

OZONE CENTER
Yearly Operational Progress Report
Date: December 31, 2008

Country: Kyrgyz Republic

Implementing agency: UNEP

National coordination agency: Ozone Center

Project title: Institutional Strengthening Project for the Montreal Protocol Implementation in the Kyrgyz Republic

Period covered: October 1, 2002 – December 31, 2008

1. Status of implementation of the activities listed under Section 4.2-3

1.1. Realization of awareness raising campaign covering public and industrial sector on danger posed by ODS

The campaign for public awareness is carried out according to UNEP guidelines, such as Five Steps for Raising Awareness on Ozone Depletion, 1996, and others. Produced video reels are regularly demonstrated to representatives of industrial sector and NGOs. At the present time there is a set of videos used:

1. Sky Pirates (Ozon Action Programme, 26’);
2. Good Practices in Refrigeration, 14’;
3. Saving the Ozone Layer Every Action Counts (Ozon Action Programme, 18’);

This video was translated into Kyrgyz and Russian languages for further on-air demonstration purposes at National TV.

4. Methyl Bromide (Ozon Action Programme and TVE);
5. Healthy Harvest: Alternatives to Methyl Bromide (Ozon Action Programme, 15’);
6. Back to the future. Safe Handlings Handling of Hydrocarbons (Ozon Action Programme, 20’);
7. Automotive Air Conditioning System Theory, Diagnosis and Service Procedures (20’);
8. Nothing to Declare: Good Customs to Save the Ozone Layer (UNEP Division of Technology, Industry and Economics, Ozon Action Programme, 18’42’)
9. Lost in transit (EIA, 15’);
10. Cartoon “Ozzy – Ozone” (UNEP, 9’44”) translated on Russian language.
11. Video “Ozon borborunun ishi” in Kyrgyz language.
12. Video of American Cancer Society “Sun Rays – a major health hazards today”

During 2005, two video clips and 3 video films have been produced:

- Global catastrophe “Looking back to future”,
- Lesson on chemistry,
- Danger to skin,
- Safety preventive measures to be taken while under sun,
- To children about children.

Also during 2005, two scientific 20 minutes long video films on ozone layer protection problem have been made. The main goal of the first video is to inform farmers about modern

technologies of grain treatment and its treatment products, about correct ways of grain-crops storing, acquaintance of public with methyl bromide alternatives - chemical agents for grain treatment and the consequences of wrong storage of grain-crops treatment and its influence on human health. Second video film relates about the consequences of ozone layer depletion and ultraviolet radiation influence on human health.

During 2008

Two web-sites, devoted to protection of the Ozone Center, were developed and established:

- www.ecoholod.com.kg. Web-site of Republican Public Association “Ecoholod”. The site contains information about activity of this public association;
- www.ecofum.org.kg. Web-site contains information about Republican Public Association “Ecofum”, that was established with the support of the Ozone Center, under UNDP program, directed to implementation of modern technologies for pest control and minimization of negative influence to the environment.

Multimedia DVD for public awareness on problems of the Ozone Layer was prepared. Also video films were produced, as follows:

- Influence of UV radiation on health, 15’;
- Implementation of alternatives for MDIs, 15’;
- On implementation of TPMP, 15’;
- Servicing mobile air conditioners, 15’;
- On activity of the Ozone Center, 15’.

On the basis of brochure “Saving the Ozone Layer: Every Actions Counts” a new brochure “Problems of the Ozone Layer Protection” was created and translated into Kyrgyz and Russian languages. The brochure contains popularly described reasons of a danger posed by the destruction of the ozone layer in the stratosphere, consequences of its depletion and action that need to be taken for the prevention. A specific attention is drawn to the contribution made by developing countries in order to reduce emissions of the ozone depleting substances. There is also a brief summary of the current state of the problem and actions taken in the Kyrgyz Republic to reduce the consumption of ODSs. This brochure is aimed at experts in the field of ozone protection/environmental problems, scientists, students, and at general public as well. The brochure is distributed to main libraries, higher education institutions and given to participants of all workshops arranged by the Ozone Center. This brochure was published in number of 500 issues and is freely distributed among all stakeholders.

A brochure containing general international agreements and national legislation that stipulate principle basics and trends of ozone protection activities in the Kyrgyz Republic was published. The circulation of the brochure was set at 1,000 copies. This material was also circulated among the principle libraries, higher education institutions as well as it is normally popularized during Workshops arranged by the Ozone Center. During the reported period this material was translated into Kyrgyz language. In the second half of 2004 an updated edition of a brochure containing general international agreements and national legislation was prepared in Russian and Kyrgyz languages.

An information message “Problems of the ozone layer preservation” was developed and published by the Ozone Center (500 copies). This material includes an article of Mr. Bolotbek Aidaraliev, National Project Coordinator, - “Global initiatives”; strategic statement of the Government of the Kyrgyz Republic; prioritized tasks of governmental authorities and industrial enterprises; roles played by different structures; list of projects that are important for implementation; actions required for successful implementation of projects. At the second half of

2004 this information message was translated into Kyrgyz language and published (500 copies). This material is distributed among participants of workshops and stakeholders.

A brochure “Influence of UV radiation on the health of human being” was published (500 copies). The brochure describes main aspects of the ozone layer depletion and consequences for the humans. It also describes positive and negative effects of UV radiation. The brochure pays especial attention to methods of protection against harmful sun radiation. The brochure is aimed at wide range of the public. The brochure is distributed to main libraries, higher education institutions and given to participants of all workshops arranged by the Ozone Center. This brochure was freely distributed among all stakeholders.

“Protection of the Ozone Layer: contribution of tourism and hotel industry” brochure was published in amount of 500 copies. The brochure contains popularly described reasons of a danger posed by the destruction of the ozone layer in the stratosphere, consequences of its depletion and action that need to be taken for the prevention. This brochure is aimed at representatives of hotel and tourism business. It was distributed among participants of the National workshop on raising awareness and incentive of end-users of refrigeration equipment, September 7, 2004. This workshop was orientated at employees of hotel and tourism business.

Special manual “Problems of the ozone layer protection through the eyes of teachers” was prepared. This manual received positive references and recommendations for publications. The manual was discussed at two workshops and scientific council of Kyrgyz Education Academy and recommended to be published. The manual was approved by the Ministry of education of the Kyrgyz Republic. This manual was published (500 copies) in Kyrgyz and Russian languages.

A brochure “Twenty questions and answers: Scientific assessment of the problem of the ozone layer protection” was published. The brochure contains, in form of questions and answers, popularly described problems of the destruction of the ozone layer and ways to protect it. The style of the brochure makes it easily understood for inexperienced reader. The brochure describes basic ideas about the ozone, ozone layer, their influence on human beings and environment. There is detailed information about main mechanisms of forming and destruction of the ozone in atmosphere. There is also information about distribution of the ozone in different layers of atmosphere and over different regions. Special attention is given to mechanism of regulation of influence on the ozone layer and their efficiency. This publication will be useful for wide range of specialists, students and stakeholders. Volume of publication is 500 copies in Russian and Kyrgyz languages.

A thematic wall calendar for 2004 that reflects problems of preserving the ozone layer is published (500 issues). The calendar is distributed to higher education institutions, decisions-makers, NGO, international organizations offices.

The following posters were designed and printed: “Ozone layer and its protective role”, “Let’s protect our health and environment: Customs checking table”, “Sizzle or tan?”, “UV radiation and its influence on living organisms”. These posters are freely distributed among schools, libraries, institutes and participants of workshops, organized by the Ozone Center.

The brochure “Implementation of alternatives to Methyl Bromide in the Kyrgyz Republic” was published in amount of 500 copies.

“Manual for refrigeration technicians on modern methods of service of refrigeration equipment” was published in amount of 100 copies.

Manual “Refrigerants, oil, service of refrigeration systems” was published in amount of 500 copies.

A booklet “Methyl Bromide Alternatives” has been published in amount of 500 copies. During 2007:

- Preparation of “Guidelines for training refrigeration technicians modern methods of MACs servicing”. The guidelines contains information about methods of retrofit, recovery and recycling of CFC-12 with the use of received equipment.

- Publication of brochure “Phase-out of Halons”, containing detailed information about use of Halons, fields of application, their negative influence on the Ozone Layer. Published in amount of 500 copies.
- Publication of brochure “The Ozone Layer”, containing information about history of the problem, theoretical and practical information about natural and anthropogenic factors of influence on the Ozone Layer, connection between problem of the Ozone Layer and climate change. There is special chapter talking about harmful effects of high UV radiation and protective measures against it. Published in amount of 500 copies.
- A number of information materials were translated into Russian: “Education pack”, “Fire protection Alternatives to Halons”, “Environmental effects of ozone depletion and its interactions with climate change: 2006 assessment” и «Ozone Protection-Climate Change-Energy Efficiency. Special issue of “Industria & Formazione” Magazine.

In cooperation with Public Association “Beagle”:

- Preparation of art illustrations for working book “Ozzy Ozone – your friend and defender”.
- Preparation of methodical manual “Recommendations for applied program for natural science lessons”

- Preparation of working book “World free of the Ozone holes”

In cooperation with Central Asian Center for Information Resources “EcoInform”

- Publication of bulletin “Protection from harmful sun radiation”, about sun-safe behavior and protective clothes. Published in amount of 500 copies.
- Publication of Postcards “No ODS”, devoted to 20th anniversary of the Montreal protocol. Published in amount of 250 copies.

In 2008:

- In April 2008 two brochures were published in Russian and Kyrgyz languages: “Breathe better, saving the planet”, devoted to problems of MDIs, containing ODS and their alternative substitutes. Brochures were developed separately for physicians and for patients and population (Published in amount of 1000 copies, on each language);
- Reprint of brochure “The Ozone Layer”, 500 copies;
- Publication of brochure for schoolchildren “Play safe in the Sun”, 500 copies.
- Reprint of Information bulletin “Protection from harmful Sun radiation”, 500 copies;
- Publication of working book on ecology “Protect yourself from the Sun” for schoolchildren, 500 copies;
- Reprint of book “Oils and refrigerants”, Author Mr. B. Babakin, 300 copies;
- Publication of “Manual for beginning refrigeration technicians”, in Russian and Kyrgyz languages, 100 copies;
- Publication of “Manual for servicing MACs”, 300 copies;
- Reprint of “Guidelines on the best practice”, 300 copies;
- Publication of brochure “Review of refrigerants”, 300 copies.

In 2009:

1. Informational book “To future without methyl bromide»;
2. Ozone layer depletion, UV radiation, climate change in global and regional scale. Myth or reality?” collected papers of the National academy of science of Kyrgyz Republic: authors: Toktomyshev S.J., Orozaliev M.D., Amanaliev M.K.
3. «Regional monitoring of atmospheric ozone”, authors: Toktomyshev S.J., Orozaliev M.D., Amanaliev M.K., Semenov V.K., Sinyakov V.P.

4. Posters “Ozone holes and the climate of mountainous region of Central Asia”
5. The brochure «Ozone layer» is republished, 500 copies;
6. The brochure «The problems of ozone layer protection» is republished in Russian and Kyrgyz languages, 1000 copies;
7. Comics «Sunshine and Muk is my friend» are republished, 500 copies;
8. Educational supplies «To teacher- about the ozone layer» are republished in Kyrgyz language, 500 copies;
9. Department of journalism of Kyrgyz-Russian Slavic university with financial support of Ozone center prepared a special issue of students’ newspaper “Ozonovyi vestnik”, 2500 copies, that inserted an interview with the head of an upper-air scientific station “Issyk-Kul” Sinyakov V.P., assistant of Ozone center Ilyasov Sh.A., National consultant of Ozone center Garifulin V.K.; useful information about the protection from harmful effects of ultraviolet radiation; 2009 Secretary General’s message in honor of celebration of the International day of ozone layer protection, last news and so on

During 2005/06 and 2009/10 academic years, the theme on ozone layer protection has been introduced into compulsory education course on Ecology at Kyrgyz-Russian Slavonic University.

During March 14-16, 2007 the Ozone Center had organized Training Center for implementation of alternatives to Methyl Bromide under Osh Technology University.

The Ozone Center rendered assistance to the Kyrgyz Agrarian University and established new Training&Research Center under this university. The center helps students to realize laboratory work and mastering new practical methods for ODS phase-out in agricultural sector.

