



**United Nations
Environment
Programme**

Distr.
Limited

UNEP/OzL.Pro/ExCom/31/35
8 June 2000

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Thirty-first Meeting
Geneva, 5-7 July 2000

PROJECT PROPOSALS: IRAN

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

Foam

- Phaseout of CFC-11 by conversion to pentane technology in the manufacture of integral skin foam at Iran Polyurethane Manufacturing Co. UNDP
- Conversion from CFC-11 to n-pentane in the production of rigid foam panels at Rashestan Co. UNIDO

Refrigeration

- Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid polyurethane foam at Baharanfarr Co. UNDP
- Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fadak Refrigeration Industries UNDP

- Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fereidooni Refrigerant Industries UNDP
- Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial and domestic refrigeration equipment at Jaleh & Segin Co. UNDP
- Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at MH Seyed Salaki Co. UNDP
- Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration at Sanayee Broudati Partou Sard Tawan (Barez-Himalia) and Sanayee Broudati Himalia (Himalia) UNIDO

**PROJECT EVALUATION SHEET
IRAN**

SECTOR: Foam ODS use in sector (1998): 2,500 ODP tonnes

Sub-sector cost-effectiveness thresholds: Integral skin US \$16.86/kg
Rigid US \$7.83/kg

Project Titles:

- (a) Phaseout of CFC-11 by conversion to pentane technology in the manufacture of integral skin foam at Iran Polyurethane Manufacturing Co.
- (b) Conversion from CFC-11 to n-pentane in the production of rigid foam panels at Rashestan Co.

Project Data	Integral skin	Rigid
	Iran Polyurethane	Rashestan
Enterprise consumption (ODP tonnes)	38.70	70.00
Project impact (ODP tonnes)	38.70	70.00
Project duration (months)	36	30
Initial amount requested (US \$)	988,000	540,122
Final project cost (US \$):		
Incremental capital cost (a)	1,030,000	502,830
Contingency cost (b)	103,000	50,283
Incremental operating cost (c)	10,144	-13,231
Total project cost (a+b+c)	1,143,144	539,882
Local ownership (%)	100%	100%
Export component (%)	0%	0%
Amount requested (US \$)	652,482	539,882
Cost effectiveness (US \$/kg.)	16.86	7.71
Counterpart funding confirmed?	Yes	Yes
National coordinating agency	Department of Environment	
Implementing agency	UNDP	UNIDO

Secretariat's Recommendations		
Amount recommended (US \$)	652,482	539,882
Project impact (ODP tonnes)	38.70	70.00
Cost effectiveness (US \$/kg)	16.86	7.71
Implementing agency support cost (US \$)	81,773	69,387
Total cost to Multilateral Fund (US \$)	734,255	609,269

PROJECT DESCRIPTION

Sector Background

- Latest available total ODS consumption (1998) 8,938.40 ODP tonnes
- Baseline consumption of Annex A Group I substances (CFCs) 4,635.00 ODP tonnes
- Consumption of Annex A Group I substances for the year 1998 5,571.00 ODP tonnes
- Baseline consumption of CFCs in foam sector 2,400.00 ODP tonnes
- Consumption of CFCs in foam sector in 1998 2,500.00 ODP tonnes
- Funds approved for investment projects in foam sector as of end of 1999 US \$5,099,884.00
- Quantity of CFC to be phased out in investment projects in foam sector as of end of 1999 1,723.00 ODP tonnes
- Quantity of CFC phased out in investment projects in foam sector as of end of 1999 1,200.00 ODP tonnes
- Quantity of CFC to be phased out in investment projects in foam sector approved in 1999 83.00 ODP tonnes
- Funds approved for investment projects in the foam sector in 1999 US \$553,929.00

1. Iran's 1998 consumption of Annex A Group I substances exceeded the baseline consumption by 936 tonnes. At the time of preparation of this document its 1999 consumption was not available as it had reported only 1998 data to the Fund Secretariat as of 31 May 2000.

