Customs Officers Training on Monitoring & Control of Trade in ODS

GRENADA

St Georges, Grenada
11 - 15 April, 2005

Organized by:

Government of Grenada
in co-operation with the
United Nations Environment Programme (UNEP DTIE)

Financed by:

Multilateral Fund for the Implementation of the Montreal Protocol

Ministry of Agriculture, Lands, Forestry, Fisheries, Public Utilities, Energy and MNIB
TABLE OF CONTENTS

Executive Summary 3
1. Background 5
2. Objectives 6
3. Expected results 6
4. Participants and speakers 7
5. Methodology 8
6. Contents and structure of the training 9
7. Results and lessons learned 10
8. Follow-up action plan 11
9. Evaluation by participants 12
10. Annexes 13

Annex 1 Workshop Agendas 14
   Annex 1.1 Train the Trainers Workshop Agenda 14
   Annex 1.2 Agenda for Day 4 18
   Annex 1.3 Agenda for Phase 2 Workshop 19

Annex 2 List of Participants and Trainers 21
   Annex 2.1 Train the Trainers Workshop: 11 - 13 April 21
   Annex 2.2 Phase 2 Planning Session: 14th April 21
   Annex 2.3 Phase 2 Training: 15th April 21
   Annex 2.4 List of trainers for the Trainers Workshop 22
   Annex 2.5 List of Trainers for Phase 2 22

Annex 3 Workshop recommendations 23

Annex 4 Reports of Break out Session 25

Annex 5 Evaluation by participants 27

Annex 6 Reference documents 29

Annex 7 UNEP DTIE OzonAction Programme 30

Appendix 1: Slides for Phase 2 training 32
Executive Summary

This training programme for customs officers and other key stakeholders to be involved in the enforcement of the Ozone Depleting Substances (Control) Bill was undertaken as part of the overall Refrigerant Management Plan (RMP) of Grenada, which was approved by the Executive Committee of the Multilateral Fund in 2001. The Government of Grenada acceded to the Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol on Substances that Deplete the Ozone Layer and the London Amendment on March 31, 1993. Grenada also ratified the Copenhagen and Montreal Amendments to the Protocol on May 20th 1999 and the Beijing Amendment on January 12th, 2004. The country has also prepared the Ozone Depleting Substances (Control) Bill which has received extensive stakeholder reviews, and following the incorporation of the recommendations of the Customs Training exercise, will be presented to Parliament for passage into law. This is expected to be accomplished by September 2005. The main objectives of the training programme were to provide customs officers and other stakeholders with the skills and knowledge necessary to monitor and control the imports of ODS and products (including equipment) containing them, and detecting and preventing illegal trade, as will be required under the Bill.

The training was conducted over five days. The first three days were used to conduct a train-the-trainers workshop for local customs trainers, senior officers and relevant stakeholders, and the preparation of a programme for a one-day training module for use during Phase 2 of the Customs Training Programme. On Day 4 the Phase 2 training module was further developed by preparing the appropriate presentations for the programme, identifying key training materials and approaches and briefing of local trainers. The seven trainers who will deliver the Phase 2 training were closely involved in preparing the programme and training materials, including the contents of the presentations to be used during the Phase 2 training. On Day 5, the local trainers delivered the training to sixteen participants comprising mainly of Customs officers (13) and other stakeholder.

The preparations for the workshop required the development of a “Customs Officers Handbook for the Monitoring and Control of Trade in Ozone Depleting Substances” by the National Ozone Unit. This document complements the UNEP training manual “Training Manual for Customs Officers: Saving the Ozone Layer” by providing country-specific information and data. Local presenters contributed additional training materials.

The workshop included presentations by Government representatives during the opening and closing sessions. Coverage was provided by local print and radio media and included coverage of the opening session as well as interviews with the UNEP representative.

The design of the training followed an interactive and participatory approach and involved one international trainer, a representative of UNEP’s CAP Programme and five local presenters. Two working groups were created during the breakout session in order to discuss specific topics, including issues raised by participants as being critical to the successful implementation of the licensing regime. During a subsequent working group session participants agreed on detailed workshop recommendations (see Annex 3) and finalized the agenda for Phase 2 of the customs training (see Annex 1.3).
A practical hands-on session was included in the programme to identify different types of refrigerants using digital refrigerant identifiers and the types of hoses, valves and couplings used for different refrigerants. Product and package labels were checked and participants had the opportunity to locate refrigerant labels on various refrigeration equipment and components.

Future challenges for customs authorities in enforcing international environmental agreements such as the Basel Convention, CITES, Kyoto Protocol, the Stockholm Convention and the Rotterdam Convention were discussed and the scope for synergies identified. The UNEP representative emphasised that special training for customs authorities is needed and that such training should be co-ordinated between the different Convention Secretariats. In this context reference was made to UNEP's Green Customs Initiative under which joint capacity development focusing on the requirements of a number of Conventions with trade implications will be undertaken for Custom officers.

All 14 participants evaluated the train the trainers workshop. The overall evaluation was 4.16 (with 5 being the maximum score). 72% of the participants rated the workshop as excellent and 28% rated it as very good.

The immediate result of the Train the Trainers workshop is the availability of 14 trained customs trainers, senior officers and relevant stakeholders and the finalization of a programme and training materials for the Phase 2 training. Seven local trainers (including the National Ozone Officer) who participated in the exercise on Day 4 will undertake the Phase 2 training and will also train new customs officers as part of the training curriculum of the customs department. These officers conducted the first Phase 2 training on day 5 of the training programme.

On Day 5, the seven Customs trainers delivered the one-day training programme developed during the Train the Trainers workshop to 16 trainees comprising 13 customs officers and 3 other stakeholders. This training was conducted under the guidance of the international trainer and the UNEP CAP representative.

Fifteen participants evaluated the train the trainer. The overall evaluation was 4.02 (with 5 being the maximum score). 64% of the participants rated the workshop as excellent and 36% rated it as very good.

The long term result of the training programme is to enhance awareness of ozone depletion issues among customs officers and other relevant stakeholders and to enable customs officers to enforce the licensing regime for ODS and products (including equipment) containing or using them.

The workshop report will be disseminated to the workshop participants and presenters. It will also be placed on UNEP's homepage at: http://www.unep-tie.org/ozonaction.html.
1. **Background**

Upon the discovery that CFCs and other man-made substances are leading to a depletion of the ozone layer, the international community negotiated the Vienna Convention for the Protection of the Ozone Layer in 1985. Following this, the Montreal Protocol on Substances that Deplete the Ozone Layer was negotiated in 1987 with the objective of reducing and eventually phasing out the production and consumption of ozone-depleting substances. Grenada acceded to the Vienna Convention and its Montreal Protocol on March 31st, 1993. The country also ratified the London amendment on that date, the Copenhagen and Montreal Amendments on May 20th, 1999 and the Beijing Amendment on January 12th, 2004.

In most developing countries the largest remaining sector in which ozone-depleting substances are still used is the refrigeration and air-conditioning servicing (RAC) sector. In 2003, Grenada consumed approximately 1.31 ODP tonnes of ozone-depleting substances (ODS), all of which were Annex A CFCs. All Annex A CFC consumed was in the refrigeration and air-conditioning service sector. Whereas all new equipment imported into Grenada is fitted with non-ODS technology, there is still a small amount of used equipment, particularly used vehicles entering the country with CFC-based technology. Any abrupt non-availability of CFC refrigerants would adversely impact on important sectors of the local economy. It is therefore essential for users of CFCs to be able to reduce and eventually phase-out their consumption in a coordinated, planned, and cost-effective manner in compliance with the country’s commitments under the Montreal Protocol. The baseline consumption for Grenada is 5.8 ODP tonnes, and the consumption in 2000 – 2003 was 3.24, 1.31, 2.80 and 1.31 ODP tonnes respectively. This means that the country is well within the Montreal Protocol consumption limits for those years and has already achieved its 2005 control measure. The eventual passage into law, and subsequent implementation of the Ozone Depleting Substances (Control) Bill will further accelerate the country’s phase out of ODSs, possibly ahead of the phase out date of January 1st, 2010.

In January 1998, the Executive Committee of the Multilateral Fund approved the Refrigerant Management Plan (RMP) for Grenada, to be implemented by UNEP DTIE. The RMP is a comprehensive approach to phasing out the use of ozone-depleting substances in Grenada's refrigeration and air-conditioning sector.

UNEP’s role is to coordinate the implementation of the two training elements of the RMP in cooperation with the National Ozone Action Unit:

1. The training programme in Good Practices in Refrigeration
2. The Training Programme for Customs Officers on the Control and Monitoring of Trade in Ozone depleting Substances and Related Technologies.