Information about activity, carrying out in frames of the project, had been presented in mass media of the republic:

- Interstate TV company “MIR”, news from CIS (in air 16⁰⁰, 15.04.2003);
- National TV and Radio Corporation (information program “Ala-Too”, 20³⁰ in Russian, 21³⁰ in Kyrgyz, 10.04.2003);
- Kyrgyz Public Educational Radio and Television, News service “Novosty” 10.04.03;
- National TV and Radio Corporation, “Radio”, latest news, 10.04.03;
- Radio “Azattyk”, 13.04.2003 (in English and Kyrgyz);
- Newspaper “Vechernyi Bishkek” (article “To save the ozone layer” as of 10/04/2003);
- National TV and Radio Corporation (TV news service – in Russian and Kyrgyz languages – as of 4/06/2003);
- Independent Bishkek TV Company (news programme as of 4/06/2003);
- TV “Piramida” as of 14/06/2003;
- Internet based journal “Econs” as of 22/04/2003
- Newspaper “Erkin Too” (article “Ozon katmary emneden buzulat? – What is the cause of the ozone layer depletion?” – as of 3/06/2003);
- Newspaper “Vechernyi Bishkek” (article “Ozone and refrigerants” as of 25/06/03);
- Newspaper “Slovo Kyrgyzstana” (article “To give the planet a live” as of 16/09/03);
- Newspaper “Salam” (article “Climattyn buzulushuna emne sebepker?” as of 16/09/03);
- Newspaper “Vechernyi Bishkek” (article “Freon off, ozone at stake” as of 16/09/03);
- Radio “Azattyk” (at 6.00, 8.00, 9.00, 12.00, 17.00 (in English, Russian and Kyrgyz languages) informative message of the Ozone Center of the Kyrgyz Republic devoted to International Ozone Day as of 16/09/03);
- Kyrgyz Radio Station, “Ecology” section (11.15 – interview with Mr. Amanaliev, Ozone Center’s manager and Mr. Jumaliev, National Consultant).
- Newspaper “Chuy bayany” (article “Ozon planetanyyn kalkanchy” as of 20/12/2003);

- National TV and Radio Corporation (Ala-Too news programme – 20:00 in Russian, 21:00 in Kyrgyz, information on the problems of the ozone layer protection, as of 10/02/2004);
- Radio “Azattyk”, rubric “News from Kyrgyzstan” – 20:00 as of 10/02/2004);
- Newspaper “Chuyskie Izvestia” (article “Customs is on guard of the ozone layer” as of 14/02/2004);
- Radio “Azattyk”, information message and detailed information about ODS phaseout problems as of 16/02/2004 and 17/02/2004);
- Radio “Almaz”, information on problems of the ozone layer protection, as of 16/02/2004;
- Newspaper “Vecherniy Bishkek” (article “We have reason to protect the ozone”, as of 16/02/2004;
- Osh TV Broadcasting Company, information in Uzbek and interview with head of NOU, Mr. M. Amanaliev, as of 17/02/2004;
- Newspaper “Eho Osha” (article “No smuggling of refrigerants” as of 20/02/2004);
- Newspaper “Osh Janyrygy” (article “Ozon katmary korgoluuga muktash” as of 20/02/2004);
- Newspaper “Slovo Kyrgyzstana” (article “We have no reason to destroy ozone” as of 20/02/2004);
- Republic Radio “Osh-3000”, interview with head of NOU, Mr. M. Amanaliev, as of 20/02/2004 and 21/02/2004;
- Newspaper “Slovo Kyrgyzstana” (article “There is especial reason to protect the ozone” as of 12/03/2004);
- Regional newspaper “Ush sadosi” (two articles in Russian and Uzbek about problems of ODS phaseout, March 2004);
- National TV and Radio Corporation, report “Ecology” at TV programme “At the end of the week”, April 2004;
- National TV and Radio Corporation and Kyrgyz Public Educational Broadcasting Channel, report about workshop for refrigeration technicians, as of 26/05/2004;
- Newspaper “Vecherniy Bishkek”, information message about training for refrigeration technicians, as of 26/05/2004;
- National TV and Radio Corporation, “Kabar” TV programme, information message about future plans of Kyrgyzstan on ODS phaseout, 26/05/2004;
- National TV and Radio Corporation, interview with head of NOU Mr. M. Amanaliev and National consultant Mr. J. Jumaliev on problems of ozone layer protection, as of 2/06/2004;
- Newspaper “Erkintoo” (article “Globaldyk maselerdy chechkinuu araketter chechet”, as of 4/06/2004);
- National TV and Radio Corporation, TV studio “Zamana”, interview with head of NOU Mr. M. Amanaliev, devoted to the Day of Ecology, as of 5/06/2004.
- Newspaper “Eho Osha”, publication about problems of the ozone layer protection, June 19, 2004;
- TV “Piramida” – June 15, 2004, news program “Novosty”, 19.30 and 22.00;
- TV “Osh-3000” – June 16, 2004, news program “Novosty”, 16.15 and 17.30 (in Kyrgyz);
- Radio “Almaz” – June 15, 2004, 19.00 (in Russian) and 21.00;
- Kyrgyz Public Educational Radio and Television – June 15, 2004, evening news, 19.00 (in Kyrgyz), 20.30 (in Russian);
- Newspaper “Vecherniy Bishkek”, article “No destruction”, July 29, 2004;
- National TV and Radio Corporation, Radio “Bishkek”, July 31, 2004, 9.00 – 9.30;
- Interstate TV company “MIR”, interview of Mr. M. Amanaliev and Mr. M. Tushishvily, news of CIS, August 2, 2004, 10.15;

- National Radio Channel. Interview with National coordinator Mr. B. Aidaraliev, Head of the Ozone Center Mr. M. Amanaliev and National Consultant Mr. J. Jumaliev, September 14, 10.14 – 10.30;
- National Radio Channel. Live radio program “Ecology”, September 11, 2004. Head of the Ozone Center Mr. M. Amanaliev and National Consultant Mr. J. Jumaliev answered questions of audience;
- Newspaper “Vecherniy Bishkek”, article “Save our sky”, September 16, 2004;
- Radio “Azattyk”, news from Kyrgyzstan devoted to the International Day for the Preservation of the Ozone Layer, September 16, 2004;
- Newspaper “Moya Stolitsa. Novosti”, article “We will save our sky”, September 17, 2004;
- Children Newspaper “Aidanek”, report “Youth of Kyrgyzstan will protect the ozone Layer”, September 17, 2004;
- National TV and Radio Corporation, news program “Zamana”, report “Ozone Day”, September 17, 2004;
- Radio “Kabarlar”, report from “Seyil” park, September 17, 2004;
- Newspaper of Ministry of Ecology and Emergency Situations “Saktoochu”, article “September 16 – International Day for the Preservation of the Ozone Layer”, September 17, 2004;
- TV of Talas region, report on ozone issues, September 18, 2004;
- Newspaper “Slovo Kyrgyzstana”, article “To save our sky”, September 21, 2004;
- Central Asian Newspaper, article “Kyrgyzstan celebrates the Ozone Day”, September 23, 2004 (in English);
- National TV and Radio Corporation, educational program “Moye Zdorovie”, rubric “UV radiation and we”, September 25, 18.30 – 19.00;
- Newspaper “Erkin Too”, article “Ozone Protection”, September 27, 2004;
- Radio “Osh-3000”, interview, September 28, 2004;
- National Radio Channel. Report from “Seyil” park, September 28, 2004, 10.15;
- Newspaper “Chuiskie Izvestia”, article “There is a special reason to protect the ozone layer”, September 29, 2004;
- Newspaper “Vecherniy Bishkek”, article “No Freon – Save Ozone”, October 16, 2004;
- Newspaper of Ministry of Ecology and Emergency Situations “Saktoochu”, article about Country Program, October 16, 2004;
- TV of Naryn region, news, October 24, 2004;
- Jalalabat regional newspaper “Akyikat”, two articles, October 29, 2004;
- Jalalabat regional TV, program “SOS”, November 17, 2004;
- Talas regional newspaper “Talas turmushu”, article, November 22, 2004;
- Newspaper “Vecherniy Bishkek”, article “We have reason to preserve ozone”, December 24, 2004;
- Newspaper MSN, article “It is far from ozone idyll”, #2, January 11, 2005;
- Radio “Ukular chorgolo”, educational program, June 1, 2005;
- Radio “Azattyk”, educational program, June 1, 2005;
- TV show “Ecological program “Ata Jurt Ajary”, June 5, 2005;
- TV “Alatoo”, news, June 7, 2005;
- Newspaper “Aalam”, article “How we can save the ozone layer”, June 14, 2005;
- Newspaper “Vecherniy Bishkek”, article “Better late than never”, June 16, 2005;
- Newspaper “Kyrgyz Tuusu”, article “Kyrgyzstan and global problems”, June 17, 2005;
- National TV, news, June 18, 2005;
- National TV, “Nevseznayka” ecological education show, June 18, 2005;
- Newspaper “Spasatel”, article “Saving ozone layer is our common business”, June 30, 2005.

- Newspaper “MSN”. Author Ms.Skorodumova E. “Long live Uzunakmatski grape”, July 4, 2005;
- Regional newspaper “Znamia Pobedy”, author Mr.Sydykov N., “Saktykta koorduk jok”, August 21, 2005.
- National TV “Kabarlar”, News, September 16, 2005, 13.00 & 15.00 o’clock.
- TV “NBT”, News, September 16, 2005 (20.00 & 23.00) and September 17, 2005 (08.00),
- National TV, Ecological program devoted to Ozone Layer Day, 20 minutes, September 18-24, 2005 and October 15, 2005.
- Newspaper “Vechernii Bishkek”, author Ms.Nichiporova, “It’s better to be a friend of sun”, #185, September 28, 2005.
- National TV show “Let our sky be clear!”, September 2005;
- Newspaper “Vechernii Bishkek”, author Mr.Mukashev, article #187, September 30, 2005
- Radio station “Mir”, News of Commonwealth, October 15, 2005.
- Newspaper “Kutbilim”, author Ms.Fomina T.V. “Protect yourself”, #37, October 21, 2005
- Independent Bishkek TV “NBT” - running commentary from Constituent Assembly of social union “Ecoholod, September 17, 2005”
- National TV, ecological program, 20 minute long, November 15, 2005.
- Regional newspaper “Znamia Pobedy” author Mr.Sydykov N., “Protect ecology, protect grain”, November 11, 2005.
- Newspaper “Vechernii Bishkek”, author Mr.Denisenko E., “What a mess did methyl bromide”, December 23, 2005.
- National TV, Health program “Methyl Bromide alternatives”, 20 minute long, Dec. 15, 2005.

In 2007

- TV chanel KTR, interview with the Head of the Ozone Center, June 5, 2007;
- Newspaper “Vitrina”, article “Protection of the Ozone – Rescue of the Earth”, devoted to 20th anniversary of the Montreal Protocol. April 2007;
- Web-site www.24.kg Information about International Scientific Conference “Modern problems of climate change and depletion of the Ozone Layer”, devoted to the 20th anniversary of the Montreal Protocol. Staff of the Ozone Center participated at this conference and presented information about interaction between climate change and depletion of the Ozone Layer.
- Article “Problem of the Ozone Layer protection”, Newspaper “Chuy Bayany”, 01.08.2007,
- Article about workshop “Modern grain protection methods”, Newspaper “Agropress”, No. 11 (83), August 2007.
- Article about workshop “Modern grain protection methods”, Newspaper “Batken Tany”, No. 29 (101), August 2007.
- Information about workshop “Modern grain protection methods”, TV ELTR, Osh region, August 2007,
- Article “Local efforts for global solution”, Newspaper “Batken Tany”, 13.08.2007,
- Article “For the protection of the Ozone Layer”, Newspaper “Erkin-Too”, No. 67 (1676), 18.09.2007,
- Article “We are in the Ozone Hole”, Newspaper “Slovo Kyrgyzstana”, 17.07.2007,
- Article about workshop “Modern grain protection methods”, Newspaper “Erkin-Too”, September 2007.
- Article “No Ozone Hole over Kyrgyzstan!”, Newspaper “Omega” №43 (189), 6.11.2007,
- Article “Customs Officers raise barriers for import of illegal ODS”, press service of CARNet, www.ekois.net, 10.07.2007,
- Article “Activity of the Ozone Center”, Information Agency “Kabar”, 10.07.2007 ,
- Article “20th anniversary of the Montreal Protocol”, press service of CARNet, www.ekois.net, 24.08.2007,

- Article “Ecological Action in Kyrgyzstan, devoted to the Ozone Day”, Information Agency “24.kg”, 15.09.2007
- Article “Forum on protection of agriculture products in Bishkek”, Information Agency “akipress.kg”, 6.12.2007,
- Article “International Day of the Ozone Layer Protection”, press service of CARNet, 12.09.2007,
- Radio GTRK, live broadcast 9:10-9:40. Head of the Ozone Center M. Amanaliev
- Radio GTRK, News, 22:00, 9.08.2007
- Radio GTRK, News, 9:00, 13:00. Y. Pavlov, N. Ozhereliev, Ch. Arsybaeva 10.08.2007
- TV GTRK, Talk-show, devoted to the International Day of the Ozone Layer Protection, 18.09.2007

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- TV KTR, TV-show “ZAMANA”, live broadcast “Global ecological problems”, 22.02.2008;
- TV KTR, TV-show “NUR”, “Combatting climate change” (Solidarity in divided world)», 25.02.2008, 10⁰⁰ – 11⁰⁰;
- Newspaper “Aiyl Okmoty, article “What any of us can do?”, 12.01.2008, # 41(47);
- Radio GTRK, broadcast “KABARLAR”, information about workshop “Methods and ways of informing the public”, (19.03.2008 – 20⁰⁰, 20.03.2008 – 7⁰⁰, 20.03.2008 – 8⁰⁰)
- Information Agency “AKIPRESS”, information about workshop “Methods and ways of informing the public”, 19.03.2008;
- Information Agency “AKIPRESS”, article “Production of ODS in the world decreased for 95%”, 19.03.2008;
- TV NBT, TV-show “News”, information about workshop “Methods and ways of informing the public”, 19.03.2008;
- TV NTS, TV-show “News”, information about workshop “Methods and ways of informing the public”, 19.03.2008;
- Radio “Europa Plus”, information about workshop “Methods and ways of informing the public”, 19.03.2008;
- Newspaper “Dla Vas”, article “The Ozone Layer is life”, #12(530), 22.03.2008;
- Newspaper “Kyrgyz Tuusu”, article about the Ozone Layer, 28.03.2008;
- Radio “MIR”, broadcast “News”, interview with the head of the Ozone Center, 2.04.2008, 18⁰⁰;
- Newspaper “Moskovsky Komsomolets”, #11(343), article “Kyrgyzstan is threatened by climat climax”, 2.04.2008;
- Information Agency “AKIPRESS”, information about the round table organized by the Ozone Center and devoted to the problem of storage of agricultural products, 10.04.2008;
- Newspaper “Moya Stolitsa”, article “Shield of the planet”, 11.04.2008;
- Information Agency “AKIPRESS”, article “In Kyrgyzstan farmers are not engaged in processing and storage of grain”, 11.04.2008;
- TV “PIRAMIDA”, TV-show “News”, information about the round table organized by the Ozone Center and devoted to the problem of storage of agricultural products, 11.04.2008, 18⁰⁰, 19⁰⁰;
- TV KTR, TV-show “Ala-Too”, information about the round table organized by the Ozone Center and devoted to the problem of storage of agricultural products, 11.04.2008;
- TRK “MIR”, TV-show “News of commonwealth”, information about the round table organized by the Ozone Center and devoted to the problem of storage of agricultural products, 11.04.2008, 18⁰⁰;