Integral Skin Foam

Iran Polyurethane

2. Iran Polyurethane manufacturing Co. was established in 1976. It produces car bumpers, flexible molded seat cushions by water-blown technology and steering wheels with CFC-11. It is reported to have produced 567,163 units of steering wheels in 1998. The three-year consumption of CFC-11 and production of steering wheels are shown below. Its average CFC-11 consumption for the period 1996-1998 was 38.7 tonnes. It produces the steering wheels for Iranian customers, predominantly Iran Khodro, the main automobile manufacturer in Iran.

	1996	1997	1998
CFC-11 used (ODP tonnes)	20.9	36.6	58.6
Units of steering wheels produced	212,675	370,663	567,163

3. The company operates four low pressure and two high pressure machines. The low pressure machines include two 23 year old Martin Sweets, one 22 year old Elastogran and one 16 year old Cannon. The high pressure machines are two 15 year old Cannon of 40 kg/min capacity. It is stated that the Government as well as the automotive industry do not allow the use of transitional substance (HCFC-141b), hence the company will convert to the use of iso-pentane. The project includes the replacement of the six existing dispensers with

six 15 kg/min high pressure pentafoam dispensers at US \$120,000 each (US \$720,000) and a pentafoam premixer and buffer tank (US \$100,000). Other costs include a storage tank (US \$35,000), ventilation (US \$40,000), electrical grounding (US \$10,000), a monitoring and alarm system (US \$40,000), miscellaneous local works (US \$25,000), trials (US \$20,000), technology transfer and training (US \$30,000). Deductions have been made to account for the age of the machines. Incremental operating cost for two years of US \$10,144 is requested.

Rigid Foam

4. Rashestan Co. established in 1985 builds instant accommodation, mobile cabins, commercial and residential buildings, etc. It consumed 70 tonnes CFC-11 in 1999 producing 220,000 m² of polyurethane foam panels of average size 2.7 m X 1.2 m and foam thickness of 3-10 cm. The company currently operates a 40 l/min Elastrogran low pressure machine installed in 1984 and a Howland low pressure machine installed in 1983. The foam production will be converted to the use of n-pentane.

5. The conversion costs include capital cost of US \$464,090 which includes the cost of 2 high pressure dispensers (US \$180,000), modification to the presses (US \$31,000), premixer (US \$60,000), pentane storage tank (US \$28,000), alarm and fire protection systems (US \$43,000), freight, installation, insurance, commissioning and trials (US \$27,590), nitrogen supply (US \$10,000) and safety inspection (US \$22,000). There is incremental operational saving of US \$6,677.

Impact of the projects

6. The total CFC-11 consumption to be phased out in the two projects is 108.7 ODP tonnes, which constitutes 2% of Iran's 1998 consumption of Annex A Group I substances.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

Integral skin foam (Iran Polyurethane Manufacturing)

1. The Fund Secretariat and UNDP discussed the project and issues relating to the company's baseline, including equipment and their usage, wide variations in CFC-11 consumption and the selection of substitute blowing agent. The Fund Secretariat and UNDP agreed that the basis for determining the eligible incremental cost of the project should be the average consumption of CFC-11 for the period 1996-1998, in view of the wide variations in the company's CFC consumption over the three year period. It was also agreed that n-pentane could be used as the substitute blowing agent instead of iso-pentane proposed in the project. The project cost was agreed as US \$652,482.

Rigid Foam (Rashestan)

2. The Fund Secretariat drew the attention of UNIDO to the high price of n-pentane in the project. The issue has been discussed and resolved and the project's cost agreed.