One of the obligations of Grenada is to implement an ODS import / export licensing system. The Ministry of Agriculture, where-in the National Ozone Unit is located is the agency that will manage this licensing system, but there will be the need for enforcement of the licensing system and labeling standards by the Customs authority and the Bureau of Standards respectively. Therefore, the ability of Customs and Standards officers to enforce controls over trade in ODS and ODS products and equipment is important for a successful and planned ODS phase-out.
Thus, customs training with assistance from UNEP DTIE is providing the means through which Grenada will be in a position to meet this challenge.

2. Objectives

The main objectives of this training programme are to provide the Customs, Trade, Legal, Police, Coast Guard and other relevant stakeholders with the skills necessary to monitor and control the imports of CFCs and other ODS and ODS-based products and equipment and to initiate Phase 2 of the Training Programme. The detection and prevention of illegal trade is part of this training.

The training objectives were achieved by:

i. Increasing awareness of ozone depletion issues;
ii. Introducing the types of ODS being used, and for which sectors and applications;
iii. Introducing the provisions and phase-out schedules of the Montreal Protocol and its Amendments;
iv. Providing an understanding of the national Refrigeration Management Plan;
v. Providing an overview of the proposed licensing system for ODS and its implications for customs officers and other stakeholders;
vi. Presenting the revised customs codes that allow for the identification of ozone-depleting refrigerants and products containing them;
vii. Refining and optimizing the establishment of the operational details of the monitoring and control system for ODS in Grenada;
viii. Providing an overview of customs regulations and monitoring and control systems for ODS in other Caribbean countries;
ix. Training in the use of identification equipment for refrigerants;
x. Designing the concept, agenda, strategy, and time schedule for the training of the remaining customs officers in the country and
xi. Conducting the first of the Phase 2 training.

3. Expected results

The immediate result is the availability of trained customs trainers, key stakeholders and customs officers. The long-term result is to enhance awareness of ozone depletion issues among customs authorities and other relevant stakeholders as well as the achievement of the training objectives as stated in Section 2.

A Montreal Protocol-related training module will be included in the ongoing training programme of the customs department for new customs officers. It will also be integrated in the refresher courses for experienced officers. Thus the sustainability of the training programme will be ensured.

In addition, synergies for the enforcement of other relevant international environmental agreements such as the Basel Convention, CITES, Rotterdam Convention and the Stockholm
Convention will be encouraged. The success of most international environmental agreements will depend on the continued support of the world’s customs authorities and other key stakeholders.

4 Participants and speakers

In total, 14 participants attended the train-the-customs-trainers workshop. They included eight customs officers from the various sections of the customs department around the country, as well as six key stakeholders from national agencies whose involvement and support is necessary for the successful implementation of the regulations. The six other stakeholders came from a number of agencies, including the Coast Guard, Ministry of Trade, the Grenada Bureau of Standards, the Grenada Ports Authority, Pesticide Control Board and the Produce Chemist lab. Seven trainers participated in the development of the Phase 2 training on Day 4. The list of participants for the Train-the-Trainers workshop is in Annex 2.1.

The resource persons for the train-the-trainers workshop were:

- Bishnu Tulsie - UNEP trainer;
- Artie Dubrie, - UNEP CAP Programme;
- Leslie Smith - National Ozone Officer;
- John Auguste - Senior Energy Officer;
- Christopher Joseph - Environmental Protection Officer;
- Michael Mitchell - Technician;
- Ezra Gilbert - Customs Officer

In addition, Mr Carlisle Felix, Comptroller of Customs addressed the closing session of the workshop. Additional speakers during the opening and closing sessions included:

- Mr. Gerald James - Chief trainer for Phase 2 Training;
- Mr. John Auguste - Senior Energy Officer;
- Mr. Leslie Smith - National Ozone Officer;

On Thursday, April 14th, seven local trainers (see Annex 2.5 for the list of local trainers), working under the supervision of the international trainer and the UINEP representative used the output from Session 16 of the Train the Trainers workshop to finalize the Agenda for the Phase 2 training. They also prepared the Power Point presentations and reviewed the material to be delivered during the Phase 2 training.

During the Phase 2 training on April 15th, fifteen (15) participants, including 12 customs officers, 1 officer from the Bureau of Standards and one from local supplier and a representative of the Grenada Ports Authority were exposed to the one-day training developed during Day 4 of the training. This training was delivered by the local trainers who participated in the train the trainers workshop and planning session for Phase 2 on Day 4 of the exercise.
5. Methodology

The training consisted of a 3-day Train-the-Trainers workshop designed by UNEP, a fourth day during which Phase 2 of the training programme was designed with the local trainers and a fifth day during which the local trainers delivered the one day Phase 2 training to 15 customs officers and other stakeholders under the guidance of the international trainer and the UNEP representative. During Day 4, the one day Phase 2 programme was finalized, power point presentations to deliver the training produced and the seven trainers identified to deliver the Phase 2 training briefed in the delivery of the workshop experiences. This approach enhances the training skills of the local trainers thereby increasing their confidence to undertake the Phase 2 training.

The preparation of the workshop required the development of the "Grenada Customs Officers Handbook for the Monitoring and Control of Trade in Ozone Depleting Substances" by the National Ozone Unit. The document complements the UNEP training manual "Customs Officers Training on Substances that Deplete the Ozone Layer by providing country specific information and data.

Figure 1: Schedule of 5-day training for Grenada customs training

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Phase 1</td>
<td>Phase 1</td>
<td>Phase 2 Training Planning</td>
<td>Phase 2 Training</td>
</tr>
<tr>
<td>Delivery of Phase 1 training</td>
<td>Design of Phase 2 training</td>
<td>Delivery of first Phase 2 training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 local trainers, senior customs officers and stakeholders trained, and Phase 2 training planned</td>
<td>Seven local trainers briefed in the delivery of Phase 2 training</td>
<td>Fifteen customs officer and other stakeholders trained by local training team</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key results:
- Immediate training of 14 trainers
- Phase 2 planning completed
- Improved skills of local trainers;
- First Phase 2 training delivered by local trainers

The workshop included presentations by Government representatives during the opening and closing sessions. Media coverage included the opening and closing ceremonies by the local press. In addition, the local press attended some training sessions on all five days of the workshop.
The design of the training followed an interactive and participatory approach and involved five local presenters. Two working groups were created during the breakout session in order to discuss specific topics and formulate workshop recommendations. (See Annex 4) These two groups also discussed and agreed on the agenda for the continued customs training (see Annex 1.3).

The UNEP Customs Training Manual, the Grenada Handbook and other relevant resource documents were used during the workshop and additional documents were displayed at the conference centre. Participants were also exposed to refrigerant containers of various sizes, various refrigeration and air-conditioning equipment, including MACs and compressors and the use of refrigerant identifiers and leak detectors.

Wrap-up sessions concluded each day's discussions. The participants conducted workshop evaluations (see Annex 5) for both the Train the Trainers Workshop and the Phase 2 Workshop and agreed a final set of recommendations (see Annex 3).

Each participant received a “Certificate of Participation” from the Government of Grenada. The Comptroller of Customs agreed to begin the further training of the remaining customs officers in May 2005 and indicated that this training would become mandatory for all customs officers.

The workshop report will be disseminated to all participants and members of the contact group on customs training. It will also be placed on UNEP's homepage at: http://www.uneptie.org/ozonaction.html.

6. Contents and structure of the training

The training materials were designed to ensure that the objectives set out for the workshop were achieved. To this end, the train-the-trainers workshop included the following sessions:

- **Session 1**: Ozone layer depletion;
- **Session 2**: International response;
- **Session 3**: National obligations and response;
- **Session 4**: National import/export licensing system;
- **Session 5**: Related international conventions;
- **Session 6**: Global and Regional context;
- **Session 7**: Role of customs officers and other key stakeholders;
- **Session 8**: Checking papers, forms and permits;
- **Session 9**: Illegal trade in ODS and ODS-containing equipment and goods;
- **Session 10**: Identification of ODS and ODS-containing equipment;
- **Session 11**: Practical exercises on identification of ODS;
- **Session 12**: Safe handling, transport and storage of ODS;
- **Session 13**: Introduction to Breakout Session 14;
- **Session 14**: Breakout Session on effective operation of ODS import licensing system and enforcement of ODS regulations;
- **Session 15**: Presentation of Findings of Breakout Session;
Session 16: Action planning for Phase II of the customs training;
Session 17: Workshop evaluation,

while the Phase 2 Training Programme included the following:

Session 1: Ozone Layer Depletion;
Session 2: International and National Response;
Session 3: National import/export licensing system;
Session 4: Role of customs officers and other key stakeholders;
Session 5: Checking Papers, Forms and Permits;
Session 6: Trade and identification of ODS and ODS-containing Equipment and Goods;
Session 7: Demonstration on identification of ODS;
Session 8: Health and Safety;
Session 9: Workshop evaluation.