- Radio “MIR”, broadcast “News”, information about the round table organized by the Ozone Center and devoted to the problem of storage of agricultural products, 14.04.2008, 18⁰⁰;
- Newspaper “Moskovsky Komsomolets”, #14(346), article “Almost all grain in Kyrgyzstan is affected by grain insects”, 23.04.2008;
- Newspaper MSN (“Moya Stolitsa”), №32(62), article “What bread do we eat?”, 2.05.2008;
- TV “5th channel”, TV-show “News”, Information about the round table devoted to inhalation therapy of COPD and protection of the Ozone Layer, 20.05.2008, 20⁰⁰ and 21⁰⁰;
- TV NTS, TV-show “News”, Information about workshop “Inhalation therapy of COPD and protection of the Ozone Layer”, 27.05.2008, 19⁰⁰ and 20⁰⁰;
- TV “EITR”, TV-show “Kutman Tan”, c/o Osh, Information about workshop “Inhalation therapy of COPD and protection of the Ozone Layer”, 12.06.2008, 7⁰⁰;
- Newspaper “Osh Janyrygy”, Information about workshop “Inhalation therapy of COPD and protection of the Ozone Layer”, 14.06.2008;
- TV “EITR”, TV-show “News”, Information about workshop “Inhalation therapy of COPD and protection of the Ozone Layer”, conducted in Jalalabat, 13.06.2008, 19²⁰;
- Newspaper “Eho Osha”, article “Asthma and ozone”, 7.06.2008.
- TV “5th channel”, news, information about activity of the Ozone Center, 18.07.2008;
- Information agency “Akipress”, information about national workshop for specialists of refrigeration field, 28.07.2008;
- Newspaper “Moscowsky Komsomolets”, №28(360), article “Hello from the sky”, 30.07.2008;
- Issyk-Kul regional TV, program “Ala-Too reflections”, information on activity of the Ozone Center, 31.07.2008;
- TV NTS, program “News”, information about International Ozone Day, 16⁰⁰, 17⁰⁰, 19⁰⁰, 20⁰⁰, 16.09.2008;
- Newspaper “MSN”, №70(659), article “Ozone Layer and health of lungs, 16.09.2008;
- Information Agency “Akipress”, information about International Ozone Day, 16.09.2008;
- “Anten TV”, c/o Karakol, program “News”, information about International Ozone Day, 17.09.2008;
- Issyk-Kul regional TV, program “Ala-Too reflections”, information about International Ozone Day, 20³⁰, 18.09.2008;
- Newspaper “Student review: Ozone messenger”, September 2008, special issue.

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14.01.2009 web-site: www.ipp.kg Interview with Ilyasov Sh.A. – assistant of Ozone center on theme “Climate change and ozone layer depletion”

10.02.2009 TV channel NTS News (at 20:00 in Kyrgyz language, at 19:00 in Russian language), information about the workshop on introducing alternatives to halon in firefighting

11.02.2009 Radio GTRK, (13:00), News, interview with the head of Ozone center Amanaliyev M.K. “On ozone layer protection

11. 03.2009 TV channel NTM Osh town, News, information about the workshop on introducing alternatives to halon in firefighting (at 19:00 in Kyrgyz language)

11. 03.2009 TV channel EITR, Osh town, News, information about the workshop on introducing alternatives to halon in firefighting (18:00, 19:00 in Kyrgyz language)

15.04.2009 TV channel EITR, News, information about the workshop “Problems of UV radiation and ozone layer protection”, (19:00)

22.06.09 OshTV, Osh town, News, information about the workshop “New inhalation technologies of chronic respiratory diseases treatment and ozone layer protection” (19:45)

22.06.09 ElTR, Osh town, News, information about the workshop “New inhalation technologies of chronic respiratory diseases treatment and ozone layer protection” (20:30, in Kyrgyz language)

23.06.09 ElTR, programme “Kutman tan”, reportage about the workshop “New inhalation technologies of chronic respiratory diseases treatment and ozone layer protection” (7:00 – 10:00)

3.07.2009 web-site: www.akipress.kg, information about the opening of production-and-training center on training of specialists of refrigerating engineering in technical school #93;

24.08.2009 www.akipress.kg, information “The meeting of NOUs on issues of introducing the certification of specialists in refrigerating sector will take place in Bishkek”

24.08.2009 TV channel KTR, News, at 21.00, 20:00 in Kyrgyz and Russian languages information about the Contact meeting of National Ozone units of Armenia, Hungary, Georgia, Kyrgyzstan, Moldova and Turkmenistan;

20.08.2009 www.caresd.net information “Contact meeting of National Ozone units of Armenia, Hungary, Georgia, Kyrgyzstan, Moldova and Turkmenistan will take place in Kyrgyzstan.”

8. 09.2009 www.akipress.kg, information “Ozone center of Kyrgyzstan organizes presentation on problems of ozone layer protection for representatives of mass media”

8.09.2009 www.24.kg, information “Kyrgyzstan will fully phase out ozone depleting substances from the 1st of January 2010”

16.09.2009 www.caresd.net, article “16-september- International day of ozone layer protection”

16.09.2009 www.caresd.net , article “UN General secretary’s message on ozone layer protection day – 16-september”

16.09.2009 www.caresd.net, interview with the head of Ozone center Amanaliev M.K.

8.09.2009 newspaper «Moya stolitza», article «Healthy ozone zone», M.Tzoy

15.09.2009 newspaper «Slovo Kyrgyzstana», article «Ozone – the zone of responsibility», A.Shepelenko

15.09.2009 newspaper «Moya stolitza», article «Without ozone – hopeless zone», M.Tzoy

16.09.2009 newspaper «Argumenty i fakty», article «Ozone holes over us – myths and reality” , A. Studenikina

16.09.2009 Issyk-Kul regional TV, News, “Ala-Too aymaktary”, 20:00, information about ecological action in Balykchy town of Issyk-Kul oblast in Kyrgyz language;

16.09.2009 TV channel ElTR, Jalalabad town, news in Kyrgyz language, 20.30, information about ecological action devoted to International day of ozone layer protection in Jalalabad state university;

16.09.2009 OshTV, Osh town, news at 20.00 in Kyrgyz language, information about ecological action devoted to 16-September - International day of ozone layer protection

17.09.2009 at 15:00, radio NTRK programme devoted to the 16-September-International day of ozone layer protection, interview with the head of Ozone center-Amanaliev M.K

6.10.2009 www.issyk-kulpress.kg, information about the workshop “New inhalation technologies of chronic respiratory disease treatment and ozone layer protection”

9.10.2009 Issyk-Kul regional TV, News, “Ala-Too aymaktary” at 20.00, in Kyrgyz language, information about the workshop “New inhalation technologies of chronic respiratory disease treatment and ozone layer protection”

4.12.2009 Talas regional TV, News in Kyrgyz language, information about the workshop “New inhalation technologies of chronic respiratory disease treatment and ozone layer protection”

In 2004, two articles in Russian and Kyrgyz were published in “MUROK” magazine:

- Influence of UV radiation on human health. Authors: Mr. M. Amanaliev, Sh. Iliasov, N. Myrsaliev, #3-4; p. 7-13;
- Condition of the ozone layer. #5-6; p. 26-29.

In 2004 the Ozone Center had realized contest for journalists “The best coverage of the problem of the ozone layer protection”. On December 21, 2004 list of winners was defined by contest committee, consisting of:

1. Mr. M. Amanaliev – Chair of contest committee, Head of the Ozone Center;
2. Mr. V. Garifulin – National Consultant;
3. Ms. J. Duishenova – representative of Department of Ecology and Nature Management, Ministry of Ecology and Emergency Situations;
4. Mr. T. Choduraev – Head of the Ecological Movement “Tabiat” (NGO);
5. Mr. T. Temirov – Deputy Editor, “Erkin-Too” Newspaper.

The Contest committee had examined applied materials and decided to make award only for the second degree nomination. It was also decided to award the incentive prizes. Ms. J. Abdymamytova, radio journalist of National TV and Radio Corporation, was awarded (II degree nomination) for the cycle of broadcasts “What depletes the ozone layer?” and radio reel “Save sky – save yourself”.

The following journalists were awarded the incentive prizes (and Diploma):

1. Ms. G. Duishalieva, Newspaper “Talas turmushu”;
2. Mr. M. Kalybekov, Radio “Osh-3000”;
3. Ms. G. Asanova, Jalalabat regional newspaper “Akyikat”;
4. Mr. A. Ermolov, Newspaper “Chuiskie Izvestia”;
5. Ms. E. Skorodumova, Newspaper “MSN”;
6. Mr. E. Denisenko, Newspaper “Vecherniy Bishkek”.

In 2005 a competition among journalists on better media coverage of problems of ozone layer protection in Kyrgyzstan has been carried out. The competition committee comprised of 7 members:

- Ms.Arsybaeva Ch., Chief committee,
- Ms.Aitmuhamedova S., secretary

Committee members:

- Ms.Duishenova J.K – chief specialist
- Ms.Putalova E. “Green Woman”
- Mr. Pazylov A. – head of MES press
- Mr. Ojereliev N.S – national consultant OC
- Mr. Jumaliev J. – national consultant OC

16 press publications, 7 TV shows, 1 video clip have been reviewed. The press articles of Ms.Skorodumova E., Ms.Fomina T., Ms.Urustembekova Ch., Ms.Sydykova N. and TV and radio shows by Abdymamytova J. were awarded upon results of competition selection.

By the end of 2003 a development of the Center’s web-site was completed where main information related the Center’s activity, global news and problems existing in the field of the ozone layer protection are presented. This site is easily accessible by all interested organizations and stakeholders. The site’s title is www.ozonecoconv.org It is updating regularly.

Devoted to the International Ozone Day, Ozone Center arranged a press-conference for reporters to inform general public on the ozone layer problems (September 14, 2003) and the role played by the Kyrgyz Republic in the course of their solution. The following representatives of country, capital and international mass media organizations were present:

- “Vechernyi Bishkek”, Mr. E. Denisenko;
- “Erkin Too”, Mr. A. Junusov;
- “Zaman Kyrgyzstan”, Ms. K. Elekeyeva;
- “Aidanek”, Ms. T. Umetalieva;
- “Kyt bilim”, Mr. M. Toktorov;
- “Chuiskie Izvestiya”, Mr. D. Evlashkov;
- “Slovo Kyrgyzstana”, Mr. A. Shepelenko;
- “Komsomolskaya Pravda”, Ms. E. Stepina;
- “Aalam”, Mr. B. Bukanbekov;
- TRK “Mir”, Ms. T. Mordacheva;
- “Azattyk”, Mr. B. Amanbayev;
- Kyrgyz General Education Broadcasting Channel, Mr. E. Azisov;
- National Broadcasting Radio Station, Ms. J. Abdykalykova;
- “Internews”, Nikola Ednoter.

After the press-conference had finished, all participants received awareness raising materials.

Devoted to the International Ozone Day, Ozone Center arranged a competition of drawings made by children on September 13, 2003 at a Center of Aesthetic Training. The event was highlighted in mass media.

On September 16, 2004, in honor of International Day for preservation of the Ozone Layer, ecological event under the motto “Save Our Sky: ozone friendly planet is our target” had been started simultaneously in northern and southern regions of Kyrgyzstan, in c/o Bishkek, Osh, Talas, Naryn, and Kara-Balta. More than 1700 people participated in commemoration of the Ozone Day: officials of MEES, representatives of ecological NGOs, teachers, students, school children, children from Republican Center of Aesthetic Education “Balajan” and “Chatyr-Kyal”, children’s chorus “Akshoola”, journalists from different mass media. Information about events was presented in newspapers, TV and radio channels. Winners of different contests conducted under this commemoration received souvenirs and all participants got T-shirts and umbrellas with special “Ozone” pictures, information materials prepared by Ozone Center: brochures, hand-outs in Kyrgyz and Russian languages, containing information about ODS, legislative measures, taken in the republic.

A billboard at the central crossroad in Bishkek was rented to display special poster (3m x 6m) with the slogan dedicated to the necessity of the Ozone Layer protection – “Save our sky!” A video film about ODS was made and broadcasted. National radio channel started broadcasting a radio reel “Saving our sky”. Leaflets were distributed. Special posters were placed in different places of realization of ODS containing production and in public transport.

Two theater shows “Let’s preserve the Ozone Layer” were given: in “Seyil” park and in Republican Youth Center of Ecology.

The Ozone Center organized an exhibition of literature on the Ozone Layer issues at the Republican Scientific and Technical Library of the Kyrgyz Republic.

In the frames of the Ozone Day exhibition was organized in Republican Children and Youth Center of Ecology and Study of Local Lore. Drawings made by children and devoted to the preservation of the Ozone Layer were presented at the exhibition.

On September 16, 2004 there was commemoration of International Day for Preservation of the Ozone Layer at “Seyil” park, organized by the Ozone Center of Kyrgyzstan.

On the same day a workshop devoted to problems of preserving the Ozone Layer was conducted in Kyrgyz State University of Construction, Transportation and Architecture. 50 students of the faculty of “Heat&Gas Supply, Ventilation and Nature Protection”, I – IV year of study, participated in this workshop.

