings and from the CFC control point of view. People are willing to cooperate.
- 9. To publish Programme benefic statistics, informing periodically and openly the amounts of equipment substituted by entity, as well as of recoverd refrigerant gas quantity.
- 10. To consider that once an equipment has been received by Storage Centres, it will not leave back. If they do not comply with the requirements of the Programme, Storage Centre will not give a receipt, but might be handled out of the Programme for CFC recovery.
- 11. To supervise Storage Centres for good usage of the equipment they recieved in loan, as a control measure.

- 12. To consider criteria at Coordinations, for Storage Centres with specific lay-outs, since some of them promote time and movement reductions, reducing work risks as well. This, obviously, as far as environmental normativity is complied and they guarantee equipment inhabilitation.
- 13. Distributors training at Coordinations, concerning Good Practices they must keep with substituted equipment, as the right way to write down equipment data, measures, etc.
- 14. FIDE should promote this kind of Training Courses among the Programmes it runs, with the final goal of standardize criteria and procedures, to guarantee electrical energy savings, but emphasizing environmental care and the benefits from the correct operation of such Programmes.

#### For SEMARNAT:

- 1. To make a broader difusion of the Ozone Layer Protection Unit web page.
- 2. To supervise Storage Centres for good use of the equipment they received in loan as a controlmeasure.
- 3. To agree joint visits with a Programme Supervisor, to make a formality regarding obligations compliance and to guarantee an efficient operation of storage centres.
- 4. To deliver more information to State Delegations related to this kind of Programme operations, as well as some diffusion material concerning the importante of Ozone Layer and what substances are affecting it, like methil bromide, used at farm lands.