7. Results and lessons learned

The objectives set out for the Train the Trainers workshop were fully met through the appropriate design of the workshop agenda during which the 15 workshop sessions addressed all relevant issues. A detailed evaluation of the most relevant issues is included in Annex 5.

<table>
<thead>
<tr>
<th>OBJECTIVES SET OUT</th>
<th>RESULTS ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Increasing awareness of ozone depletion issues</td>
<td>Through Sessions 1 and 2</td>
</tr>
<tr>
<td>ii. Introducing the different types of ODS being used and for which applications</td>
<td>Through Sessions 1, 3, 4, 10, 11, &amp; 12</td>
</tr>
<tr>
<td>iii. Introducing the provisions and phase-out schedules of the Montreal Protocol and its Amendments</td>
<td>Through Sessions 2, 3 &amp; 4.</td>
</tr>
<tr>
<td>iv. Providing an understanding of the national Refrigerant Management Plan</td>
<td>Through Sessions 3 &amp; 4</td>
</tr>
<tr>
<td>v. Providing an overview on the newly established licensing system for ODS and its implications for customs officers and other stakeholders</td>
<td>Through Sessions 4, 5, 6, 7 &amp; 8</td>
</tr>
<tr>
<td>vi. Presenting the revised customs codes which allow for the identification of ozone-depleting refrigerants and products containing them</td>
<td>Through Sessions 9 &amp; 10</td>
</tr>
<tr>
<td>vii. Refining and optimizing the operational details of the monitoring and control system for ODS in Grenada</td>
<td>Through Sessions 13, 14 &amp; 15</td>
</tr>
<tr>
<td>viii. Providing an overview of customs regulations and monitoring and control systems for ODS in other Caribbean countries</td>
<td>Through Sessions 6 &amp; 7</td>
</tr>
<tr>
<td>ix. Training enforcement officers in the use of identification equipment for refrigerants</td>
<td>Through Sessions 10, 11 &amp; 12</td>
</tr>
<tr>
<td>x. Consideration of health and safety issues.</td>
<td>Through Session 12</td>
</tr>
</tbody>
</table>
In addition, the following specific outcomes were achieved:

- Successful training and certification of 15 trainers on monitoring and controlling of imports of ODS and ODS products / equipment in Grenada.
- Demonstrating methods for the inspection of imported refrigerators, motor vehicles, compressors; the identification of refrigerants; and the checking of freight papers and labelling.
- The practical demonstrations included the use of digital refrigerant identifiers, identification of labels on refrigeration equipment, including compressors and various refrigerant cylinders.
- Exchange of information and experiences among participants and development of a network of personal contacts.
- Detailed workshop recommendations by the participants (see Annex 3).
- Certification of the participants by the Government of Grenada.
- Seven local trainers involved in the delivery of Phase 2 training.
- 15 Customs officers and other stakeholders exposed to Phase 2 training.

The following lesson was learned from the train-the-customs-trainers workshop:

- The issue of export licensing could become relevant to Grenada in the future. Therefore the draft Ozone depleting Substances (Control) Bill will be amended to cover exports of Ozone Depleting Substances.
- Many recommendations came out of the session on the ODS regulations and the licensing system. It will be important for the National Ozone Unit, in collaboration with the Office of the Attorney General, the Customs Department, the Ports Authority, the Bureau of Standards and the Pesticides Board to review these recommendations and give further recommendations to the government. The recommendations from the break out session are included as Annex 4.

8 Follow-up action plan

This training programme is part of the RMP for Grenada. As such it will be accompanied by other training and policy related activities as defined in the RMP and the Country Programme.

The NOU will establish a monitoring mechanism to ensure that the objectives of the training programme are met and will produce a follow-up report on the status of implementation of the training programme. The NOU will also re-activate the National Ozone Committee, which will most likely function as part of the National Climate Change Committee (given the number of common members the two bodies will have) to provide guidance in helping the country meet its obligations under the Montreal Protocol.
The National Ozone Unit will consider and, as far as possible, implement the workshop recommendations as adopted by the participants. The recommendations will also be communicated to the relevant decision-makers and politicians, and their support requested.

9 Evaluation by participants

For the train-the-customs-trainers workshop, the overall evaluation by participants was good (overall score of 4.16). All 15 participants completed and returned the evaluation questionnaire. Out of the 14 evaluations, 3 rated the workshop as “good” (21.0%), with a score above 4 and 11 as “excellent” (79%) with a score between 3 and 4 (see Annex 5).

The following are some of the comments received from the workshop participants:

- The course was of a high standard;
- The complexity of the control measures will require greater collaboration among stakeholders;
- Copies of the Ozone depleting Substances (Control) Bill should have been made available to participants;
- The course was very informative;
- More stakeholders (other than Customs) should have been involved;
- The chart with colour codes for ODSs should be included in the UNEP handbook;
- More time should have been allocated for discussions;

In addition, 14 of the fifteen participants who attended the Phase 2 training completed evaluations. The overall evaluation was 4.02 (with 5 being the maximum score). 64% of the participants rated the workshop as excellent and 36% rated it as very good.
## 10 List of Annexes

<table>
<thead>
<tr>
<th>Annex 1</th>
<th>Workshop Agendas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex 1.1</td>
<td>Train-the-Trainers Workshop Agenda</td>
</tr>
<tr>
<td>Annex 1.2</td>
<td>Agenda for Day 4</td>
</tr>
<tr>
<td>Annex 1.3</td>
<td>Agenda for Phase 2 Workshop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex 2</th>
<th>List of participants and trainers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex 2.2</td>
<td>Phase 2 Planning Session: April 14th.</td>
</tr>
<tr>
<td>Annex 2.3</td>
<td>Phase 2 Workshop: April 15th.</td>
</tr>
<tr>
<td>Annex 2.4</td>
<td>List of trainers for Trainers Workshop</td>
</tr>
<tr>
<td>Annex 2.5</td>
<td>List of trainers for Phase 2.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex 3</th>
<th>Workshop recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex 4</td>
<td>Report of Break out Session</td>
</tr>
<tr>
<td>Annex 5</td>
<td>Evaluation by participants</td>
</tr>
<tr>
<td>Annex 6</td>
<td>References Documents</td>
</tr>
<tr>
<td>Annex 7</td>
<td>OzonAction Programme</td>
</tr>
</tbody>
</table>

| Appendix 1 | Slides for Phase 2 Training. |
Annex 1: Workshop Agendas

Annex 1.1 Train the Trainers workshop Agenda

Division of Technology, Industry and Economics
Energy and OzonAction Unit

Tour Mirabeau, 39-43 quai André Citroën, 75739 Paris - Cedex 15, France, Tel: +33.1.44.37.14.50; Fax: +33.1.44.37.14.74
E-mail: unepie@unep.fr, URL: http://www.unepie.org/

National Train-the -Trainers Workshop for Customs Officers

Organised by the
United Nations Environment Programme
and the
Government of Grenada

Conference Room
Melville Street, Fish Market Complex
April 11 - 15, 2005

Programme

Day 1
10:00 Introduction: Bishnu Tulsie, UNEP Trainer
- Workshop objectives
- Training materials and display
- Self-introduction of participants including questions & answers

10:45 Session 1: Ozone Layer Depletion: Bishnu Tulsie, UNEP Trainer
- Ozone layer science
- Environmental and human health consequences
- UNEP video: Every Action Counts
- Discussion

11:15 Session 2: International Response: Artie Dubrie, UNEP
- International response - the Montreal Protocol and its Amendments
- Phase-out schedule and strategies for Article 2 and Article 5 countries
- Impact of the Protocol
- Discussion

11:45 Session 3: National obligations and response: Leslie Smith, Project Officer
- National phase-out obligations
- National response – Key Elements of the Refrigerant Management Plan
- Status of Projects
- Overview of National ODS consumption pattern
- Status of Compliance
- Data Reporting
- Discussion
12:30 Lunch

13:30 Session 4: National import/export licensing system: Leslie Smith/John Auguste
- National ODS regulations
- Structure of national import/export licensing system
- Institutional arrangements and procedures to manage the system
- Import quotas and application for permits and allowances
- Information to importers, wholesalers and end-users
- Handling of seized ODS and ODS-containing equipment and goods
- Enforcement and penalties
- Forms introduced by the licensing system
- Discussion

14:30 Break

14:45 Session 5: Related International Conventions: Christopher Joseph – Environment Protection Officer
- CITES
- Kyoto Protocol
- Basel Convention
- Rotterdam Convention
- Stockholm Convention on Persistent Organic Pollutants
- Common features related to the control of trade and synergies for customs authorities for effective enforcement
- Discussion