In honor of the International Day of Ozone layer protection on September 16, 2005 the following activities had been carried out:

1. An advertisement hoarding “Protect the ozone layer”, 3 meters x 6 meters long had been installed in one of the main Bishkek street in honor of celebration day.
2. Five video clips had been created:
 - Global catastrophe
 - Lesson on chemistry
 - Skin cancer danger
 - Preventive measures to be taken while under sun
 - To children about children
3. Two scientific 20 minute long films on modern methods of grain storage and its product treatment (bread) and on ozone layer protection problem had been made.
4. On September 14, 2005 a TV show devoted to the International Day of Ozone layer protection with the participation of 50 representatives from government, departments, ministries, ecological projects and NGOs as well as students of three Bishkek Universities took place in the building of the National Television and Radio Company. The TV show related in detail the activities of nature protection, measures taken by the Government and the activities of Ozone Center. Products containing ODS were displayed to the participants.
5. On September 16, 2005, at 09.00-10.00 am, Mr.Amanaliev Mars – the head of Ozone Center and Mr.Jumaliev J. had delivered a speech on the State Radio. Their speeches were accompanied by a radio clip “Protect our sky”.
6. A photo “Ozone layer protection – Earth protection” had been published in the newspaper “Vitrina” with 20 000 circulation.
7. Ecological action under the motto “Let’s protect our sky: Our goal is to acquaint the earth with ozone” devoted to the International Day of Ozone layer protection had been carried out in “Sviatlachock” kindergarden and 20 Bishkek schools. The officials from Emergency, Education Ministries, ecological NGOs representatives, teachers, students, creative group representatives, journalists took part in the celebration of Ozone Day.

The following undertakings in “Sviatlachock” kindergarden had been carried out:

-during the week on such lessons, organized for children, as drawing, music teaching, speech development an acquaintance with environment “How beautiful this world without ozone holes” had taken place. During the lessons the teachers explained popularly to children about ozone layer, about the ultraviolet radiation’s positive and negative impacts on children health and measures to be taken to protect from sun;

-information materials on the given theme as booklets, brochures, crossword puzzles, test assignments and other materials had been given out to children;

-“Ozzy Ozone – a protector of our planet” a cartoon film was displayed to children;

-A meeting for parents devoted to the theme presented by a cancer specialist “Ultraviolet radiation impact on human health” had taken place.

-A theater show “How beautiful this world without ozone holes” with the participation of children had been prepared. The children acting in favorite roles of cartoon heroes related the aftereffects of ozone layer depletion, the ultraviolet radiation impact, necessary sun-protecting measures and clothes. At the results of theatrical show children received awards and “Ozzy Ozone” huge cake.

-In the end of the show each child launched 3 tied-up balloons, symbolizing ozone molecules, to the sky. By launching the balloons the participants expressed their alarm on the problem and appealed to revive the ozone layer, which protects the life on earth from harmful impact of ultraviolet sun radiation.

At the initiative of “Bigl” NGO and with the participation of Ozone Center the students and teachers of #70 school prepared and carried out a theatrical show “Ultraviolet: a foe or a friend” in 20 schools of Bishkek city. In the show were demonstrated sun-protecting clothes and were narrated the main safety measures against ultraviolet impact. During the informative campaign, a teaching procedure on ozone layer protection problem had been introduced into educational course program. An interview before and after the campaign had been conducted. Meetings devoted to ozone-related problems for parents had been organized in each school.

On July 23, 2005 a conference “A study of ecological problems at school lessons on Geography from the point of ozone depletion problem” was conducted by the Educational City Department for school teachers on Geography. During the conference a report “Global problems at school lessons on Physics, Chemistry, Biology and Geography” had been made. Relevant informative materials had been given out.

On October 18-19, 2005 the Ozone Center representatives took part in the National Conference “Education for sustainable development in Kyrgyzstan: the assessment of potential, look into the future”. During the conference a report “Global problems taught on the school lessons on Physics, Chemistry, Biology and Geography” had been made by the example of “Ozone layer depletion”.

On October 20, 2005 a seminar “Ecology and Study of local lore – important factors of school children personality formation” with the participation of specialists from regional departments supervising school and pre-school education and school librarians took place in the secondary school named after Mr. Bajana B.G. of Moscow region of Chu province. The Ozone Center representative presented a report “Ultraviolet radiation and its impact on human health” which were accompanied by video films prepared by Ozone Center. On December 7, 2005 in the same school a meeting with participation of 68 school teachers and the children’s parents took place. A presentation of American Cancer Diseases Society “Sun Rays – A major health hazard today” was made. During the presentation, parents participated in a questionnaire.

February 6-8, 2005, representatives of the Ozone Center took part at the workshop “Monitoring of environment”.

February 9, 2005, representatives of the Ozone Center took part at Final Open Session on results of ecological control review in the Kyrgyz Republic.

March 21-23, 2005, Head of the Ozone Center took part at the 4th meeting of the Network of NOU of Europe and Central Asia.

The Ozone Center co-sponsored ecological action “I love you, Balajan”, devoted to the World day for children protection. More than 300 persons participated at the action.

In 2005 the Republican children and youth center of Ecology, Local Lore and Tourism together with the Ozone Center representatives conducted seminars which attracted attention of specialists of regional educational departments and the heads of schools to the problem of ozone layer protection. Informative materials on this issue were given out, video films were displayed to participants. Also methodological manuals containing articles on ultraviolet radiation impact and protection measures were distributed among ecological groups called “Make your own house better”. During June 16-21, 2005 the Republican children and youth center had conducted a competition on Ecology and Tourism among school children and teachers from Naryn, Issyk-Kul provinces and Sokuluk, Jail, Moscow, Alamydyn, Chu regions, as well as from Tokmok and

Bishkek cities. About 105 people took part in the contest. During the contest, ozone layer protection problem had been explained and an exhibition of children pictures was held.

The following activities had been carried out in 2006 dedicated to International Day of Ozone Layer Protection:

1) At one of cross-roads (Pravda and Bokonbaeva streets) a advertising board of 3*6 m size “Let’s save ozone layer” had been installed;

2) A message of the UN General Secretary on occasion of Celebration of the International day of Ozone Layer had been disseminated;

3) A press-release on International day reflecting problems and taken measures had been disseminated;

4) A number of activities on “Creation of public opinion and informing public on ozone layer protection in Kyrgyzstan by means of education on ecology for sustainable development”;

5) A poster dedicated to September 16 was placed in local newspaper “Vitrina”, 30 000 copies;

6) An ecological action «Koko Tenir Koldosun!» with participation of 300 people had been conducted. In Jalal-Abad region a theoretical show with participation of pupils and students had taken place. Sports shirt and caps with action logo had been handed-out at the beginning of the action. An ecological quiz among participants had taken place and the winners were awarded with prize.

7) During August 28-September 16, 2006, a seminar on «Protection from UV” had been conducted in the secondary school named after T.Tursunbaeva, in Chaek village of Naryn region. An open action organized by the teachers on Chemistry, Physics, Biology and Geography with participation of parents, pupils as well as representatives of local mass media and officers of the public educational departments.

8) On September 16, 2006, at the secondary school#3 of Jalal-Abad region, a regional training seminar on Global ecological problems – Climate change and Ozone layer protection had been conducted for 50 teachers from various secondary schools. The seminar was started with the display of a video on peoples’ attitude to ozone layer protection problem.

On September 16, 2007, in honor of the Ozone Day and 20th anniversary of the Montreal Protocol, the Ozone Center organized number of actions:

1) *In cooperation with Central Asian Center for Information Resources “EcoInform”*

- Publication of bulletin “Protection from harmful sun radiation”, about sun-safe behavior and protective clothes.
- Publication of Postcards “No ODS”, devoted to 20th anniversary of the Montreal protocol.

2) *In cooperation with Public Association “Beagle”:*

- Action “Let’s save the Ozone Layer!” that included selection of school literature about preservation of the Ozone Layer;

- Contest of essays, drawings, posters and abstracts;

- Lectures and photo exhibitions;

- Publishing of leaflets “Sun safe behavior”;

- Video “Let’s save the Ozone Shield of the Earth!” with participation of schoolchildren from school #70;

- On may 14, 2007, pupils from school #70 organized performance “Let’s save the Ozone Shield of the Earth”

3) Posting of bill-boards on the main streets of Bishkek – “Protection of the Ozone – Rescue of the Earth”.

4) Publication of module, devoted to the Ozone Day, in September issue of advertisement newspaper “Vitrina” (circulation – 20,000)

- 5) Preparation and dissemination of Comics “The Sun and my friend Muk”, devoted to problems of the Ozone Layer protection. The comics are intended for schools.
- 6) Translation and dissemination of the message of UN Secretary General, devoted to the Ozone Day and 20th anniversary of the Montreal Protocol.
- 7) Dissemination of leaflets “September 16 – International Day of the Ozone Layer Protection”, published by information Agency “CARnet”.
- 8) Action “Zone of the Ozone – 20”, organized in cooperation with Ecological movement “Tabiat”. The action included contest of essays, pictures and posters. Special t-shirts and caps with Ozone logos were distributed among participants. Also, in frames of the project, a number of workshops for teachers were conducted in all regions of the republic.

In 2008

On January 18, 2008 the second convention of Public Association “EKOHOLOD” was organized in Bishkek. 50 representatives from all regions of the republic participated at the convention together with guests – Professor Mr. B.S. Babakin, Moscow State University of Applied Biotechnology and Mr. Yerzhan Aysabaiev, Program Administrator, UNEP DTIE. The work of convention was presented in mass-media at the national TV and through Information Agency “KABAR”.

On March 19, 2008 training workshop “Methods and ways of informing the population about problems of the Ozone Layer” was conducted in Bishkek at the conference hall of the Ministry of Emergency Situations. 18 journalists participated at the meeting.

The workshop was devoted to shaping of public opinion about problems of the Ozone Layer through raising activity of the public and mass-media, attraction of mass-media representatives to decision-making process, propaganda and informing about environmental problems.

It was decided to strengthen the role of mass-media in presenting the information about environmental problems, the journalists were offered to team up for informing the public.

The brochure “Breath better and save the planet” in Russian and Kyrgyz were published in April 2008. It is devoted to the problems of MDI based on ODS and alternatives. Brochures were developed separately for physicians and for patients and public (1000 copies printed in each language).

On April 11, 2008 the round table “Modern methods of protection of grain and its products in conditions of farms” was conducted at the conference hall of the Ministry of Emergency Situations. 34 persons, representatives of the Ministry of Agriculture, Water and Processing Industry; Enterprises; NGOs and Mass-media participated at the meeting. Problems of grain storage were discussed during the meeting.

On June 24, 2008 at the office of the Ozone Center there was the meeting with representatives of NGOs and mass-media devoted to the celebration of September 16, the Ozone Day. 12 persons participated at the meeting.

In 2008 the following actions were organized by Ozone Center for the celebration of the International Ozone Day:

1. On September 15, 2008, public association “Bigl” organized action “Together we will protect the world from ecological trouble”, devoted to the International Ozone Day. The action was organized in the park named after Togolok Moldo. Schoolchildren from schools #70, 13 and 8 participated at the action. The following materials were disseminated during the action: “Play safe in the Sun!”, comics “Ozzy Ozone: Ozzy goes polar”, “Ozzy goes to agriculture”.
2. Realized actions for students:

- On September 16, 2008, ecological movement “Tabiat” with the support of the Ozone Center and State Agency on Environment Protection and Forestry of the Kyrgyz Republic, in frames of the project “Forming of public opinion and public awareness on problems of the Ozone layer”, organized the second cycle of ecological action “Zone of Ozone 2008” in ecological and economics lyceum #65. The following materials were disseminated during the action: “Play safe in the Sun!”, comics “Ozzy Ozone: Ozzy goes polar”, “Ozzy goes to agriculture”. Also there was a workshop, organized for teachers of natural sciences. They were provided with training and methodology materials: “Protection from harmful UV”, “OzonAction program”, “Protect yourself from the Sun”. Representatives of mass-media were invited to the action.
 - The first cycle of annual ecological action “Zone of Ozone 2008” had started on August 9, 2008 at children health resort “Mayak”, v. Toru-Aygyr (Issyk-Kul region), with the purpose of raising ecological culture and education of children. The action included a number of activities and dissemination of information materials: “Play safe in the Sun!”, comics “Ozzy Ozone: Ozzy goes polar”, “Ozzy goes to agriculture”.
 - On September 17, 2008, in frames of the project “Forming of public opinion and public awareness on problems of the Ozone layer”, the third cycle of annual ecological action “Zone of Ozone 2008” were organized at the secondary school #3 named after Nekrasov, c/o Karakol, Issyk-Kul. The following materials were disseminated during the action: “Play safe in the Sun!”, comics “Ozzy Ozone: Ozzy goes polar”, “Ozzy goes to agriculture”. The information about action was presented in mass-media.
3. On September 16, 2008, in Osh Technological University named after academician Adyshev, ecological action “Let’s save the Ozone Layer of the planet”, devoted to the International Ozone Day, was organized for students of the university. A number of reports and abstracts about protection of the Ozone Layer were presented. At the end of action the press-conference was organized. Vice-rector on scientific work Mr. Toktoraliev and National Consultant of the Ozone Center Mr. Bayaliev participated at the press-conference.
 4. At September issue of newspaper “Vitrina”, special module was published: September 16 – International Ozone Day, containing message: “Global partnership – global success” (number of copies – 20 000).
 5. At the central streets of Bishkek big banners were posted. The banners contained information, devoted to September 16 - the International Ozone Day.
 6. Department of journalism of Kyrgyz-Russian Slavonic University, with the support of the Ozone Center, published special issue of student newspaper “Ozone messenger”. This newspaper contains information about activity of the Ozone Center, realized projects, public awareness activities, latest news, etc. (number of copies – 2 500).
 7. Address of UN Secretary General, devoted to the International Ozone Day, was disseminated among schools, universities, NGOs, mass-media.
 8. Ecological movement “Kaiberen” prepared training methodological manual “Ozone Layer of the Earth” for teachers of universities, specialists, and wide circle of readers.

On December 15, 2008, the results of competition for journalists “For the best coverage of problems of the Ozone Layer in mass-media” were announced. The awarding ceremony was realized on December 23, 2008.