RECOMMENDATIONS

1. The Fund Secretariat recommends blanket approval of the Iran Polyurethane Manufacturing and Rashestan projects with the level of funding and associated support costs indicated below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Phaseout of CFC-11 by conversion to pentane technology in the manufacture of integral skin foam at Iran Polyurethane Manufacturing Co.	652,482	81,773	UNDP
(b)	Conversion from CFC-11 to n-pentane in the production of rigid foam panels at Rashestan Co.	539,882	69,387	UNIDO

PROJECT EVALUATION SHEET IRAN

SECTOR: Refrigeration ODS use in sector (1998): 2,500 ODP tonnes

Sub-sector cost-effectiveness thresholds: Commercial US \$15.21/kg
Domestic US \$13.76/kg

Project Titles:

- (a) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid polyurethane foam at Baharanfarr Co.
- (b) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fadak Refrigeration Industries
- (c) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fereidooni Refrigerant Industries
- (d) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial and domestic refrigeration equipment at Jaleh & Segin Co.
- (e) Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at MH Seyed Salaki Co.
- (f) Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration at Sanayee Broudati Partou Sard Tawan (Barez-Himalia) and Sanayee Broudati Himalia (Himalia)

Project Data	Commercial			Commercial/ Domestic	Commercial	
	Baharanfarr	Fadak	Fereidooni	Jaleh & Segin Co.	MH Seyed	Himalia
Enterprise consumption (ODP tonnes)	17.97	18.46	11.00	24.92	10.37	39.39
Project impact (ODP tonnes)	16.69	17.27	10.35	23.60	9.78	36.09
Project duration (months)	36	36	36	36	36	36
Initial amount requested (US \$)	208,070	262,707	157,454	332,788	141,590	483,144
Final project cost (US \$):						
Incremental capital cost (a)	157,500	135,600	132,500	232,500	132,000	307,500
Contingency cost (b)	15,750	13,560	13,250	23,250	13,200	26,750
Incremental operating cost (c)	102,540	152,937	86,348	86,553	47,661	43,294
Total project cost (a+b+c)	275,790	302,097	232,098	342,303	192,861	377,544
Local ownership (%)	100%	100%	100%	100%	100%	100%
Export component (%)	0%	0%	0%	0%	0%	0%
Amount requested (US \$)	208,070	258,937	157,454	322,309	141,590	377,544
Cost effectiveness (US \$/kg.)	12.47	14.99	15.21	13.66	14.48	10.46
Counterpart funding confirmed?	Yes	Yes	Yes	Yes	Yes	Yes
National coordinating agency	Department of Environment					
Implementing agency	UNDP					UNIDO

Secretariat's Recommendations						
Amount recommended (US \$)	208,070	258,937	157,454	322,309	141,590	377,544
Project impact (ODP tonnes)	16.69	17.27	10.35	23.60	9.78	36.09
Cost effectiveness (US \$/kg)	12.47	14.99	15.21	13.66	14.48	10.46
Implementing agency support cost (US \$)	27,049	33,662	20,469	41,900	18,407	49,081
Total cost to Multilateral Fund (US \$)	235,119	292,599	177,923	364,209	159,997	426,625

PROJECT DESCRIPTION

Sector Background

- Latest available total ODS consumption (1998)	8,938.40 ODP tonnes
- Baseline consumption of Annex A Group I substances (CFCs)	4,635.00 ODP tonnes
- Consumption of Annex A Group I substances for the year 1998	5,571.00 ODP tonnes
- Baseline consumption of CFCs in refrigeration sector	Not available ODP tonnes
- Consumption of CFCs in refrigeration sector in 1998	2,500.00 ODP tonnes
- Funds approved for investment projects in refrigeration sector as of March 2000 (30th Meeting)	US\$21,750,805.00
- Quantity of CFC to be phased out in investment projects in refrigeration sector as of end of 1999	1,878.74 ODP tonnes

2. The refrigeration sector is estimated to consist of 300 enterprises. In the domestic refrigeration sub-sector, there are about 10 large manufacturers and about 15 medium-sized manufacturers. In the commercial refrigeration sub-sector, there are about 30 large-sized manufacturers, and about 250 small and medium-sized manufacturers. The Executive Committee has approved more than US \$21 million for twenty-eight projects to phase out 1,879 ODP tonnes of CFC in the refrigeration sector, including a project on conversion of a major manufacturer with production capacity of 1 million units per year.