15:30 Session 6: Global and regional context: Bishnu Tulsie, UNEP Trainer
- Global production and trade with ODS and ODS-containing products
- Transhipment harbours, production, disposal, reclaim facilities in the region
- Regional and global trade agreements
- Implementation of revised HS codes in the region
- Impact on trade and economy
- Discussion

16:00 Wrap-up sessions and workshop recommendations

Day 2

9:00 Welcome and Review of Day 1

9:15 Session 7: Role of customs officers and other key stakeholders: Bishnu Tulsie, UNEP Trainer
- Key players in monitoring and control imports / exports of ODS and ODS-containing equipment and goods (customs, coast guard, police, court, chemistry laboratory, importers/wholesalers, end-users, NOU etc)
- Reporting legal and illegal trade with ODS and ODS-containing products
- Enforcing ODS legislation
- Checklist for customs officers
- Discussion
10:00  Session 8: Checking Papers, Forms and Permits: Ezra Gilbert – Customs Officer
- Application forms, permit forms, freight papers, retrofit certificates etc.
- Logistics and data management
- Practical exercise on checking freight papers and permits
- Data management and reporting
- Discussion

10:30  Break

10:45  Session 9: Illegal Trade with ODS and ODS-containing Equipment and Goods:
Bishnu Tulsie, UNEP Trainer
- Legal and illegal trade with Parties and non-Parties
- Detecting legal and illegal trade at local, regional and international level
- Trade with recycled, recovered, reclaimed or contaminated refrigerants
- Causes and trends of illegal trade
- Methods of smuggling
- Prevention of illegal trade
- Case study on illegal trade (Honeywell)
- Discussion

11:30  Session 10: Identification of ODS and ODS-containing equipment and goods:
Bishnu Tulsie, Trainer
- Harmonized System codes for pure and mixed ODS
- Common trade names for ODSs, including CFCs, HCFCs, methyl bromide, halons, solvents, foams, aerosols etc.)
- CAS numbers, ASHRAE numbers, UN numbers etc.
- Examples of labelling for ODS and colour codes
- Examples of labelling of ODS-containing equipment and goods
- Detection of mislabelled ODS containers, cylinders etc.
- Identification of ODS-containing equipment and goods
- Use of refrigerant identifiers (theory)
- Discussion

12:30  Lunch

13:30  Session 11: Practical exercises on identification of ODS: Michael Mitchell, Refrigeration Technician
- Examples of ODS containers and cylinders and ODS-containing equipment and goods
- Hands-on work with CFC detection equipment if available
- Identification of ODS-containing equipment and goods

16:00  Session 12: Safe handling, transport and storage of ODS: Bishnu Tulsie, UNEP Trainer
- ODS Chemical information relevant to customs officers
- Safe handling of ODS and ODS-containing products
- Safe transport and storage of ODS and ODS-containing products
- Safe sampling of ODS - who is allowed to take samples and to use refrigerant identifiers

16:30  Wrap up of Day 2 and Workshop Recommendations

Day 3

9:00  Welcome and Review of Day 2
9:15 Session 13: Introduction to break-out Session 14: Effective operation of ODS import / export licensing system and enforcement of ODS regulations: Bishnu Tulsi, UNEP Trainer
   - In addition to two key topics, participants may suggest 2 additional topics of interest:
     - Topic 1: How to effectively operate ODS import / export licensing systems
     - Topic 2: How to effectively enforce ODS regulations
     - Topic 3: (To be suggested by participants)
     - Topic 4: (To be suggested by participants)

9:45 Session 14: Break-out Session: Effective operation of ODS import / export licensing system and enforcement of ODS regulations: (Group Work)
   - Group moderators will co-ordinate the break-out sessions.
   - Group moderators will ensure the preparation of a short report and presentation of their findings including the group recommendations.

11:00 Break

11:15 Session 15: Presentation of findings of the group work to the plenary: Group Leaders
   - Presentation of group recommendations to the plenary
   - Discussion and adoption of group recommendations
   - Feedback on the break-out session
   - Hand-over of reports to the lead consultant

13:00 Lunch

14:00 Session 16: Action planning for Phase II and III of the customs training: Bishnu Tulsi, UNEP Trainer
   - How to design Phase II of the customs training (approach, duration, agenda, schedule, trainers, participants etc.)
   - Which training materials should be used for Phase II of the customs training and what should be the key contents of the training
   - How to ensure timely implementation, monitoring and reporting during Phase II and III
   - Discussion

15:00 Session 17: Workshop evaluation
   - Completion of evaluation questionnaires
   - General feedback and comments from participants and organisers
   - Wrap-up and Workshop Recommendations

15:30 Closing session and media briefing
   - Conclusions and outlook – Ozone Outlook
   - Closing statement by UNEP DTIE's OzonAction Programme
   - Closing remarks by UNEP Trainer
   - Hand-over of participation certificates – Permanent Secretary, Ministry of Agriculture
   - Closing remarks by Customs representative
   - Closing of workshop
   - Vote of thanks
Annex 1.2 Agenda for Day 4

9:00  Briefing on day’s activities and approach

9:15  Review of Workshop recommendations for Phase 2 and Preparation of an Agenda

10:00 Break

10:15 Selection of Slides for use in Phase 2 training and Preparation of PowerPoint Presentation

11:30 Briefing of trainers on Phase 2 training

12:30 Lunch

13:30 Briefing of Trainers on Phase II training continued.

15:30 Closure and Wrap-up
ANNEX 1.3: Agenda for Phase 2 Training

National Training Workshop for
Customs Officers

Organised by the
United Nations Environment Programme
and the
Government of Grenada

St. Georges, Grenada
April 15th, 2005

Programme
8:30 - Registration of Participants

9:00-9.10 Welcoming Ceremony: Customs, National Ozone Unit
Chief trainer: Mr. Gerard James
- Invocation
- Welcome address and workshop objectives:

9.10-9.20 Introduction: Chief trainer: Mr. Gerard James
- Self-introduction of participants including questions & answers

9:20-10.00 Session 1: Ozone Layer Depletion: Mr. Gerard James
- Ozone layer science
- Environmental and human health consequences
- Q&A

10:00-10.40 Session 2: International and National Response: Sergeant St. John Thomas
- The Montreal Protocol and its Amendments
- Phase-out schedule and strategies for Article 2 and Article 5 countries
- Impact of the Protocol
- National response – Key Elements of the Refrigerant Management Plan
- Data Reporting
- Q&A

10:40 11:00 Break

11:00 – 11:25 Session 3: National import/export licensing system: Mr. Leslie Smith, NOO
- National ODS regulations
- Structure of national import/export licensing system
- Institutional arrangements and procedures to manage the system
- Import quotas and application for permits and allowances
- Information to importers, wholesalers and end-users
- Handling of seized ODS and ODS-containing equipment and goods
- Enforcement and penalties
- Forms introduced by the licensing system
- Q&A
11:25 – 12:05 Session 4: Role of customs officers and other key stakeholders:  
*Ms. Ezra Gilbert*

- Key players in monitoring and control imports / exports of ODS and ODS-containing equipment and goods (customs, coast guard, police, court, chemistry laboratory, importers/wholesalers, end-users, NOU etc)
- Reporting legal and illegal trade with ODS and ODS-containing products
- Enforcing ODS legislation
  - Checklist for customs officers/ Implementation of revised HS codes in the region
- Q&A

12.05-12:40 -Session 5: Checking Papers, Forms and Permits: *Ms. Ezra Gilbert*

- Caribbean Single Administrative Documents (CARISAD)
- Forms introduced by the national regulations
- Q&A

12:40 – 1.30 Lunch

1:30-2:30 Session 6: Trade and identification of ODS and ODS-containing Equipment and Goods: *Mr. Algernon Belfon, Mr. Leanwall Perrotte*

- Detecting legal and illegal trade at local, regional and international level:
  - Common trade names for ODSs, including CFCs, HCFCs, methyl bromide, halons, solvents, foams, aerosols etc.
  - HS Codes, CAS numbers, ASHRAE numbers, UN numbers etc.
- Trade with recycled, recovered, reclaimed or contaminated refrigerants
- Causes and trends of illegal trade
- Methods of smuggling
- Prevention of illegal trade
- Examples of labeling for ODS and colour codes
- Examples of labeling of ODS-containing equipment and goods
- Detection of mislabeled ODS containers, cylinders etc.
- Identification of ODS-containing equipment and goods
- Use of refrigerant identifiers (theory)
- Case study on illegal trade (Honeywell)
- Q&A

2:30-3.00 Session 7: Demonstration on identification of ODS: *Mr. Robert Medford*

- Examples of ODS containers and cylinders and ODS-containing equipment and goods
- Demonstration of CFC detection equipment
- Q&A

3:00-3.15 Session 8: Health and Safety. *Mr. Leanwall Perrotte*

- ODS Chemical information relevant to customs officers
- Safe handling of ODS and ODS-containing products
- Safe transport and storage of ODS and ODS-containing products
- Safe sampling of ODS - who is allowed to take samples and to use refrigerant identifiers