27 works were submitted to the competition (TV, Internet, Newspapers). All these works covered problem of the Ozone Layer protection.

The members of commission examined all materials, submitted to the competition, and decided to award two 2nd places, one 3rd place and some incentive prizes. 7 works were selected for the final consideration: 3 publications in newspapers, 2 publications in Internet, 1 report in radio and 1 in TV.

- For articles in newspaper “Moskovsky Komsomolets”, second place – Tihonenko E.;
- For article in newspaper “Moya Stolitsa”, second place – Tsoi M.;
- For articles at the web-site akipress.kg, third place – Duishembieva A.;

Incentive prizes:

- For the cycle of radio program on protection of the Ozone Layer, radio GTRK, Chabdarova T.;
- TV MIR, report from workshop “Problems of protection of agricultural and industrial products during storage”, 11.04.2008, reporter Muchkina A.;
- ekois.net, Jakypova I.;
- Team of journalists from KRSU for publication of newspaper “Student messenger”, September 2008 (Team leader Deeva I.V.; students of KRSU: Zvyagintsev I., Tokbaeva D., Kivachitskaya A., Chernyakova K., Mutinov D.).

On December 20, 2008, lectures about problems of the Ozone Layer protection were conducted for students of KRSU (department of journalism), information materials were disseminated.

Employees of the Ozone Center participated at Conference of the Parties of UN Framework Convention on Climate Change and Kyoto Protocol, December 1 – 12, 2008, c/o Poznan, Poland and at the meeting of International Foundation for Salvation of Aral, December 22 – 23, 2008, c/o Almaty, Kazakhstan.

2009

On 27, 28 February 2009 the third annual meeting of the Republican Public Association “Ecoholod” took place at the conference hall of “Issyk-Ata”. The representatives of the interested organizations, the members of Republican public association “Ecoholod”, who are the leading specialists in refrigeration servicing in our country participated at the meeting. One of the issues of the meeting was the informing of the public on problems of ozone layer depletion and the consequences of excessive UV radiation impact. The informational books, publications of the Ozone center were disseminated to all participants at the conference.

The workshop “Problems of studying UV radiation and ozone layer protection” was held on 14 April 2009 at Jalalabad state university in Jalalabad town. The pro-rector, deans, heads of departments and teachers of the university took part at the workshop. 26 people took part in total.

The following issues were given at the conference:

- informing the public, in particular, teachers and students of the universities about the problems of ozone layer depletion and consequences from excessive UV radiation impact.

-opening of the informational center on environmental conventions in Jalalabad state university in Jalalabad town;

- presentation of educational supplies “Ozone layer of the Earth”, developed by the head of the public organization “Kaiberen” Bekbolotova A.K.

Director of the public fund “Ecolife”, informational center of Jalalabad state university were given the following technical facilities and equipment:

- Computer – 1 package
- printer – 1 piece
- furniture (table with desk cupboard, bookcase, chairs – 2 pieces)
- fax – 1 piece
- Digital weather station with radio probe PST-02977- 1 package
- Radio probe of UV rays intensity (02871) – 1 piece
- educational and methodological literature, published by Ozone center.

The workshop “Problems of studying UV radiation and ozone layer protection” was held at Osh technological university in Osh town on 15 April 2009 . The pro-rector, deans, heads of departments and teachers of the university took part at the workshop. 26 people took part in total. Informational materials on ozone layer protection, brochures, posters were disseminated to all participants of the workshop.

In April, May 2009 the national consultant of Ozone center Garifulin V.K. conducted training by the system of Intersectoral training center of State Municipal Technical Control on 40-hours program 9 refrigeration technicians of “Kyrgyztelecom” in accordance with developed “Regulations on State certification of specialists, working with chlorofluorocarbons, natural refrigerants and alternatives to methyl bromide, pesticides”. Trainees successfully took qualified exams with participation of technical inspectors of State Municipal Technical Control. This step initiated the certification of specialists in republic according to decisions of Montreal protocol and Government of Kyrgyz Republic.

On 5 June 2009 on international day of environmental protection Ozone center organized an exhibition of publications, informational books, bulletins and posters of the center at the History museum. Informational books, bulletins, posters of the center were disseminated to all visitors.

On 15, 16 June 2009 the head of Ozone center Amanaliev M.K. took part at the activities of Sary-Chelek state biosphere reserve. Ozone center passed two packages of digital weather station for measuring UV radiation to biosphere reserve. Ozone center’s literature on informing the public was given to schools of the villages.

On 22 June 2009 an opening of asthma club with the participation of the governor of Osh region A.A. Karashev, president of Kyrgyz thoracic society, head of the pulmonology and allergology section of the NCCT, doctor of medicine, professor T.M. Sooronbaev, director of the Osh regional hospital, professor Sh.A. Sulaimanova, assistant of Ozone center Sh. A. Ilyasov took place at the Osh regional hospital, Osh town. Modern equipment (spirometer, picfloumeters, nebulaizers, computer and educational materials) were given to the asthma club.

On 3 July 2009 The State agency on vocational technical education under the Government of Kyrgyz Republic, The republican public association “Ecoholod”, Ozone center of Kyrgyz Republic with the assistance of United Nations environment program (UNEP) opened a production-and-training center on training specialists of refrigerating engineering at technical school #93 in Bishkek. Ozone center of Kyrgyz Republic supplied the technical school with equipment and literature. Trainings are expected to be conducted for training specialists-beginners as well as the industrial

workers on refrigeration servicing to get the certificate of permit to work with refrigerants at production-and-training center.

On 16 July 2009 an opening of asthma club with the participation head of the social department of Naryn region's administration Karasartova A., president of Kyrgyz thoracic society, head of the pulmonology and allergology section of the NCCT, doctor of medicine, professor T.M. Sooronbaev, director of the Naryn regional hospital Mambetalieva K.M., took place at conference hall of Naryn regional hospital, Naryn town. Modern equipment (spirometer, picfloumeters, nebulaizers, computer and educational materials) were given to the asthma club.

In April 2009 Journalism department of Kyrgyz-Russian Slavic university with financial support of Ozone center published the second issue the student newspaper "Ozonovyi vestnik", where the main ecological news, as well as the last news of Ozone center about the activities on raising public awareness on problems of ozone layer depletion are reflected. In addition there is an interview with the scientist, academician of the National academy of science OF Kyrgyz Republic Toktomyshev S.J.; reportage from the production association "Kyrgyztorgtechnika"; interview with the national consultant of Ozone center Ojerelyev N.S. about methyl bromide, phase out of methyl bromide in agriculture; interview with Doctor of medicine, professor Sooronbaev T.M. (2000 copies).

In 2009 representatives of Ozone center of Kyrgyzstan took part in a number of activities, held at schools and universities in Bishkek city as well as in the regions of the republic. In general, on 16th September about 2400 people (pupils, students, teachers) over the republic (Bishkek city's, Issyk-Kul, Chyi, Talass regions schools' pupils and students of Bishkek city, Osh and Jalalabad regions' universities) took part in mass ecological actions, devoted to International day of ozone layer protection.

1. On 8th September 2009 at the conference hall of the State agency on environmental protection and forestry Ozone center presented an electronic information pack on problems on ozone layer protection and climate change for journalists. Representatives of mass media: printing, TV and radio were invited to the meeting. At meeting Ozone center presented an electronic information pack that reflects materials related to ecological aspects of ozone layer protection and it's interaction with climate change. Journalists were permitted to acquire knowledge to create in future articles, TV programs, reportages on above mentioned points. In general 22 journalists took part at the meeting.

As a result, journalists wrote the following articles for 16th September:

- article "Without ozone – hopeless zone", newspaper "Moya stolitza", author M.Tzoy, 15.09.2009
- article "From January 1, 2010 Kyrgyzstan will totally abandon use of ozone depleting substances", www.24.kg, 8.09.2009, Tolkaneva K.
- Interview with the head of Ozone center Amanaliev M.K., www.caresd.net
- article "16th September- International day of ozone layer protection", www.caresd.net
- article "Ozone – zone of responsibility", newspaper "Slovo Kyrgyzstana", Shepelenko. A., 15.09.2009
- article "Ozone holes over us: myths or reality?" newspaper "Argumenty I fakty", Studenikina A., 16.09.2009
- broadcasting devoted to 16th September – International day of ozone layer protection, interview with the head of Ozone center Amanaliev M.K. on radio NTRK, 16.09.2009 r., 15:00

2. On 15th September 2009 at the library of Osh technological university (OshTU) named after academician M.M. Adyshev in Osh town an exhibition of Ozone centre's publications, informational bulletins, posters, as well as literature on ozone layer and ultraviolet radiation was organized for students and teachers of the university. Exhibition was devoted to 16th September – International day of ozone layer protection.

On 16th September 2009 an ecological action “Save ozone layer of the planet” devoted to 16th September – International day of ozone layer protection for students was carried out by teachers of the university. The heads of the university and representatives of Ozone center spoke at the action. Students' reports, essays, posters on the theme “Save ozone layer” were presented at the action. Within the framework of the action newspaper “Ozonovyi vestnik”, leaflets, information bulletins, books about the problems of the ozone layer depletion were disseminated to all students and teachers. Altogether, about 300 students took part in this ecological action. An action was broadcasted on TV (TV channel ElTR, News, 19:00 in Russian language, 20:30 in Kyrgyz language, 16.09.2009).

3. On 16th September 2009 an ecological action “Save ozone layer of the earth” was organized at Jalalabad state university in Jalalabad town, Jalalabad region. Altogether, about 320 students took part in this action. The heads of the university and representatives of Ozone center addressed at the meeting. Within the framework of the action a number of activities, such as competitions of poems, pictures as well as presentations of students were carried out. In the final analysis of the competitions students were awarded with valuable souvenirs. Then in central streets of Jalalabad town students had marched with banners and slogans “16th September – International day of ozone layer protection”, “Save the ozone layer!”.

On 17th September a seminar for teachers of Jalalabad state university was conducted with presentation of educational methodological handbook for teachers of universities on problems of ozone layer. For the action and seminar the following brochures were specially prepared and published: “Ozone is an umbrella, saving from sun lights” (in Kyrgyz language 200 copies), “Ozone layer and our health” (in Russian language 200 copies), educational methodological handbook “Depletion of ozone layer” (in Kyrgyz language 100 copies).

An exhibition of publications, literature about ozone layer and ultraviolet radiation and Ozone center's publications and posters was organized in the foyer of Jalalabad state university. An action was broadcasted on TV (TV channel ElTR, News, 19:00 20:30 in Kyrgyz language, 17.09.2009).

4. On 15th September 2009 members of the public association “Kaiberen”, faculty of the department of the environmental protection and natural resources conservation of the Institute of mining named after Asanaliev U. carried out an ecological action “Ozone protection – is a rescue of an Earth” devoted to 16th September – International day of ozone layer protection for students of the university. Teachers of the institute and more than 400 students took part in this action. The heads of the institute and representatives of Ozone center presented information about ozone layer protection at the action. Representatives of three universities, situated in Karakol (Issyk-Kul region), Naryn (Naryn region) and Osh (Osh region) presented reports about main results of three-year monitoring of UV Indexes, measured by them in regions. Also students presented reports, essays, rhymes and pictures on the theme “Ozone protection – is a rescue of an Earth”, played performances “Environmental pollution”, “Yard cleaner – a story of a murderer”. At the end, all reporters and active participants of the action were awarded with souvenirs and presents. Newspaper “Ozonovyi vestnik”, leaflets, information bulletins, books about the problems of the ozone layer depletion were disseminated to all students and teachers.

An ecological action ended with releasing balloons outside the institute symbolizing help in recovery of ozone layer.

5. On 14th September an ecological action “Universal participation: ozone protection unifies the world” was held at secondary school #3 named after Makarenko in Balykchy town, Issyk-Kul region. About 400 pupils, teachers of the school and assistants of Ozone center and representatives of State agency on environmental protection and forestry participated in this action. Competitions of pictures, drawing on glass and ceramics, ecological quizzes were organized; senior pupils presented reports, essays on the theme “Problems of ozone layer depletion”. The following informational materials were disseminated to pupils: coloring book for children “Play safe at the sun”, comic books “Ozzy Ozone – defender of our planet”, “Ozzy goes farming”, “Muk is my friend”, newspaper “Ozonovyi vestnik”, leaflets, books “Ozone layer”, informational bulletins. Afterwards a seminar for teachers of natural sciences was held at this school. The following educational methodological materials were disseminated to teachers: Education Pack, “Protection from harmful solar radiation”, “Programme Ozone action”, “Protect yourself form the Sun”, disks. The action was broadcasted in mass media: oblast TV of Issyk-Kul oblast (“Ala-Too regions” programme, 16.09.2009, 20:00 in Kyrgyz language).
6. Regional center of expertise on education for sustainable development in Kyrgyzstan and Ozone center held an ecological action “Ozone Zone -2009”, devoted to International day of ozone layer protection at secondary school #12 in Tokmok town, Chyi region on 17th September. Within the framework of the action a series of competitions for schoolchildren was organized. The following materials were disseminated to schoolchildren: coloring book for children “Play safe at the sun”, comic books “Ozzy Ozone – defender of our planet”, “Ozzy goes farming”, “Muk is my friend”, newspaper “Ozonovyi vestnik”, leaflets, books “Ozone layer”, informational bulletins. Then a seminar for teachers of natural sciences was organized at this school. The following educational methodological materials were disseminated to teachers: Education Pack, “Protection from harmful solar radiation”, “Programme Ozone action”, “Protect yourself form the Sun”, disks. Overall about 300 pupils participated in this action.
7. On 19th September 2009 Regional center of expertise on education for sustainable development in Kyrgyzstan held an ecological action “Ozone Zone-2009” with participation of schoolchildren and teachers of five (5) schools of Bakay-Ata district center in Talas region. In general more than 400 pupils participated in this action. A series of competitions, ecological quizzes, and sport competitions were organized for schoolchildren. The winners of the competitions and active participants of the action were awarded with souvenirs. The following materials were disseminated to all participants: coloring book for children “Play safe at the sun”, comic books “Ozzy Ozone – defender of our planet”, “Ozzy goes farming”, “Muk is my friend”, newspaper “Ozonovyi vestnik”, leaflets, books “Ozone layer”, informational bulletins. A seminar for teachers of these schools was held afterwards. The following educational methodological materials were disseminated to teachers: Education Pack, “Protection from harmful solar radiation”, “Programme Ozone action”, “Protect yourself form the Sun”, disks.
8. On 17th September a round-table conference “The present global ecological problem is the ozone layer depletion” was organized with participation of pupils of middle and senior classes at school #67 in Bishkek city. Teachers, representatives of Ozone center and State agency on environmental protection and forestry presented information about problems of

ozone layer depletion. The pupils of school #67 presented reports, essays on the theme “Save the ozone layer of the Earth”. Then the practical methods to work with pupils on ecological problems were demonstrated. In general about 100 pupils took part in this round table.