- (a) **Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid polyurethane foam at Baharanfarr Co.**
- (b) **Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fadak Refrigeration Industries**
- (c) **Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fereidooni Refrigerant Industries**
- (d) **Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial and domestic refrigeration equipment at Jaleh & Segin Co.**
- (e) **Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at MH Seyed Salaki Co.**
- (f) **Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration at Sanayee Broudati Partou Sard Tawan (Barez-Himalia) and Sanayee Broudati Himalia (Himalia)**

3. These projects will phase out 87.86 ODP tonnes of CFC-11 and 30.86 ODP tonnes of CFC-12 in the manufacture of commercial refrigeration systems at six enterprises (Baharanfarr, Fadak, Fereidooni, MH Seyed Salaki, Sanayee and Jaleh and Segin) in Iran. This will be achieved by converting CFC-11 to HCFC-141b as the foam blowing agent, and CFC-12 to

HFC-134a as the refrigerant. All of the enterprises manufacture similar equipment (refrigerators, freezers, display cabinets and commercial freezers) although Baharanfarr is also involved in the production of sandwich panels for the construction of walk-in coolers and Jaleh & Segin and Himalia produce refrigeration equipment for both domestic and commercial use. All six enterprises operate low-pressure dispensers for foaming applications in the baseline. For refrigerant applications, all enterprises operate vacuum pumps, leak detectors and manual and semi-automatic charging boards.

4. Under the current projects, the existing low-pressure dispensers at all six enterprises will be scrapped and replaced by high-pressure machines. All six enterprises will require semi-automatic and automatic charging, leak detection and evacuation equipment. Other costs include redesign, testing, trials and technical assistance. Incremental operating costs are requested by the enterprises reflecting the higher cost of chemicals and an increase in foam density. Savings on account of more efficient handling of chemicals (5%) due to the introduction of new high pressure dispensers to the existing low pressure dispensers have been subtracted from incremental operating costs. Cost-effectiveness thresholds established in domestic refrigeration, commercial refrigeration and rigid foam sectors were used in determining the level of eligible grant.

5. The duration of all projects is 36 months.

Justification for the use of HCFC-141b

6. The enterprises have selected HCFC-141b technology to replace CFC-11 in foam blowing operations. A letter advising the Government decision to use HCFC technology has been received by the Secretariat in accordance with Executive Committee decision 27/13 and is attached to this evaluation together with the justifications from the implementing agencies.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The Secretariat has raised with the two implementing agencies issues relating to the duration of project implementation (3 years). The duration of implementation in these projects appears to the Secretariat to be too long given the size of the enterprises and the volume of work involved by the agency. UNIDO explained that the project milestones are in line with UNIDO's latest experience in the relevant countries and take into consideration the latest criteria of the Executive Committee regarding project completion. UNIDO will do its best to reduce the implementation timeframe as much as possible. UNDP explained that the project duration (36 months) has been standardized taking into account the variation in various factors affecting the duration such as phase-in period for the new technology and time for depleting inventories of raw materials and components.

2. The Secretariat has discussed with UNDP and UNIDO the issue of equivalent replacement of existing refrigerant charging and foaming equipment as well as cost of

compressors and chemicals used in the calculation of incremental operating costs. All the issues have been resolved and the budgets have been revised accordingly.

RECOMMENDATIONS

1. The Fund Secretariat recommends blanket approval of the commercial refrigeration projects from UNDP and UNIDO with the funding levels and associated support costs as indicated below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment and rigid polyurethane foam at Baharanfarr Co.	208,070	27,049	UNDP
(b)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fadak Refrigeration Industries	258,937	33,662	UNDP
(c)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at Fereidooni Refrigerant Industries	157,454	20,469	UNDP
(d)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial and domestic refrigeration equipment at Jaleh & Segin Co.	322,309	41,900	UNDP
(e)	Conversion from CFC-11 to HCFC-141b technology and from CFC-12 to HFC-134a technology in the manufacture of commercial refrigeration equipment at MH Seyed Salaki Co.	141,590	18,407	UNDP
(f)	Conversion from CFC-11 to HCFC-141b and CFC-12 to HFC-134a technology in the manufacture of domestic and commercial refrigeration at Sanayee Broudati Partou Sard Tawan (Barez-Himalia) and Sanayee Broudati Himalia (Himalia)	377,544	49,081	UNIDO