3:15- 3.50 Session 9: Workshop evaluation: *Chief Trainer: Gerard James*

- Completion of evaluation questionnaires
- General feedback and comments from participants and organisers
- Wrap-up and Workshop Recommendations

3.50 Closing session and Presentation of Certificate

UNEP DTIE OzonAction Programme
# ANNEX 2 List of participants and trainers

## Annex 2.1 Train the Trainers Workshop: 11th -13th April

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharon Rose</td>
<td>Supervisor Customs</td>
</tr>
<tr>
<td>Cecilia George</td>
<td>Class 1 Customs Officer</td>
</tr>
<tr>
<td>Rene Parkes</td>
<td>Class 1 Customs Officer</td>
</tr>
<tr>
<td>Leanwall Perotte</td>
<td>Class 11 Customs Officer</td>
</tr>
<tr>
<td>Ezra Gilbert</td>
<td>Class 11 Customs Officer</td>
</tr>
<tr>
<td>Algernon Belfon</td>
<td>Class 11 Customs Officer</td>
</tr>
<tr>
<td>Gerard James</td>
<td>Class 11 Customs Officer</td>
</tr>
<tr>
<td>Eric Charles</td>
<td>Customs Officer</td>
</tr>
<tr>
<td>Lenroy Alexis</td>
<td>Grenada Ports Authority</td>
</tr>
<tr>
<td>Robert Medford</td>
<td>Grenada Bureau of Standards</td>
</tr>
<tr>
<td>St. John Thomas</td>
<td>Royal Grenada Police Force (Coast Guard)</td>
</tr>
<tr>
<td>Wayne Roberts</td>
<td>Royal Grenada Police Force (Coast Guard)</td>
</tr>
<tr>
<td>Christopher Johnson</td>
<td>Produce Chemist Lab</td>
</tr>
<tr>
<td>Derick Romain</td>
<td>Ministry of Trade</td>
</tr>
<tr>
<td>Valerie Ramoo</td>
<td>Pesticide Control Board</td>
</tr>
</tbody>
</table>

## Annex 2.2 Phase 2 Planning Session: April 14th

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerald James</td>
<td>Customs Officer (Chief trainer)</td>
</tr>
<tr>
<td>Ezra Gilbert</td>
<td>Customs Officer</td>
</tr>
<tr>
<td>Robert Medford</td>
<td>Bureau of Standards</td>
</tr>
<tr>
<td>Algernon Belfond</td>
<td>Customs</td>
</tr>
<tr>
<td>Leanwall Perrotte</td>
<td>Customs</td>
</tr>
<tr>
<td>St. John Thomas</td>
<td>Royal Grenada police Force (Coast Guard)</td>
</tr>
<tr>
<td>Leslie Smith</td>
<td>Project Officer, National Ozone Unit</td>
</tr>
</tbody>
</table>

## Annex 2.3: Phase 2 Training, 15th April

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dunstan Bristol</td>
<td>Preventive Guard - Customs</td>
</tr>
<tr>
<td>Fitzra Sylvester</td>
<td>Customs Clerk</td>
</tr>
<tr>
<td>Carlton Francis</td>
<td>Preventive Guard - Customs</td>
</tr>
<tr>
<td>Carvel Lett</td>
<td>Class 11 Customs Officer</td>
</tr>
<tr>
<td>Julia Charles</td>
<td>Class 11 Customs Officer</td>
</tr>
<tr>
<td>Evelyn Barry</td>
<td>Class 11 Customs Officer</td>
</tr>
<tr>
<td>Indira Mookram</td>
<td>Customs Clerk</td>
</tr>
<tr>
<td>Erica Pierre</td>
<td>Customs Clerk</td>
</tr>
<tr>
<td>Jasmin Ferguson</td>
<td>Customs Clerk</td>
</tr>
<tr>
<td>Michael Jones</td>
<td>Preventive Guard - Customs</td>
</tr>
<tr>
<td>Oswald Charles</td>
<td>Preventive Guard - Customs</td>
</tr>
<tr>
<td>Harry Mark</td>
<td>Customs Clerk</td>
</tr>
<tr>
<td>Billy Langaigne</td>
<td>Grenada Bureau of Standards</td>
</tr>
<tr>
<td>Kerry Bowen</td>
<td>Jonas Browne &amp; HubbardsHubbards (G’da) Ltd.</td>
</tr>
<tr>
<td>Rosemin Stanislaus</td>
<td>Customs</td>
</tr>
<tr>
<td>Kellon Fraser</td>
<td>Grenada Ports Authority</td>
</tr>
</tbody>
</table>
Annex 2.4  List of Trainers for the Trainers Workshop

Bishnu Tulsie – UNEP trainer;
Artie Dubrie, _UNEP CAP Programme;
Leslie Smith _ Project Officer, National Ozone Unit
John Auguste, _Senior Energy Officer
Christopher Joseph – Environmental Protection Officer
Michael Mitchell – Refrigeration Technician
Ezra Gilbert – Customs Officer

Annex 2.5: List of Trainers for the Phase 2

Gerald James - Customs Officer (Chief trainer)
Ezra Gilbert - Customs Officer
Robert Medford - Bureau of Standards
Algernon Belfond - Customs
Leanwall Perrotte - Customs
St. John Thomas - Royal Grenada Police Force (Coast Guard)
Leslie Smith - National Ozone Officer
ANNEX 3  Workshop Recommendations

Regulatory/legislative issues:

1. Check on the legal status of the Customs (Control and Management) Act and ensure that references in the Montreal Protocol Bill and Regulations are consistent with the current legal instrument under which Custom operates.
2. Revise Section 20 (b) of the Ozone Depleting Substances (Control) Act to ensure that disposal of seized goods/ODSs are in accordance with its provisions.
3. Section 20 (Page 38) of the National Handbook is not reflected in the text of the Bill. This is to be investigated and appropriate revisions made.
4. Include a definition of the word “Retrofitter” under Part 1 Section 2: Interpretation of the Bill.
5. Add to Section 12 a provision to allow the NOU to redistribute unused quotas if necessary.
6. Amend Section 7 to provide for the State to retrofit equipment if it is not done by the importer within the specified time, and for the cost of the retrofit to be recovered from the proceeds of the sale of the equipment.
7. Add to Section 7 text to authorize Customs to declare an area as a Custom Area for the purpose of undertaking the retrofit of equipment ordered by the Comptroller to be retrofitted.
8. Re: Section 7: Revise to give the NOU the authority to sell seized or uncleared goods in accordance with the regulations, and in consultation with Customs and the Port Authority.
9. Form 4: Add a column to the Table to include “Country of Origin”.
10. Forms 3 and 4: Change “Amount to be Imported” to “Balance on Quota”
11. Modify Form 5 (Order to Retrofit) to allow a Registered Retrofitter to sign the form to certify that the Retrofit was completed.
12. Consider providing in an appropriate place in the Bill, for joint site visits/inspection of possible user sites by two or more of the NOU, the Bureau of Standards, the Police and Customs, as the circumstances may require.
13. Consideration should be given to empowering the NOU to impose fines on persons found in violation of the Act if the offending party accepts that he has committed a breach, and the extent of the fine to be prescribed within the Act (Ref Customs Ordinance).
15. Include in the Bill, provisions for monitoring and reporting on the re export of ODSs and related technologies.

Operational Issues:

1. The NOU to provide Customs with the HS classifications for different ODSs.
2. Set standards for the issuing of license to store and sell controlled substances (ODSs).
3. Consider developing synergies with existing entities that have field presence and powers to conduct searches and seizure to help implement the Bill.