9. Department of journalism of Kyrgyz-Russian Slavic university with financial support of Ozone center prepared a special issue of students’ newspaper “Ozonovyi vestnik”, 2500 copies, that inserted an interview with the head of an upper-air scientific station “Issyk-Kul” Sinyakov V.P., assistant of Ozone center Ilyasov Sh.A., National consultant of Ozone center Garifulin V.K.; useful information about the protection from harmful effects of ultraviolet radiation; 2009 Secretary General’s message in honor of celebration of the International day of ozone layer protection, last news and so on.

- On 28th September Kyrgyz-Russian Slavic university held a seminar “Problems of ozone layer depletion” for students of 1,2,3,4 courses (about 160 students took part). At the seminar information about the problems of ozone layer depletion, effects of excessive ultraviolet radiation on people’s health and environment, as well as how to save the protective shield of our Earth – ozone layer was presented. Informational bulletins, leaflets, newspaper “Ozonovyi vestnik” were disseminated to all participants of the seminar.

10. In honor of International day of ozone layer protection the UN Secretary General’s message was translated into Russian language and disseminated at schools, universities, nongovernmental organizations, mass media, and placed on web-site of Ozone center and Carnet.

11. An advertising publication “16th September – International day of ozone layer protection” devoted to International day of ozone layer protection was published on September issue of the republican newspaper “Vitrina” (20 000 copies).

Ozone center’s representatives lead the work of forum of electronic discussion “On the way to Copenhagen: climate change and poverty in Central Asian countries” (<http://forum.caresd.net>). The issues on effects of global ecological problems on health of population, as well as the effects of UV radiation because of ozone layer destruction were discussed at the forum.

1.2. Dissemination of information related to new technologies and ODS alternatives

1.2.1. In 2003

During March and April of 2003 ODS Officer and National Consultants arranged working meetings and discussions with representatives of enterprises and private firms throughout Southern and Northern regions of the country pursuing aims of raising awareness of industrial sector on danger posed by ODS, on new technologies and alternative refrigerants, pertaining the contents and current state of Refrigerant Management Plan (RMP).

These meetings were attended by responsible officers and organizations which are planned to be involved into RMP projects implementation.

More detailed information is presented in report for 2003 that available at the web-site.

1.2.2. In 2004

For the purpose of raising awareness of industrial sector, in the second half of 2004 National Consultants Mr. V. Garifulin and J. Jumaliev realized working missions to Issyk-Kul (26.08.2004 – 4.09.2004), Osh, Jalalabat and Batken regions (08.10.2004 – 17.10.2004).

During September 6-8, 2004, a National Workshop “Raising Awareness and Incentive of the End-users of Refrigeration Equipment” was conducted in c/o Cholpon-Ata. The main tasks of the workshop were:

- Information of the owners of refrigeration equipment (including tourism and hotel industry) about Incentive Project for enterprises of the Kyrgyz Republic, working in refrigeration sector;
- Familiarization with the Country Program, International Agreements and efforts of the Government directed to phase-out of ODS;
- Information about methods of: replacement of ODS-based equipment to ODS-free equipment; retrofit (replacement of ODS refrigerants to alternative ozone-friendly refrigerants);
- Raising interest of the owners of refrigeration equipment in replacement or retrofit.

Training program also included other questions:

1. Raising awareness on the ozone layer depletion issues;
2. Interaction between provisions of the Montreal Protocol and National RMP;
3. Familiarization with the Schedule of ODS phase-out according to the Country Program;
4. Familiarization with alternative refrigerants;
5. Recovery and reuse of CFC-12

Training was carried out by specialists of the Ozone Center together with National Consultants. Total amount of participants was 31 person, 19 of them are representatives of business.

All participants had positively evaluated the workshop. They considered the information presented at the workshop as necessary and well-timed. They also admitted that it was necessary to carry out preventive measures for replacement of equipment and retrofit. All representatives of business had showed interest in applying for incentive payments.

In 2006 the national consultants of Ozone Center - Mr.Jumaliev J., Mr.Garifulin, Mr.Pavlov Y., Ojereliev N. had discussed the issues of dissimulation of information on new technologies and ODS replacement during the visits to the southern and northern regions of the country.

1.2.3. 2007.

During the year 2007, information about new technologies and alternatives to ODS was distributed through missions of the Ozone Center staff and National Consultants: Mr. N. Myrsaliev, Mr. Sh. Iliasov, Mr. D. Toichiev, Mr. N. Ozhereliev, Mr. Y. Pavlov, Mr. J. Jumaliev and Mr. V. Garifulin. They visited regions of the republic, as follows:

- Chuy region
- Talas region
- Issyk-Kul region
- Osh region
- Naryn region
- Jalalabad region

1.2.4. 2008

During 2008 dissemination of information about new technologies and alternatives to ODS was realized during travels of assistants of the Ozone Center N. Myrsaliev, Sh. Iliasov, D. Toichiev; national consultants Mr. J. Jumaliev, V. Garifulin, N. Ojereliev, Y. Pavlov to the regions of the republic.

1.2.4. 2009 г.

Within the TPMP project framework on MDI phase-out, containing CFC, information dissemination about new technologies and ODS alternatives has been carried out through organizing the asthma clubs.

On 22 June 2009 an opening of asthma club took place at the Osh regional hospital, Osh town. Modern equipment (spirometer, picfloumeters, nebulaizers, computer and educational materials) were given to the asthma club.

On 16 July 2009 an opening of asthma club with the participation head of the social department of Naryn region's administration Karasartova A., president of Kyrgyz thoracic society, head of the pulmonology and allergology section of the NCCT, doctor of medicine, professor T.M. Sooronbaev, director of the Naryn regional hospital Mambetalieva K.M., took place at conference hall of Naryn regional hospital, Naryn town. Modern equipment (spirometer, picfloumeters, nebulaizers, computer and educational materials) were given to the asthma club.

On 5 October 2009 an opening of asthma club with the participation of the president of Kyrgyz thoracic society, head of the pulmonology and allergology section of the NCCT, doctor of medicine, professor T.M. Sooronbaev, director of the Issyk-Kul regional hospital Akunova J.K., took place at conference hall of Issyk-Kul regional hospital, Karakol town, Issyk-Kul region. Modern equipment (spirometer, picfloumeters, nebulaizers, computer and educational materials) were given to the asthma club.

On 1, 2 December 2009 an opening of asthma club with the participation of the president of Kyrgyz thoracic society, head of the pulmonology and allergology section of the NCCT, doctor of medicine, professor T.M. Sooronbaev, director of the Talas regional hospital Jorobekova G.T. took place at conference hall of Talas regional hospital, Talas town, Talas region. Modern equipment (spirometer, picfloumeters, nebulaizers, computer and educational materials) were given to the asthma club.

During 2009 the issues of information dissemination about new technologies and ODS alternatives for other sectors had been decided during business trips of Ozone center's assistants Myrsaliev N., Ilyasov Sh.A, Toichiev D., and national consultants Jumaliev J. and Garifulin V.K. to all regions of the republic.

1.3 Collection and processing of data (ODS consumption).

The data on ODS consumption is receiving from three principle sources:

- Official suppliers of refrigerants and refrigerants consumers (who possess licenses for ODS importation issued by Ministry of External Trade and Industry after reconciliation with Ministry of Ecology and Emergency Situations);
- Department of Customs Service under Ministry of Finance;
- Department of Ecology and Environment Utilization of Ministry of Ecology and Emergencies.

1.3.1 In 2003

The more detailed and complete information was received from ODS suppliers and consumers. For this purpose as well as for development of design estimates for conversion of refrigeration installations to retrofit and replacement Mr. Jumaliev and Mr. Garifulin. National Consultants, carried out missions to:

Chui region – September 22–25, 2003;

Issyk-Kul region – September 26–30, 2003;

Djalal-Abad region – October 1–6, 2003;

Osh region – October 7–12, 2003;

Batken region – October 13–17, 2003.

Besides, similar activities were carried out in the c/o Bishkek.

1.3.2. In 2004

During missions of the National Consultants to the regions they updated information through interaction with suppliers and consumers of ODS. During the first half of 2004, Mr. V. Garifulin and Mr. J. Jumaliev had visited:

- Osh region (February 12 – 19, 2004);
- Chuy and Issyk-Kul regions (March 15 – 23, 2004);
- Issyk-Kul region (May 12 – 14, 2004)

Similar activity was carried out in the c/o Bishkek too.

In the second half of 2004 the update of information was made by National Consultants – Mr. V. Garifulin and J. Jumaliev during their working missions to Issyk-Kul (26.08.2004 – 4.09.2004), Osh, Jalalabat and Batken regions (08.10.2004 – 17.10.2004).

In 2006 the national consultants of Ozone Center - Mr.Jumaliev J., Mr.Garifulin, Mr.Pavlov Y., Ojereliev N. had discussed the issues of dissimulation of information on new technologies and ODS replacement during the visits to the southern and northern regions of the country.

1.3.3. In 2005

Update and clarification of information about ODS was realized during local trips of the National Consultants: Mr. J. Jumaliev, V. Garifulin, N. Ojereliev. They visited Chuy and Issyk-Kul, regions. In 2005 for the first time was collected the data on halon consumption by Defense Ministry of Kyrgyz Republic in 2004. The results of data collection and processing are provided in Appendix 1.

1.3.4. In 2006.

During February 1-21, 2006, information on ODS consumption in Chu, Issik-Kul, Naryn, Jalal-Abad, Osh and Batken regions had been collected.

During the second half the year, the ODS consumption information was collected during the trips to Osh, Jalal-Abad, Chu and Issik-Kul regions.

1.3.5. in 2007.

The information was collected during missions of the Ozone Center staff and consultants to Osh, Jalalabad, Chuy, Talas and Issyk-Kul region.

1.3.6. in 2008.

The information was collected during missions of the Ozone Center staff and consultants to the regions of the republic.

The results of collection and procession of information are available in Annex 1.

1.3.7. B 2009 r.

Information was collected during the business trips of Ozone center's assistants and consultants to regions of republic.

The results collection and processing of information are shown in Annex 1.

1.4 Facilitation and coordination of actions for elimination of consumption determined in the Country Programme.

1.4.1 Establishment of Interdepartmental Ozone Commission

The Interdepartmental Ozone Commission was established and approved by a Governmental Resolution “On the State Programme for Phase-out of the Ozone Depleting Substances” # 263 as of April 29, 2002. This commission includes representatives of the following organizations:

Ministry of Ecology and Emergency Situations;
Ministry of External Trading and Industry;
Ministry of Finance;
Ministry of Water, Agriculture and Processing Industry;
Ministry of Health Protection;
National Statistics Committee;
State Inspection on Standardization and Metrology;
Department of Agriculture, Industry and Environment, office of the Prime-minister;
State Customs Department under the Ministry of Finance.

On April 28, 2005 meeting of the Commission was conducted. It was realized for coordination of activities under implementation of the Country Program. Representatives of NGO and mass media participated at the meeting as observers. The following decisions had been taken by the commission:

1) to approve the activity of Ozone Center to implement the provisions of the Montreal Protocol in Kyrgyz Republic.

2) for the purpose of further improvement of existing measures on law execution and Government resolution #860, 263 – to recommend to the following agencies and ministries of Kyrgyz Republic,:

- the Ministry of Industry and Economy together with the Custom Service Department shall strengthen the interaction, in particular, control on ODS product import;
- the Custom Service Department shall be involved in the implementation process of regional projects on prevention of illegal ODS trade;
- the Ministry of Emergency Situations shall prepare draft resolution on amendments to the Government resolution #263, dated 29.04.02, on inclusion of a representative from the Ministry of Education into the structure of coordination commission.
- Ozone Center shall involve in UNDP Program “Ecological education for sustainable development”
- the Ministry of Emergency Situations, Ministry of Industry and Trade, Ministry of Health shall correlate (adjust) its own respective projects with the general compliance of Kyrgyz Republic with international provisions, in particular Montreal Protocol on ODS.

The Government shall coordinate the actions of Defense Ministry, National Air Company “Kyrgyzstan-Abajoldoru” and Ministry of Emergency Situations in matters of project implementation of halon application in vehicle fire extinguishing systems and remove ODS from dissolvent sector.

On April 20, 2007, there was meeting of the Interdepartment Commission for Ozone to coordinate works, related to realization of the Country Programme for ODS phase-out. Representatives of all interested ministries, governmental bodies and universities were invited to the meeting. UNDP international consultant Mr. R. Berkeley, UNEP program management officer Mr. Y. Aisabayev and UNDP programme assistant Mr. M. Surkov participated at the meeting. The head of the Ozone Center presented activity report of the Ozone Center for 2002-2006. UNEP programme management officer Mr. Y. Aisabayev presented TPMP project and described the situation with similar projects in ECA network countries. It was noted that UNEP pays attention to the future of

the Montreal Protocol, its relation to other environment conventions, cooperation between NOU and their synergy.