ANNEX I

ADDITIONAL JUSTIFICATION FOR USE OF HCFC TECHNOLOGY (UNDP)

The implementing agency expert appraised the prospective recipient enterprise, Fadak Refrigeration Industries Co. during February/August 1999, prior to the preparation of this project document, and had detailed discussions with the technical and managerial personnel of the enterprise, regarding the choice of technology for replacing the existing CFC-based technology, under the project. The enterprise was briefed in detail about the following:

1. An overview of the available interim (low ODP) and permanent (zero ODP) replacement technologies.
2. The techno-economic impact of each technology on the products manufactured, and the processes and practices employed by Fadak Refrigeration Industries Co.
3. The possible implication of each technology, in terms of its known impact on environment, health and safety, such as ozone depleting potential, global warming potential, occupational health, fire and explosion hazards.
4. It was emphasized to Fadak Refrigeration Industries Co. that HCFC technologies are interim in nature due to their residual ODP and therefore may continue to adversely affect the environment, though at a lower scale than CFCs.
5. It was further explained that HCFCs may be prohibited under present or future international conventions and will therefore also need to be phased out at a future date, and any investments required for their phase-out and for conversion to safer technologies, may have to be borne by Fadak Refrigeration Industries Co.

Fadak Refrigeration Industries Co. preferred selection of HCFC-141b based technology, in their manufacture of commercial refrigeration equipment offering the following reasons:

- a) Hydrocarbons are flammable and constitute a fire, explosion, safety and security risk. The factory premises of Fadak Refrigeration Industries Co. are not equipped or designed for handling such hazardous chemicals. To implement this technology they may need to drastically re-layout or even have to move the factory. This is not commercially viable to them, as it would be very expensive and time-consuming.
- b) Their factory workers are not familiar with use of flammable chemicals and it would be extremely expensive to re-train them and change their mindset.
- c) The product specifications would change and lot of investments would be needed for this changeover.

Fadak Refrigeration Industries Co. thus prefer HCFC-141b technology, which would be relatively much cheaper, easier and quicker to implement without making major changes in their manufacturing activities.

Justification for the Use of Alternative Technologies - Foam Operation (UNIDO)

The use of HCFC-141b as an alternative-blowing agent for the foaming operation will result in the following:

- 1) New formulations suitable for CFC-141b will be required. These will be available from existing chemical suppliers. No investments are foreseen for handling chemicals.
- 2) The use of new formulations will lead to a change in mixing ratios and increased viscosity, leading to reduced flow characteristics of the chemical mixture. The foaming reaction parameters will change. HCFC-141b based foam will have an increased thermal conductivity compared to foam produced with CFC-11. The existing low-pressure dispensers with mechanical mixing, will not be able to process the new formulations without adversely affecting the cell structure and thereby the thermal conductivity of the foam. These dispensers will therefore be replaced by high-pressure foam dispensers of equivalent effective capacity, which will provide a finer cell structure and help minimize the deterioration of thermal conductivity of the foam.
- 3) The HCFC-141b based foam will have an increased molded density with respect to the CFC-11 based foam, resulting in increased requirement of chemicals.
- 4) Technical assistance from external process experts and from chemical and equipment suppliers will need to be acquired, to implement the new formulations and to ensure smooth transition to the new technology.
- 5) Trials will be needed for the new equipment, process and products. This will cover the cost of chemicals, raw materials, consumables & utilities required during trials/commissioning.
- 6) The production personnel in the enterprise need to be trained to be able to work with the new formulations and process.

Costs are included in the project budget, to cover the incremental costs of these changes. These changes will also result in incremental operating costs, for which provision has been made in the project budget. These incremental costs originate from the Increased cost of the formulations and increased foam density resulting in increased consumption of polyurethane chemicals.