5. Circulate the revised regulations based on these recommendations to all participants for review and comment.

**Training:**

1. A follow up one-day workshop should be held with participants of the Train the trainer’s workshop to discuss implementation of the recommendations, implementation of the licensing system experiences with its implementation.
Annex 4  Reports from Group Session

Group 1

KEY PLAYERS AND THEIR ROLES

Customs Officers
National Ozone Unit
Licensing Agencies
Ministry of Trade
Pesticides Board
Reference: Page 180-181 (Trading Manual for Customs Officers)

OPERATIONAL PROCESS

Make recommendations that users of ODS as defined under the Montreal Protocol should be trained and certified by a recognized governing authority. (e.g. Methyl Bromide)
On the application forms there should by an additional space indicating certification number
The servicing companies should have responsible certified technicians with the necessary R&R devices
Set up a rental R&R system
A Penalty will be imposed for any false declaration as stipulated by the recognized governing authority
The person purchasing ODS should present their certificate in person

GROUP 2

KEY PLAYERS

 Minister
   ↓
Ozone Officers
   ↓
Chief Inspector
   ↓
Inspectors  Environmental Officers  Customs
   ↓
Registered Imports
PROVISIONS OF THE REGULATION

Monitoring, Control and Eventual phase out of ODS
Certification of technicians
Public Awareness

POWERS OF THE CONTROLLER 35 OF 1960/CUSTOMS ORDINANCE

Section 210 subsections a-d – Smuggling of Prohibited and Restricted Goods

PREFERRED OPTION

Sections 42-43 – Provision for Prohibitions and Restrictions under schedule 1-3
Section 46 – Provision for Prohibitions and Restriction as listed in other ordinance’s
Section 85 – Powers to request samples and take
Section 148 – Attempting to ship restricted or prohibited items
Sections 205 – Penalty for false declaration
Section 35 – Concealment
Sections 240 & 03 Power of arrest
Section 202- Writ of assistance/powers of forced search at any time

AREAS OF AYNERSIES AND CONFLICTS

Amendments between conflicting legislation
Relationship between Customs/Bureau, Customs/Pest control, Customs/Coast Guard

RECOMMENDATIONS

- Customs should be represented on the ODS committee
- Addressing, Appeals, Amendments, Reporting Data, Public Awareness
- Awareness program on the procedures for the engorgement of the ODS act.
- Training mixtures/blend identification
ANNEX 5 Evaluation by the participants

Evaluation Questionnaire

The following questionnaire was given to participants to evaluate the training course. The responses are tabled in a graph in the following page. The rating “1” stands for poor performance and the rating “5” for excellent performance.

1. What is your overall evaluation of the course?
2. Did the course provide the information you expected?
3. Was the communication between participants possible and useful?
4. Was the composition of the audience adequate?
5. As far as the contents of the presentation are concerned, did you find them adequate in explaining the following issues:
   a) Environmental and human health consequences of ozone layer depletion?
   b) International response to ozone layer depletion (Montreal Protocol)?
   c) National obligations and phase-out strategy (RMP)?
   d) Regulatory framework for the national import/export licensing system?
   e) Prevention of illegal trade of ODS?
   f) Role of customs officers in enforcing the import/export licensing system?
   g) Role of other stakeholders in implementing the import/export licensing system?
   h) How to identify ODS and equipment containing ODS and the use of ODS identifying equipment?
   i) Issues relating to safe storage and handling of ODS?
   j) Data reporting requirements and procedures?
   k) Enforcement, penalties and prevention of illegal trade

6. Did the training course provide you with adequate information regarding the subsequent training of the remaining customs officers?
7. Did the training course provide appropriate training material as the basis for the subsequent training of the remaining customs officers?
8. Can you think of any additional material that should be included in the "UNEP Customs Training Manual" to enable it to better achieve its goals?
9. Can you think of any additional material that should be included in the “Samoa Handbook on ODS Legislation and Import / Export Licensing System" to enable it to better achieve its goals?
10. Please give additional comments about the quality of the course and how similar courses could be improved.
ANNEX 6  Reference Documents

1. Allied Signal, Quimobasicos and the Frio Banditos: A Case Study of the Black Market in CFCs, Ozone Action Inc., 1996
2. Back to the Future: Working Safely with Hydrocarbons: UNEP; TVE; Greenpeace.
4. Study on the Potential of Hydrocarbon Replacements (UNEP DTIE)
5. Illegal Trade in Ozone depleting Substances (Ozone Action News-Letter)
6. Avoiding a Double Phase out
7. How Small and Medium Sized Enterprises in Developing Countries can Protect the Ozone Layer: (UNEP DTIE)
8. Healing the Ozone Layer with Small Brushes (UNEP DTIE)
9. CFC Production and Related Issues
10. Handbook on Data Reporting under the Montreal Protocol (UNEP DTIE)
17. Information Paper on Separate Identification of Montreal Protocol Pure Ozone-Depleting Substances under the Harmonized System
ANNEX 7  UNEP DTIE OzonAction Programme

Nations around the world are taking concrete actions to reduce and eliminate emissions of CFCs, halons, carbon tetrachloride, methyl chloroform, methyl bromide and HCFCs. When released into the atmosphere these substances damage the stratospheric ozone layer — a shield that protects life on Earth from the dangerous effects of solar ultraviolet radiation. Nearly every country in the world — currently 170 countries -- has committed itself under the Montreal Protocol to phase out the use and production of ODS. Recognising that developing countries require special technical and financial assistance in order to meet their commitments under the Montreal Protocol, the Parties established the Multilateral Fund and requested UNEP, along with UNDP, UNIDO and the World Bank, to provide the necessary support. In addition, UNEP supports ozone protection activities in Countries with Economies in Transition (CEITs) as an implementing agency of the Global Environment Facility (GEF).

Since 1991, the UNEP DTIE OzonAction Programme has strengthened the capacity of governments (particularly National Ozone Units or “NOUs”) and industry in developing countries to make informed decisions about technology choices and to develop the policies required to implement the Montreal Protocol. By delivering the following services to developing countries tailored to their individual needs, the Programme has helped promote cost-effective ODS phase-out activities at the national and regional levels:

**Information Exchange** provides information tools and services to encourage and enable decision makers to make informed decisions on policies and investments required to phase out ODS. Since the 1991, the Programme has developed and disseminated to NOUs over 100 individual publications, videos, and databases that include public awareness materials, a quarterly newsletter, a web site, sector-specific technical publications for identifying and selecting alternative technologies and guidelines to help governments establish policies and regulations.

**Training** builds the capacity of policy makers, customs officials and local industry to implement national ODS phase-out activities. The Programme promotes the involvement of local experts from industry and academia in training workshops and brings together local stakeholders with experts from the global ozone protection community. UNEP conducts training at the regional level and also supports national training activities (including providing training manuals and other materials).

**Networking** provides a regular forum for officers in NOUs to meet to exchange experiences, develop skills, and share knowledge and ideas with counterparts from both developing and developed countries. Networking helps ensure that NOUs have the information, skills and contacts required for managing national ODS phase-out activities successfully. UNEP currently operates 4 regional and 3 sub-regional Networks involving more than 109 developing and 8 developed countries, which have resulted in member countries taking early steps to implement the Montreal Protocol.

**Refrigerant Management Plans (RMPs)** provide countries with an integrated, cost-effective strategy for ODS phase-out in the refrigeration and air conditioning sectors. RMPs have evolved
to meet the specific need to assist developing countries (especially those that consume low volumes of ODS) to overcome the numerous obstacles to phase out ODS in the critical refrigeration sector. UNEP DTIE is currently providing specific expertise, information and guidance to support the development of RMPs in 40 countries.

**Country Programmes and Institutional Strengthening** support the development and implementation of national ODS phase-out strategies especially for low-volume ODS-consuming countries. The Programme is currently assisting more than 90 countries to develop their Country Programmes and more than 75 countries to implement their Institutional Strengthening projects.

**For more information about these services please contact:**

Mr. Rajendra Shende, Chief, Energy & OzonAction Unit  
UNEP Division of Technology, Industry and Economics  
OzonAction Programme  
39-43, quai André Citroën  
75739 Paris Cedex 15 France  
Tel:  (33) 1 44 37 14 50  
Fax:  (33) 1 44 37 14 74  
Email: ozonaction@unep.fr  
Web:  WWW: [http://www.uneptie.org/ozonaction.html](http://www.uneptie.org/ozonaction.html)
Appendix 1: Presentation Slides for Phase 2 Training

Objectives of Workshop (1)
- Increase awareness of ozone depletion issues and impacts of ozone layer depletion
- Familiarize participants with the different types of ODS being used and for which applications;
- Familiarize participants with the provisions and phase-out schedules of the Montreal Protocol and its Amendments;
- Provide participants with an understanding of the National Refrigerant Management Plan (RMP);
- Provide an overview on the newly established import / export licensing system

Objectives of Workshop (2)
- Discuss the role of customs officers and other stakeholders in implementing the Montreal Protocol Regulations and enforcing the ODS licensing system;
- Present the revised customs codes which allow for the identification of ozone-depleting refrigerants and ODS-based products;
- Provide an overview of commonly used trade names and labeling for ODS;
- Demonstrate the use of ODS identification equipment;
- Health and safety considerations

Self-Introduction of Participants
- Introduction of participants
  - Name and designation
  - Agency
  - Most important expectation from the workshop

Session 1: Ozone Layer Depletion
- Ozone layer science
- Environmental and human health consequences of ozone layer depletion
- Questions and Answers

Ozone Depleting Substances (ODSs)
- Chemicals that have the potential to deplete the ozone layer
- Contain chlorine or bromine atoms
- Have long atmospheric life
- Also cause global warming

Uses of ODS
- Refrigerants: domestic, commercial, and transport refrigerators; air-conditioning & heat pump systems; motor vehicle air-conditioners
- Blowing agents: CFC-11 foam blowing agent for the manufacture of polyurethane, phenolic, polystyrene and polyolefin foam plastics.
• Cleaning solvents: CFC-113, methyl chloroform, carbon tetrachloride for electronic assembly production processes, precision cleaning & general metal degreasing. Also for dry cleaning & spot cleaning in textile industry
• Propellants: CFC-11, -12, -113, -114 for aerosols like deodorants, shaving foam, perfume, window cleaners, lubricants, & oils
• Sterilants: Mixtures of CFC-12 & ethylene oxide used for medical sterilisation
• Fire extinguishers: Halons & HBFCs
• Fumigants: Methyl bromide, pesticide for soil fumigation & pre-shipment & quarantine apps. Feedstock: HCFC & carbon tetrachloride are used as feedstock for chemical synthesis.