On April 25, 2008 annual meeting of interdepartmental commission on ozone was conducted at the conference hall of “Korund” hotel. Representative of all governmental bodies – members of the commission participated at the meeting (23 persons). The following issues were discussed at the meeting:

1. Report of the Ozone Center on realization of the Country Program and TPMP during 2007.
2. Strategy of phasing-out halons, HCFCs and CFC-based MDIs.
3. Recommendations for the following actions.

The Ozone Center presented report for 2007 and plan of works for 2008.

The meeting resulted in approval of activity of the Ozone Center on realization of the Country Program. The meeting also approved components of strategies to be entered into the draft of the Resolution of the Government on amendments to the Country Program.

On June 3, 2009, annual interdepartmental meeting of coordination commission on ozone was conducted in the conference hall of Hotel “Korund”. The following issues were examined:

- report on activity of the Ozone Center for 2008 (head of the center Mr. Mars Amanaliev);
- Directions of the further activities for protection of the ozone layer (assistant of the Ozone Center Mr. Shamil Iliasov);
- development and realization of HCFC Phase-out Management Plan (HPMP) (international consultant of UNDP Mr. Rick Cook);

After discussion of all items of the agenda, the commission totally approved the activity of the Ozone Center on realization of TPMP in the republic. With the purpose to provide sustainability of achieved results, the State commission supported initiatives of members of coordination council and recommended:

- to develop technical regulations of safety in servicing of refrigeration equipment;
- to facilitate the training of specialists in the system of vocational training and higher education;
- to support the activity of training centers and public associations established during the implementation of TPMP;
- to continue necessary measures to prevent illegal trade of ODS and ODS containing equipment.

1.4.2 Establishment of National Ozone Office under Ministry of Ecology and Emergency Situations

By a decree #188 as of 20/09/2002 of the Department of State Ecological Control and Environmental Utilization of the Ministry of Ecology and Emergency Situations of the Kyrgyz Republic an Ozone Center was established. Accordingly an ODS Officer and the Ozone Center’s staff were designated and approved. By a decree #444 of Ministry of Ecology and Emergency Situations of the Kyrgyz Republic, dated October 3, 2003, a Statue of Ozone Center was approved and documents for state registration of the entity “Ozone Center” were prepared. The registration process was accomplished in January 2004. Staff of the Ozone Center consists of: head of the center, assistants (3 persons), office-manager, national consultant on ODS data collection, national consultant on legal issues.

Ozone Center within the frames of its authorities:

- Carries out awareness raising campaign among public and industrial circles on danger posed by ODS;
- Disseminates information on new technologies and ODS alternatives;
- Collects and process the information on ODS consumption;

- Assists the state agency on environment protection and forestry in ODS phase-out in accordance with the plan defined by the Country Program;
- Organizes and conducts training seminars;
- Assists in efforts of improvement of legislation on ozone-related issues;
- Assists the implementation of Refrigerant Management Plan (RMP);
- Assists the interaction and communication between the Government of Kyrgyz Republic and the international organizations (UNEP, Ozone Secretariat, MF secretariat, implementing agencies) ;
- Shares the information with the other Parties of the Montreal Protocol;
- Prepares reports on ODS consumption and submits them to Ozone Secretariat;
- Prepares reports on implementation process of the Country Program and submits it to MF Secretariat;
- Prepares reports on implementation process of the institutional strengthening project and submits it to UNEP.

Action plan of Ozone Center (ISP) – is a part of the Kyrgyz Government Action Plan defined by the Country Program.

During 2004-2005 years, Ozone Center of Kyrgyzstan took part in two meetings within the framework of regional network of Eastern Europe, Caucasus and Central Asia (Belgrade, Serbia and Montenegro, Bucharest and Romania).

In March 2005, Head of the Ozone Center participated at the work of ExCom as representative of the regional network of NOU of Europe and Central Asia.

During December 5-17, 2005 the Ozone Center representative had been invited to Dakar (Senegal) to take part in the Implementation Committee meeting on Kyrgyzstan's halon compliance with the Montreal Protocol.

1.4.3. Adoption of legislative and regulative ODS handling control systems

A law #15 “On ratification of the London, Copenhagen and Montreal Amendments to the Montreal Protocol on Substances that Deplete the Ozone Layer” was adopted by Legislation Chamber of Jogorku Kenesh of the Kyrgyz Republic as of October 25, 2002, approved by the Chamber of Public Representatives of Jogorku Kenesh of the Kyrgyz Republic as of December 9, 2002, and signed by the President of the Kyrgyz Republic as of January 15, 2003.

A package of documents for passing a law on ratification of Beijing amendment to the Montreal Protocol had been prepared. The Government resolution on draft law of Beijing amendment (#358, dated May 14, 2004) had been adopted. On June 28, 2005, “Jogorku-Kenesh” the Parliament of Kyrgyz Republic had reviewed and adopted a draft law. On August 6, 2005 the President of Kyrgyz Republic had signed a law “On ratification of the amendment to the Montreal Protocol on ODS adopted in Beijing on December 3, 1999, #139”

Suggestions have been made to include them into the Ecological Security Conception of Kyrgyz Republic being again elaborated.

On June 28, 2005 the Kyrgyz Republic ratified Beijing Amendment. The appropriate law was adopted by the Parliament and passed for signature to the Presidential Office.

Drafts of laws on making changes to the laws “On protection of the environment” and “On protection of atmosphere air” to the articles relating protection of ozone layer and climate change has been prepared and passed to the Ministry of Ecology and Emergency Situations (June 2004). Also a law draft “On protection of ozone layer” had been approved at the plenary session of the Parliament and had been sent to the President of Kyrgyz Republic for signature.

The Law of the Kyrgyz Republic “On protection of the Ozone Layer” was adopted on December 18, 2006, # 206.

An instruction book (300 copies in Kyrgyz and Russian languages) on protection of grain and grain products had been developed and accorded with the Ministry of Health and was approved by the Ministry of agriculture, water resources and processing industry.

In 2007 draft Resolution of the Government “On ODS phase-out in the Kyrgyz Republic” was prepared, it contains special provisions:

- binding the Ministry of Economic Development and Trading together with the State Agency on Environment Protection and Forestry to inform all legal entities and individuals about ODS phase-out schedule in the Kyrgyz Republic.
- binding the Ministry of Defense and Ministry of Emergency Situations to introduce ban on import of halon-based equipment (since 01.01.2009), and develop methodology for switching to alternative fire-control systems.
- binding Interdepartmental Commission on Ozone together with the Ministry of Health Protection and Ministry of Finance to develop Strategy of transition to alternative, ozone-friendly MDIs.
- binding the Ministry of Agriculture, Water and Processing Industry to introduce ban on import of Methyl Bromide (Since 01.01.2008), except quarantine and pre-shipment treatment.
- binding the Ministry of Education and Science to realize work on raising public awareness on problems of the Ozone Layer protection and protective measures against UV radiation.
- binding the Ministry of Emergency Situations to implement system of training and certification of refrigeration technicians, servicing equipment based on CFCs and natural refrigerants, also to develop permission system for work with poisonous substances, alternatives to MB.
- binding the State Agency on Environment Protection and Forestry together with the State Customs Committee to develop interdepartmental instruction on issuance of licence for Export/Import of ODS, taking into consideration ODS phase-out schedule.

2008

On December 11-13, 2007, the workshop on “Perfection of the legislation in sphere of protection of the Ozone Layer” was conducted in Hotel “Korund” (c/o Bishkek). The main task of the workshop was conduction of overall analysis of existing national and international legislation on protection of the Ozone Layer, and development further policy of the Kyrgyz Republic for implementation of obligations under the Montreal Protocol.

For the work at the seminar representatives of legal departments of interested ministries and bodies were invited (Ministry of economic development and trade, State Agency on environment protection and forestry, State Customs Committee, Ministry of Health, Department of quarantine, chemicalization and plants protection, Ministry of Emergency Situations, lecturers from State Technical University and Kyrgyz State University). Totally 30 specialists participated at the workshop.

During the seminar, participants were familiarized with current national legislation on protection of the Ozone Layer, obligations of Kyrgyzstan under the Montreal Protocol, legislation of other countries of CIS (Belarus, Russian Federation, Kazakhstan, Uzbekistan, Ukraine and Moldova). Special attention was paid to some exclusions – MDIs, quarantine and pre-shipment treatment with MB, automated fire-fighting systems in civil and military aviation, battle tanks and armored vehicles.

In national legislation special attention was paid to the Law “On protection of the ozone Layer” and Regulations of export and import of ODS and ODS-containing equipment. There also was a discussion on Customs codes of ODS-containing products. After that there was exchange of opinions about advantages and disadvantages of national legislation.

At the end part of the seminar model law “On Chemical Substances” was presented. After that there was a discussion about possibility of regulation chemical substances covered by some environment conventions, in frames of this law.

Following the workshop, participants approved a draft of the Resolution of Government of the Kyrgyz Republic «On termination of ozone-depleting substances in the Kyrgyz Republic», the draft of Law «On amendments to the Code of Administrative Responsibility», also they defined list of new regulations required for more effectively implementation of commitments under the Montreal Protocol.

On April 24, 2008 the Law “On amendments to Administrative Code” was adopted. The article 181-1 was included into the Code, this article introduce responsibility for non-fulfillment of measures, directed to phase-out of chemicals having harmful influence on environment and, particularly, on the Ozone Layer (substances covered by the Montreal Protocol, Basel Convention and Rotterdam Convention).

On 11.07.2008 the Resolution of Government of the Kyrgyz Republic “On termination of use of ODS” was adopted and it contains the following provisions:

1. Approve phase 2 of Country program on phase-out of ODS in the Kyrgyz Republic, for the period 2008-2010;
2. Approve structure and membership of Interdepartmental commission on coordination of works, related to realization of Country program on phase-out of ODS.
3. State agency on environment protection and forestry of the Kyrgyz Republic:
 - Since 1.09.2008 to introduce ban on import of Methyl Bromide, except for quarantine and pre-shipment treatment;
 - Inform all interested legal entities and natural persons about schedules of ODS phase-out in the Kyrgyz Republic;
4. Ministry of Defence and Ministry of Emergency Situations, since 1.09.2008, to introduce ban on import of halons and halons-based equipment, except special applications (civil aviation, military equipment). To develop methodological recommendations on modern fire-fighting systems, based on halons, with the purpose of transition to alternative fire-fighting systems.
5. Ministry of Health, in cooperation with Ministry of Finance, to develop and approve Strategy of transition to alternative, ozone-friendly MDIs in the Kyrgyz Republic.
6. Ministry of Education and Science, in cooperation with Ministry of Health and State Agency on Environment Protection and Forestry to realize work on raising public awareness on problems of the ozone Layer protection and methods of protection from UV radiation.
7. Ministry of Emergency Situations, in cooperation with Ministry of Education and Science, Ministry of Agriculture, Water resources and Processing Industry and State Agency on Architecture and Construction to introduce system of training and certification of specialists, working with refrigeration equipment, based on CFCs and natural refrigerants; also to develop permission system for work with poisonous substances, alternatives to Methyl Bromide.

Drafts of the following documents were developed:

- Strategy for phase-out of MDIs, based on CFCs;
- Methodological recommendations for fire-fighting systems on replacement of halons in fire-fighting systems to alternative ozone-friendly substances;
- Regulations on state certification of specialists, working with CFCs, natural refrigerants and pesticides, alternative to Methyl Bromide.
-

2009 г.

During the first half-year the following materials were prepared:

- **Methodological guidelines on modern methods of firefighting are approved by the Chief directorate of fire service of Ministry of emergency situations and accepted to handbook**
- **Transition strategy to ozone friendly MDIs – approved by the order of Ministry of Health from 27th April 2009;**
- **Regulations on state certification of specialists, working with chlorofluorocarbons, natural refrigerants and alternatives to methyl bromide, pesticides – has been endorsed by the interested ministries and agencies and assumed to realization. A letter with the proposal of including to the Government's Action plan the development of the appropriate technical regulations was send to the Ministry of economic development and trade.**

Worked out:

- **Handbook for customs officers and ecological inspectors on implementing the state control of export/import of ODS and ODS containing products**

Developed:

- A guidance for customs officers and ecological inspectors on realization of the state control of import/export of the ODS and ODS containing production taking into account the schedule of the termination of their use;

- The project of the governmental enactment of the Kyrgyz Republic about «modification of the governmental enactment of the KR № 552» is prepared. The project of the enactment has been reconciled by all the interested ministries and departments and considering the given proposals and remarks were transferred to the Government of the Kyrgyz Republic.

The enactment of the Kyrgyz Republic was issued in September “about the assertion of the enactment about import and export of ODS and ODS containing products state control” from September 19, 2009 №534.

By the regulation:

- New edition of Enactment about import and export of ODS and ODS containing products state control was confirmed;

Ozone Center experts took part in the law of the KR development “General technical regulations about ecological safety”. Adopted on May 6, 2009. The law includes emissions of the ODS in terms of the ecological danger of the enterprise category definition.

Subordinate regulatory acts were processed and submitted for approval to the Environmental Protection and Forestry State Agency to include main enactments relevant to the ODS treatment issues:

1. Rules of atmospheric air protection;
2. Instructions on carrying out the state control over the stationary sources of pollution of the atmospheric air;
3. Methodical instructions on development and registration of the norms of utmost emissions into the atmosphere.

A need at further perfection of the legal-regulatory acts system was revealed as there is a lack of documentation that defines necessary mechanisms of emissions quota system in the national legislation.

The question on further completion of legal-regulatory acts national system within 2010 was initiated.

