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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Fifty-fifth Meeting  
Bangkok, 14-18 July 2008

**PROJECT PROPOSAL: YEMEN**

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

Phase-out

- National ODS phase-out plan: first tranche UNEP and UNIDO

## **PROJECT DESCRIPTION**

1. On behalf of the Government of Yemen, UNEP, as lead agency has submitted a national ODS phase-out plan (NPP) for consideration by the Executive Committee at its 55th Meeting. The project will be implemented with UNIDO as co-implementing agency. The total cost of the NPP as submitted is US \$1,875,300 (US \$740,000 plus agency support costs of US \$96,200 for UNEP and US \$1,135,300 plus agency support cost of US \$85,148 for UNIDO).

2. The project proposes the complete phase out of CFCs and halons by the end of 2009, as well as maintaining zero consumption of CTC and TCA. Baseline consumption levels are as follows: for CFCs, 1796.1 ODP tonnes; for Halons, 140 ODP tonnes; for CTC, 0 ODP tonnes; and for TCA 0.9 ODP tonnes. The NPP also contains a request for funding for the preparation of a transitional strategy for imported CFC-MDIs, and for technical assistance for the halon sector.

### Background

#### **CFCs**

3. At its 37th meeting in July 2002, the Executive Committee approved an RMP for Yemen for US \$1,836,805 plus agency support costs. The RMP consisted of five main components: a Recovery and Recycling project; projects to establish regulations and legislation; a training programme on good refrigerant management practices; training of Customs Officials; and a component for monitoring the functioning of the RMP. A balance of US \$184,900 remains from the RMP.

4. The following are the achievements made under the RMP to date:

- (a) Recovery and Recycling: Equipment for the project was procured and potential beneficiaries identified, five training centres were established, and 59 future trainers were trained. Activities yet to be undertaken, using unspent funds from the RMP, are the distribution of equipment to 134 workshops, training of the beneficiaries, and monitoring and evaluation of the equipment's operation;
- (b) Establishment of Regulations and Legislation: A decree on ODS regulation was issued in 2006, which addresses most but not all relevant issues. The licensing system appears to be established;
- (c) Training programme on good refrigerant management practices: Five training centres established under the recovery and recycling sub-project were supplied with training equipment. 50 trainers and 790 refrigeration technicians were trained, while 340 remaining of the originally-targeted technicians are yet to be trained;
- (d) Training of Customs Officials: A training of trainers workshop was held for 45 customs officers and representatives from other related authorities, and 22 refrigerant identifiers were provided. 321 customs officers remain to be trained in the next phase of the training, which will be conducted in each of the 12 main customs entry ports; and

- (e) Monitoring of the RMP: A National Monitoring Team, composed of 19 members drawn from the various governorates of Yemen, was established.

5. At its 28th Meeting, the Executive Committee approved joint funding of US \$35,000 for France and Germany to prepare a survey for a halon banking management plan in West Asia (Bahrain, Lebanon, Qatar and Yemen).

6. Subsequently, the Executive Committee approved, at its 30th Meeting, further joint funding of US \$235,000 for the formulation of a regional halon banking management plan with an additional US \$50,000 for a workshop to be organized by UNEP for presentation and dissemination of the results, and for demonstration of activities for the use of alternatives and the recovery and recycling of halons. The project had limited success and resulted in little impact on the halon consumption in Yemen, as also noted in the evaluation report regarding “Final evaluation report on halon banking projects for countries with low volumes of installed capacities”, document UNEP/OzL.Pro/ExCom/44/10. The submission also reports that Yemen has not been able to benefit from the Regional Halon Bank project, and includes a component requesting funding for technical assistance for halon activities.

#### Policy and legislation

7. Yemen has a comprehensive decree on ODS legislation, Decree 275/2006, adopted in July 2006.

#### Refrigeration Sector

8. CFC consumption has been phased out in the aerosol, foam and solvent sectors. As of 2007, the remaining consumption of CFCs of 268.74 ODP tonnes was in the refrigeration sector (81.14 ODP tonnes in the commercial manufacturing sector and 187.60 ODP tonnes in the servicing sector). The servicing sub-sector has been proposed as the priority area for the NPP.

9. The approval of the RMP at the 37th Meeting in July 2002 indicated that following implementation of all activities proposed in the RMP, “the remaining CFC consumption that would need to be phased out with the assistance from the Multilateral Fund, if eligible, is 177.3 ODP tonnes.”

10. The prices of refrigerants per kilogramme as at early 2007 were as follows: R-11: US \$4.00, R-12 : US\$ 11.84 , R-22: US\$ 6.82, R-502: US\$ 15.50; R-134a: US\$19.86; R-404a (US \$ 17.35, R-406a: US\$ 9.02; and R-141b: US\$ 10.00.

#### Fire fighting Sector

11. The installed capacity of halon is estimated to be 14.7 metric tonnes for halon 1211, and 73.62 metric tonnes for halon 1301. As earlier mentioned, the Executive Committee previously approved funding for the formulation of a regional Halon banking management plan for four countries in the West Asia Region, including Yemen.

Activities proposed in the TPMP

12. The following activities are proposed to be implemented through the TPMP project:
- (a) Policy enforcement and curbing illegal trade, which would involve the introduction of certain bylaws; a capacity building programme for national stakeholder groups; and upgrading of refrigerant identification capacities;
  - (b) A refrigeration training and certification programme that would develop Codes of Practice and a certification scheme, equip an additional 9 training centres, design a demonstration retrofitting training programme, and train an additional 1,500 refrigeration technicians in good practices and retrofitting;
  - (c) Technical assistance to promote good practices in refrigeration servicing and increase recovery and recycling of CFCs from larger refrigeration appliances;
  - (d) Conversion of the remaining ten commercial refrigerator manufacturers from CFC to HCFC-141b for foam blowing and HFC-134a as refrigerant;
  - (e) Preparation of a transitional strategy for imported CFC-MDIs;
  - (f) Technical assistance for halon activities; and
  - (g) Monitoring and implementation of the project.

**SECRETARIAT COMMENTS AND RECOMMENDATION**

**COMMENTS**

13. The Secretariat reviewed the submission and raised a number of issues with UNIDO, among them the issue of possible alternatives for the conversion of CFC-11 foaming equipment at the commercial refrigeration manufacturers, the justification for the halon and MDI components, and the funding for all components. At the time of writing this document the discussions were still ongoing.

**RECOMMENDATION**

14. Pending.

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