Some Key Statistics
Effects of Ozone Layer Depletion (1)

*Human Health*
− Damages DNA which suppresses immune system resulting in increase in infectious diseases
− Skin Cancer
− Eye Cataracts

*Plants & Trees*
− Reduces crop production, damage to seeds
− Reduces quality of crops

Effects of Ozone Layer Depletion (2)

*Aquatic Organisms*
− Damage to plankton, aquatic plants, fish larvae, shrimp, crabs
− Affects marine food chain

*Materials*
− Degrades paints, rubber, wood, & plastics, especially in tropical regions
− Damages could be in billions of US dollars

*Ground Level Smog*

Knowledge Check
- What is the Ozone Layer?
- Why is the Ozone Layer important?
- What are some effects of Ozone Layer depletion?
- What is the Ozone hole?
- What are Ozone Depleting Substances (ODSs)?
- What are the common uses of ODSs?
- Name two ODSs

Session 2:
International and National Response
• The Montreal Protocol and its Amendments
• Phase out schedules for Article 2 and Article 5 countries
• Impact of the Montreal Protocol
• National Obligations and Response
• Questions and Answers

International Response
• 1985: Vienna Convention for the Protection of the Ozone Layer negotiated under which Parties agree to collaborate in scientific research and assessment of ozone layer depletion and related issues
• 1987: Montreal Protocol on Substances that deplete the Ozone Layer agreed to, under which Parties agree to take specific actions to phase out the use of ozone depleting substances

Amendments to the Protocol (1)
• 1990: London Amendment: under which a Multilateral Fund was established to assist developing countries to meet their obligations under the Protocol and phase out schedules established for most ODSs
• 1992: Copenhagen Amendment: under which tighter phase out schedules were agreed to for some ODSs. In addition, other substances were added to the list of substances to be eliminated.

Amendments to the Protocol (2)
• 1997: Montreal Amendment: Under which all countries are required to implement import/export licensing systems to monitor and control trade in Ozone depleting Substances.
• 1999: Beijing Amendment: This introduced tighter controls on the production and phase out schedules for some ODSs

Phase-out Schedule for Non Article 5 Countries
• Article 2 Countries (Non Article 5 countries or developed countries) have phased out the use of CFCs since 1996.
• There are cases in which these Parties are allowed to use CFCs for exempted applications, such as medical purposes.

GLOBAL PRODUCTION SUMMARY

National Obligations
• National Phase out obligations
• National response – Key elements of the Refrigerant Management Plan (RMP)
• Data reporting – challenges and opportunities

Annual ODS Data Reporting
• Currently reliant on the department of statistics and voluntary submission by importers
• The current HS codes allow for the identification of specific ODS
• The licensing of Importers will provide further opportunities for data verification
Key Elements of The Refrigerant Management Plan
• Training of Technicians in the Air-conditioning and Refrigeration sectors and key stakeholders
• Establishment of Recovery and Recycling programme
• Training of Customs Officers and key stakeholders
• Data collection, analysing and reporting
• Public awareness and education ongoing
• Establishment and Enforcement of the Import-Export Licensing system for ODS and ODS dependent technologies

National Phase-out Obligations
• Base line consumption 6.0 ODP tonnes
• From 1999 consumption level frozen at baseline
• 2005 , 50% of baseline allowed
• 2007, 15% of baseline allowed
• 2010, 0% or completed phase out

Other Obligations
• Annual data reporting to the Ozone and Multilateral fund Secretariats
• Establishment of Import-Export Licensing system for ODS

Session 3: National Import/Export Licensing System
Ozone Depleting Substances (Control) Act
✓ This Act is in draft format and is expected to be passed in Parliament in September 2005.
✓ The Act will provide the legal basis under which various agencies will be allowed to take action to control trade in ODSs and related technologies

Structure of the Import/Export Licensing System (1)
• Anyone who wishes to import an ODS must first be registered to do so by the National Ozone Unit (NOU). This makes the person a registered or licensed importer.
• Each shipment of an ODS must be done under a license issued by the NOU.
• Licenses will be issued in quadruplicate. One copy will be retained by the NOU, one by the importer and 2 sent to Customs
• Customs will subsequently return one copy to the NOU for verification.

Structure of the Import/Export Licensing System (2)
• Levels of imports will be based on quotas issued by the NOU.
• Quotas will be based on the National Quota and the historical levels of imports of the importer.
• The NOU will retain a portion of the national quota for emergency purposes.
• Unused quotas may be distributed to other registered importers by the NOU as needed.

Structure of the Import/Export Licensing System (3)
• The Act will prohibit the importation of equipment that uses CFCs.
• If a CFC based equipment is imported, the Comptroller has the authority to order the importer to retrofit the equipment at his expense before it is released by Customs.
If the importer fails to comply within the specified time, the equipment could be retrofitted by the Crown and the cost of the retrofit recovered from the sale of the equipment.

**Structure of the Import/Export Licensing System (4)**
- Trained technicians may apply to the NOU to be registered as certified retrofitters.
- Only those technicians certified by the NOU can undertake retrofits.
- The Act will introduce a number of forms to be used in controlling trade in ODSs and related technologies. These are found in Appendix B (Page 33) of the National Handbook and will be examined in detail during Session 5.

**Structure of the Import/Export Licensing System (5)**
- It is important to note that under the Customs Ordinance the Comptroller has the authority to perform Agency Functions under any Law that has trade/import/export controls. This power extends to the Ozone Depleting Substances (Control) Act and as such, Customs will be the main agency to implement the provisions of the Act.

**Structure of the Import/Export Licensing System (6)**
- Under the Act, illegal imports of ODSs are to be seized, but must be disposed of in one of the following 3 ways:
  - Re-export to another country, provided the amount of the export is within that country’s quota.
  - Sale to local registered importers provided the amount sold is within his quota;
  - Destruction.

**Structure of the Import/Export Licensing System (7)**
- In addition to Customs, there are a number of agencies with key roles in the implementation of the Act. These will be examined in the next Session.

**Knowledge Check**
- What is an import/export licensing system designed to do?
- What is the difference between an quota and a license?
- Name 3 forms introduced by the licensing system
- What is meant be a retrofit?
- What is the role of customs officers in the licensing system?
- Name some other stakeholders in enforcing the licensing system
- How should seized ODSs be disposed of?
- How should seized equipment be disposed of?

**Session 4: Role of Customs Officers and other stakeholders**
- Who are the key players in implementing the Montreal Protocol Regulations
- Enforcing the Montreal Protocol Regulations:
  - **Role of Customs Officers**
Key Players in Enforcing and Administering ODS Licensing System

1. Enforcement
   • Customs Officials
   • Police and Coast Guard
   • Bureau of Standards
   • Ports Authority
   • Pesticides Control Board
   • National Ozone Unit
     • Licensing Authorities
     • Government Laboratory

2. Attorney General’s Department

3. Advisory and support Groups
   • National Ozone & Climate Change committees
   • Industry & Trade Representatives and Associations
   • General Public

Role of Customs Officers in Enforcing ODS Regulations
   • Understand the provisions of the MP Regulations
   • Know and cooperate with other stakeholders involved in enforcement of the Regulations
   • Inspection – of documentation, shipments and goods
   • Detecting illegal trade with ODS and ODS-based products
   • Using refrigerant identifiers and analyzers
   • Reporting legal and illegal trade as well as seizures to the NOU
   • Seizing illegal imports including storage and disposal
   • Supporting other enforcement agencies e.g. in providing evidence for court cases

Enforcement
   • What is the legal basis for action by Customs?
   • Is legal authority vested in any other agency or person?

Data Management
   • Customs records
     – Introduction of a CPC?
   • Imports Records/Statistics department
   • Cross Checking with importers and NOU/ Licensing authority
   • Reporting requirements of Customs
   • Report imports (legal trade)
   • Report illegal trade
   • Provide trade statistics
   • Record and reporting of seizures

Checklist for Customs Officers (1)
Checklist for Customs Officer (2)
• Note the quantity, source, and destination of ODS. These will serve as important clues that may provide indicators of possible illegal importations.
• Inspect the merchandise.
• Check packaging, size, and label on container.