وزارت محیط زیست و منابع طبیعی



Islamic Republic of Iran
Department of Environment
Ozone Layer Protection Unit

Ref: A.2.1147.S.....
Date: 18/12/99

In the name of God

Dr. Omar E. El-Arini
Chief Officer
Montreal Protocol
Fax : 1514282-0068

RECEIVED
SEP 9 1 1999

Dear Dr. El. Arini,

Reference is made to the commercial refrigeration sector projects prepared for submission to 29th meeting of the Ex.Com as follows :

- 1- Electro Shargh Mazandaran
- 2- Sard Karan
- 3- Jaleh of Zahedan
- 4- General
- 5- Electro Sard Azna
- 6- Fadak
- 7- Sardrazi Tehran
- 8- Khouzestan Technic
- 9- Baharanfar of Andimeshk

Please be advised that we recognize that the technology choice is HCFC-141B even though this alternative is considered to be an interim one .

Indeed at the time being we have no other choice due to many national and global factors prevailing the technology selection , among them are:

- Commercially availability of HCFC-141b
- Low conversion costs comparing the other alternatives
- High safety costs of hydrocarbon technology

The counterparts have acknowledged that they would convert to ODS free technology if regulations request them to do so and this is understood and endorsed by us as well .

This justification complies with Ex.Com's decision 27/13

Thank you and best regards ,

N. Moharamnejad
Deputy-Head of Department for
Human Environment affairs

CC: Patricia Akiki
Programme Assistant
Fax : 212 906-6947

RECEIVED
MAY 09 2002



Islamic Republic of Iran
Department of Environment
Ozone Layer Protection Unit

Ref: O.R./281.....
Date: 2 MAY 2002

In the name of God

Ms. Cecilia U. Corpus
Regional Programs Officer
Montreal Protocol Unit
United Nations Development Programme
Fax: (212) 906 6947

Subject: Commitment Letter of Protects Involving HCFCs

Dear Ms. Corpus,

In line with the decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, the Government of I.R.Iran

- a) Verifies that it had reviewed the specific situation at Salaki and Fereidooni refrigeration manufacturers
- b) States that based on the prevailing circumstances at Salaki and Fereidooni at the present time, the conversion of these enterprises require the use of HCFC141b for the interim period as stipulated in the Montreal Protocol.
- c) Confirms that the Government and the recipient enterprises understood that no funding would be available from the MF Fund for the future conversion from HCFCs for the said enterprises whenever such a conversion to other alternatives will be required.

Thank you and best regards,


S. Ferdowsi
Manager

cc: Mr. Rostami, UNDP Tehran



Ref: 02...170
 Date: 22...04...2000

Islamic Republic of Iran
 Department of Environment
 Ozone Layer Protection Unit

UNIDO
 Vienna

In the name of God

Attention: Dr. A. Malayeri

Subject: Commitment letters of projects involving HCFCs

Dear Sir,

In line with the decision 27/13 of the Executive Committee and in recognition of Article 2F of the Montreal Protocol, *the Government of I.R.Iran*

a) Verifies that it had reviewed the specific situation at the enterprises *Sanayee Boroudati Partou sord Tawan (Barez-Himalia) and Sanayee Boroudati Hmalia (Himalia), Iran.*

as well as its HCFC commitments under the article 2F:

b) States that based on the prevailing circumstances at *Sanayee Boroudati Partou Sord Tawan (Barez - Himalia) and Sanayee Boroudati Himalia (Himalia), Iran*

At the present time the conversion of the enterprises requires the use of HCFC-141b for the interim period as stipulated in the Montreal Protocol:

c) Confirms that the Government and the recipient enterprise understands that no funding would be available from the Fund for future conversion from HCFCs for the said companies whenever such a conversio to other alternatives will be required.

UNIDO-IRAN			
DATE RECD: 23 APR 2000			
REG. NO.: 1000			
FILE NO.: MP (1)			
INF	ACT	DATE	INIT
/	/		

Ozone Office Manager
 Name: saeid ferdowsi
 Signature: *S. Ferdowsi*
 Date: 22/04/00