**Checklist for Customs Officer (3)**

**Checklist for Customs Officers (4)**
• Delay release or Seize the material **if the importer does not have the import/export license.**
• Coordinate these actions with appropriate agencies.

**Knowledge Check**

► Name 2 key players in enforcing the ODS regulations and describe their role
► How should you dispose of illegally imported CFCs?
► How would you deal with an imported vehicle if it has a CFC based air-conditioning unit?
► Describe 2 things you would check for to ensure that a shipment of CFC is a legal import

**Session 5: Checking Papers, Forms and Permits.**
• Caribbean Single Administrative Document (CARISAD)

**Forms introduced by the Regulations**
– Form 1 Application for registration as an Importer
– Form 2 Certificate of Registration to import ODS
– Form 3 Application for a License to Import
– Form 4 License to import
– Form 5 Order for retrofit
– Form 6 Application for retrofit license

**Session 6: Trade and Identification of ODS and Related Technologies**
• Legal and illegal trade
• Causes of illegal trade
• Smuggling methods
• HS codes, common names, trade names and CAS, UN and ASHRE numbers
• Examples of labeling and detection of mislabeled products
• Colour codes
• Honeywell Case Study
• Questions and Answers

**Causes of illegal Trade**
✓ Some demand still in developed countries
✓ Supplies are diminishing
✓ Protocol control measures taking effect
✓ Demand in some developing countries may be higher than allowable import limits
✓ Nervousness about supplies among importers
✓ To meet illegal demand in developed countries
To avoid taxes

Fraudulent Transshipments
- Historically most popular.
- “Transshipped” through the US to Article 5 countries

“Recycled” vs. “Virgin”
- License to import recycled CFCs.
- CFCs certified by manufacturer to be “recycled”.
- CFCs are actually virgin.
- Difficult to detect because there are no differences between virgin and recycled CFCs
- Country of origin/manufacturer may be suspect.

Mislabeling CFCs
- Identified as legal refrigerant, such as HCFC or HFC.
- Identified as other chemical, such as chlorine, and cylinder repainted.
- Mislabelled as recovered or recycled ODS
- Difficult to detect.
- Contents of cylinder must be tested.
- Country of origin/manufacturer may be suspect.

Using a Wrong HS Code
- Import records may show wrong commodity code.
- Example: Importing CFC 12 (2903.42), but records show code for HFC 134a (2903.30) or propane (2711.12).
- Difficult to detect based on paperwork.
- Must be aware of whether country of origin manufactures that type of product.
- May require contents of cylinders to be tested.

Traditional Smuggling
- Similar to drug smuggling or other contraband – concealment and double layering
- On ones person, in small boats.
- Recent arrest in US - small cylinders brought from Bahamas to Miami in small boat. Multiple shipments.

Smuggling CFCs in compressors or other equipment
- Venezuela scheme - refrigerators which required only 3 to 4 pounds to operate fabricated to hold 2,500 pounds of refrigerant.
- Equipment used over and over – returned merchandise.
- Check value placed on import. May be undervalued to avoid taxes.
- Name of shipper or recipient may be suspect
Splitting Valves/Tanks
➢ Small cylinder of legal refrigerant inside 500 pound tank of illegal substance.
➢ Valve for illegal material is in separate secret compartment on bottom of tank.
➢ Taiwan case; photos.
➢ Most likely to be found in very large tanks (500 pounds).

Identification of ODSs
• Common names and trade names
• CAS, HS, ASHRE and UN numbers
• Examples of labeling and colour codes
• Examples of labeling of ODS-containing equipment
• Use of refrigerant identifiers

Revised HS Codes for ODSs

HS Codes for Equipment
• Refrigerators, Freezers, compressors, fire extinguishers, Dry cleaning equipment: Ch 84.
• Vehicles
• Cosmetics (Sprays)
• Insecticides and solvents
• Lubricating preparations

ODS Names
• Trade Names
  – the names companies give to their products.
    e.g. Freon-12
• Chemical Names
  ➔ Different names and formulas can be used
  ➔ Chemical names, e.g: Dichlorodifluoromethane or CFC-12 or R-12
  ➔ Long chemical formula, e.g. CF₂Cl₂
  ➔ Short chemical formula, e.g. CFC-12

ODS Names (cont.) 1
• ASHRAE number
  ➔ American Society of Heating, Refrigerating, and Air conditioning Engineers
  ➔ Number designation for refrigerants based on their chemical structure, e.g. R-12

ODS Names (cont.) 2
• UN Number
• United Nations Substance Identification Number (UN SIN or UN number)
  ➔ A four-digit international standard number which identifies a particular chemical or group of chemicals; e.g. CFC-12’s UN number is 1028.

ODS Names (cont.) 3
• CAS Number
  ➔ Chemical Abstract Service number to identify a chemical. The CAS Number contains from 5 to 9 digits separated into three groups by hyphens. The first group, starting from the left, has up to 6 digits; the second group always has 2 digits; the third group always has 1 digit.
The CAS Number is specific for single chemicals and for some mixtures.

e.g. CFC-12 is 75-71-8

**ODS Products**
- Automobile and truck air-conditioning units (whether incorporated in vehicles or not)
- Domestic and commercial refrigeration and air-conditioning/heat pump equipment, e.g.
  - Refrigerators
  - Freezers
  - Dehumidifiers
  - Water coolers
  - Ice machines
  - Air-conditioning and heat pump units
- Aerosol products, except medical aerosols
- Portable fire extinguisher

**Examining Labels**
- Cylinders
- Cooling equipment
- Compressors
- Vehicles

**Examples of Labels**

**Colour Codes**

**Refrigerant Identifiers**
- Electronic identifiers can detect some refrigerant
- They also tell the purity level of the refrigerant
- Sampling – only whole cylinders should be used as samples.
- Leak Detectors

**GENTRON (Honey well) Presentation**

Knowledge Check

**Session 7: Practical Exercise in Identifying Refrigerants and Labels on Equipment**
Session 8: Health and Safety Considerations

• Health and Safety issues of relevance to all stakeholders
  – CFCs are gases stored in cylinders under pressure
  – Risk of explosion if heated or dropped
  – Frost bite if pressurized gas comes into contact with skin
  – Inhalation can cause dizziness, shortness on breath, death
  – Fumes are toxic if the Gas exposed to naked flames

ODS Safety Checklist (1)

• Handling and Transport
  - Industry-recommended procedures should be observed for the handling, transport and storage of virgin, recovered, recycled or contaminated refrigerants.
  - Use protective clothing, including safety goggles and cold-insulating gloves when handling ODS. Some ODS can cause frostbite and other damaging effects to the skin and eyes.

ODS Safety Checklist (2)

- Do not eat, drink or smoke in storage areas or nearby ODS or ODS-containing products.
- Do not vent ODS into the atmosphere
- Do not dispose of any ODS by using methods other than approved R&R, adequate storage or approved destruction methods.

ODS Safety Checklist (3)

- Avoid handling and storage of ODS in confined spaces which lack ventilation since ODS can accumulate in confined spaces. This increases the risk of inhalation and may cause unconsciousness or suffocation resulting in death. Use breathing protection if appropriate.
- ODS cylinders should be stored or transported in an upright position.
- ODS cylinders need to be handled and transported carefully and should not be dropped.

Safety Checklist (4)

• Storage
  - ODS cylinders should be stored away from the risk of fire or direct sun light and not get in contact with hot surfaces. A rise in temperature will cause an increased pressure with the risk of explosion.
  - Some ODS are combustible and storage areas should be equipped with appropriate fire extinguishing systems. Most ODS produce irritating or toxic fumes in a fire.
  - Use electronic leak detectors to inspect storage areas and access valves for leakage.

Safety Checklist (5)

- Do not use the halide torch (flame test) method for leak testing.
Storage areas for ODS cylinders should be secured locations which are only accessible by authorised personnel and which should be protected against theft.

**Safety Checklist (6)**
- ODS cylinders and storage areas should be properly labelled and show appropriate warnings if necessary.
- Seized ODS should be stored until further legal action determines what will be done with the substances. They should be clearly labelled and safely stored.

**Knowledge Check**
- Describe 2 effects of exposure to CFCs
- How can a leak detector help improve the safety of an inspector entering an enclosed storage area?
- How should cylinders of ODSs be stored?
- Name 2 things you should not do when handling pressurized gases
- What protective gear should you have when handling ODSs?
- What type of test should be avoided?

**Session 9: Workshop evaluation**
- Complete questionnaires and hand in (15 mins.)
- General feedback and comments from participants
- Wrap-up
  - Closing Session
- Presentation of Certificates of Participation
- Closure of Workshop