The Regulations on state certification of specialists working with CFCs, natural refrigerants and alternative to Methyl Bromide pesticides, was presented at the workshop “Integrated training of specialists in refrigeration sector”. Representatives of the State Agency of Vocational Training, heads and lecturers of educational institutions, and Program Administrator of UNEP DTIE, Mr. Yerzhan Aisabaev participated at the workshop. The draft of the Regulations was discussed during workshops for specialists of refrigeration sector. All comments and proposals were taken into consideration. The draft was coordinated with all interested ministries and governmental bodies. Ministry of Emergency Situations, as responsible body, had approved the Regulations on February 2, 2009.

The letter with proposal to develop technical regulations and include this activity into the Plan of actions of the Government was sent to the Ministry of Economical Development and Trade. The Ozone Center had started the development of relevant technical regulations.

Strategy of transition to the ozone-friendly MDIs was developed with taking into consideration many comments and proposals of participants of the workshops “Inhalation therapy of chronic respiratory diseases and protection of the Ozone Layer. It was also discussed in structures of the Ministry of Health. After that it was approved by the order of the Ministry of Health on April 27, 2009.

In frames of perfection of the legislation and taking into consideration the recommendations of participants of the workshops, the following was developed:

- Guidelines (Instructions) for Customs officers and environment inspectors on realization of the state control over import/export of ODS and ODS containing equipment. After coordination with the State Customs Committee, State Agency for Environment Protection and Forestry it was passed to printing house for printing;
- Draft of the Resolution of Government of the Kyrgyz Republic “On amendments to the Resolution No. 552”. During the development of the draft of the Resolution, representatives of the Ozone Center participated in 7 meetings of Advisory council under the State Customs Committee. During the work of Advisory council, all proposals and comments from businessmen, Customs brokers, representatives of the Ministry of economical development and trade were coordinated. The draft of the Resolution was coordinated with all interested ministries and governmental bodies and passed to the Government of the Kyrgyz Republic for approval.

Specialists of the Ozone Center participated in development of the Law “On general technical regulations “On ecological security”, adopted on 08.05.2009. The law contains article stating that special attention must be paid to emission of ODS.

On June 23-24, 2009 the meeting of representatives of NOUs and Customs from China, Kazakhstan, Mongolia, Tajikistan, Turkmenistan and Uzbekistan was conducted in Urumqi, China, with the support of UNEP. The meeting was organized for development and realization of measures for communication and coordination of activities between Customs services, NOUs and other controlling bodies.

The meeting resulted in adoption of recommendations for perfection of legislative measures in participating countries.

1.4.4 Introduction of license and quota system

Resolution of Government #552, dated September 6, 2000, approved Rules of State Regulation of Export/Import of ODS.

The work on analysis of the legislation on licensing system was under way. Thus, in 2004 Resolution of Government #860, (dated November 25, 2004), was prepared, adjusted and approved. Resolution #860 "On amendments to the Resolution #552 "On top-priority measures for implementation of the Vienna Convention and Montreal Protocol" strengthens measures of control, introduces ban on import of old ODS-based equipment (equipment based on substances from Annex A to the Montreal Protocol).

A letter had been sent to Ozone Secretariat with request to inform other countries of Kyrgyzstan's refusal to import ODS-containing or ODS-using equipment.

In 2008 the quota for import of CFC-12 is 5 MT. For 2009 the quota is planned at the level of 3 MT.

. На 2010 г. планируется отсутствие квоты на ввоз ХФУ-12.

Планируется в 2010 г. разработка механизмов квотирования для озоноразрушающих веществ на уровне подзаконных актов.

1.4.5 Introduction of incentive/disincentive system

This work is carried out under the framework of the project End-user Incentive and Awareness Programme KYR/02/G63 (end-users of commercial and industrial refrigeration equipment) in order to reduce the consumption of CFCs by providing enterprises, which utilize appropriate equipment, with incentive payments. A complete information relating to this project is provided in the report.

Under the project activities an End-user Incentive and Awareness Raising Workshop was held on April 10, 2003. This Workshop was attended by Mr. B. Aidaraliev, First Deputy Minister, Mr. Robert Berkeley, Senior UNOPS/UNDP Recovery and Recycling Expert, representatives of UNDP Country Office, governmental/non-governmental organizations and mass media.

There were 37 participants at the workshop.

The following presentations were made during the Workshop:

- Overview of the Secretariat of the Multilateral Fund's (for the implementation of the Montreal Protocol) activities and actions taken by other international organizations aimed at rendering assistance to countries in their ODS phasing-out efforts (Mr. Robert Berkeley);
- Overview of the Ozone Center's activities aimed at implementation of Kyrgyzstan's obligations under the Montreal Protocol (Mr. Mars Amanaliev, ODS Officer);
- Description of RMP and the other RMP projects (Mr. Shamil Ilyasov);
- Replacement and retrofit procedures (Mr. Joldosbek Jumaliev, R&R Consultant);
- Alternative refrigerants (Mr. Vazikh Garifulin, End-user Incentive Consultant);
- Program for raising awareness and incentive of the end-users of refrigeration equipment. Guidelines for filling in the applications for incentive payments (Mr. Robert Berkeley).

A process of collection and subsequent analysis of data on incentive/disincentive systems put in practice in other countries is underway.

At January 10, 2004 a working meeting on Awareness and Incentive Programme with participation of the Ozone Center were conducted at the UNDP office in Bishkek. Realization of the planned activity for 2003 was estimated positively. The action plan for 2004 was considered and approved.

During July, August and September 2003, consultation works were carried out. The work covered enterprises on how to fill out applications for end-user incentives supporting them with detailed design estimates for each refrigeration installation. From November to December 2003 there were participants determined, to whom aims and goals were explained and recommended preliminary project solutions.

January – March 2004 there was assistance provided in preparing application documents for incentive pay-outs to the following organizations:

- “Milky Ice” LTD, producer and seller of ice-cream;
- “Sher Inc” LTD, producer of sausages.

During September 21–25 and December 9–10, 2004, National Consultant – Mr. Garifulin provided assistance to “Milky Ice” Company (c/o Osh) in project for retrofit and incentive payment, he also inspected “Pivnaya Akademia” Ltd (c/o Osh).

During September 26–30 and December 6–8, 2004 National Consultant- Mr. Garifulin assisted in preparation of applications for 2005 for two enterprises “Remesov” and “Mamatkulov” in Jalalabat town, he also inspected “Baichehekei” café (c/o Jalalabat).

Refrigerant Management Plan envisages phase-out of 250 kg of CFC-12 in 2003 and in 2004 – 500 kg of CFC-12. Totally – 750 kg.

Actually, the following was realized:

Phase-out of CFC-12 during 2003-2004

“Pivnaya Akademia” Ltd 234 kg

PE “Putilin” 141 kg

PE Café “Baichehekei” 168 kg

PE “Shin” 672 kg

TOTAL 1218 kg

Applications submitted in 2004 and amount of CFC-12 to be phase-out

“Sher-Inc” Ltd 221 kg

“Milky Ice” Ltd 168 kg

TOTAL 389 kg

These applications were submitted in 2005 and CFC-12 phased-out:

PE “Remesov” 105 kg

PE “Mamatkulov” 151 kg

PE “Tsay” 343 kg

TOTAL 599 kg

By December 31, 2005 about 2098 kg of CFC had been phased out against planned 1750 kg. Incentives payments to the owners of refrigeration equipment totaled 55 408 USD.

All results of activity under “End-users Incentive” Project are presented in the project reference table.

In 2005, a process of CFC phase-out consumption had been examined. During August 8-12, 2005, as a result of the examination, the trade of illegal CFC products of Chinese production had been revealed in Osh and Jalal-Abad regions.

For purpose of attraction of additional participants to the End-user incentives project a number of meetings in Osh, Jalal-Abad and Batken regions had been carried out. As a result of the meetings a number of people got interested in participation in the project. But not all potential participants met the strict rules of requirements. The main reasons of failure to comply with the requirements were:

- the property did not belong to the citizens of Kyrgyz Republic;
- a lack of owned capital for co-financing of production works.

In 2006 year, submitted applications and CFC phased-out:

Private entrepreneur Mr.Ugai - 383 kg

“Karebi-Ug” Limited – 456 кг

Private entrepreneur «Milky Ice» - 168 кг

“Sher-ink Limited” - 221 kg, also 110 kg for 2004 year

Cooperative society «Vetka» submitted application form for 2006 kg.

Private entrepreneur Mr.Nikolaev K.I. submitted application for 143 kg, being performed.

Private entrepreneur Ms.Shemiakina N.A. submitted application for 224 kg.

JSC “Shoro” application submitted for 351 kg.

Total CFC – 1118 kg.

As of the end of 2006, CFC 2865 kg had been phased-out (part of them is not approved and is supposed to be approved in the near future), while the plan is 1750 kg. Planned CFC phase-out is 3243 kg. 179 kg of CFC had not been accepted due to mixture.

The following end-user incentives payments were:

- closing payment 54 749 USD;
- up-front payments 35 547 USD.

Total planned incentive payment 81 658 USD.

During the first half-year of 2007, the Ozone Center provided consultations to enterprises how to apply for incentive payments. It was accompanied by preparation of estimate and project documentations. Two applications were submitted: PE Mr. H. Ergashev (phase-out of 208 kg of R-12) and PE Ms. Alakova (phase-out of 106 kg of R-12).

New additional participants were involved:

PB Nikolaev – application submitted for 143 kg. Project is completed.

PB Shemiakin – application submitted for 224 kg. Project is completed.

CJSC “Shoro” – application submitted for 351 kg. Project is completed.

Totally – 718 kg.

At the end of 2007, total amount of CFC-12 phased-out is 4289 kg, among it 3814 kg were passed for recycling. Total amount of incentive payments is 117,908.00 USD.

Results of the project activity are reflected at the table below.

Project KYR/02/G63 “Raising public awareness and end-users incentive program” had been completed.

The project of KYR/02/G63 on raising awareness and incentive of end-users is completed. Final report was prepared in November 2008. Further activities on incentive of end-users are realized in frames of TPMP.

Summary table of “Awareness Raising and End-User Incentives Project in refrigeration equipment sector

Year	Applicants	Planned CFC phase-out, kg	Planned incentive payment, USD	Advance payment received, 40% (60% since May 5, 2006), USD	CFC phased-out	Total incentive payment, USD	Passed for recycling, kg	Refused to be recycled/reason
2003	“Shin”	672	10000	4000	672	10000	586	86
	“Pivnaya Akademia”	234	4375	1720	234	4375	234	-
	“Putilin”	133	4593	1780	133	4593	133	-
	“Baychechekey”	179	6250	1971	179	6250	-	179/mixture
	TOTAL	1218	25218	9471	1218	25218	953	265
2004	“Milky-Ice”	168	6250	2500	168	6250	160	8
	“Sher-Inc”	221	6592	2637	221	6592	221	-
	TOTAL	389	12842	5137	389	12842	381	8
2005	PB Tsay	343	8750	3500	343	8750	216	127
	PB Remezov	105	3125	1250*	105	3125	148	-
	PB Mamytkulov	151	5473	2189	151	5473	151	-
	TOTAL	599	17348	6939	599	17348	515	127
2006	PB Yugai	383	8750	3500	383	8750	342	41
	SK “Vetka”	206	7500	4500	206	7500	206	-
	“Karibe Yug	456	10000	6000	456	10000	387	69
	TOTAL	1045	26250	14000	1045	26250	935	110
2007	PB Ergashev	208	7500	4500	214	7500	212	2
	PB Alakova	106	6250	3750	106	6250	106	-
	PB Nikolaev	143	6250	3750	143	6250	137	6
	PB Shemiakina	224	7500	4500	224	7500	224	-
	CJSC “Shoro”	351	8750	5250	351	8750	351	-
	TOTAL	1032	36250	21750	1038	36250	1030	8
	Grand total	4283	117908	57297	4289	117908	3814	518

Within the frameworks of the project “End-users incentive program of commercial and industrial refrigerant equipment”, a workshop was conducted for owners of refrigerant equipment for informing about the work of the project (more detailed description of the workshop is given in Section 1.2.2)

1.4.6. Monitoring of ODS handling

ODS monitoring is carried out on a regular basis by the Ozone Center. The results are formulated according to the “Manual on Data Reporting under the Montreal Protocol. The Multilateral Fund for the Montreal Protocol Implementation”. The monitoring results for 2001, 2002 and 2003 were submitted to the Ozone Secretariat.

Monitoring of use was made according to the year plan. In 2004 for realization of monitoring there were extra trips in northern regions of the republic (July 1–9, 2004) and in southern (September 21–30, 2004), in Issyk-Kul region (August 26–September 4, 2004) and Osh, Jalabat, Batken regions (October 8–17, 2004). Monitoring was also conducted during meetings with representatives of industrial sphere. During mission in northern regions (July 1–9, 2004) there was a transportation of one recycling center from c/o Bishkek (“Kyrgyzstorgtehnika” JSC) to c/o Cholpon-Ata (Cholpon-Ata Technical Center JSC).

May 10 – 16, 2005, mission to the northern regions was realized.

June 27 – July 11, 2005 mission to the southern regions was realized.

During September 7-11, 2005 Mr. Robert Berkeley - an international consultant visited the country with the purpose of supervision of RMP implementation process and planning perspectives of TRMP projects. The sites included in project RMP implementation had received positive appraisal on implementation process of the State program on ODS phase-out.

During 2007 a number of meetings with refrigeration specialists were conducted. During this meetings participants received information about goals of the project and were invited to participate at upcoming TPMP workshops.

Constant control over the implementation of the Country Program had allowed achieving annual CFCphase-out from 53 tones in 2001 to 4.25 tones over 2007.

2008

As result of monitoring in 2008 the volume of recovered CFC-12 is 1390.7 kg, including 620.1 kg of recycled.

Monitoring was conducted by consultants and staff of the Ozone Center during preparatory works and workshops. In the first half-year of 2008:

- Osh region, 28.01-01.02.2008, Myrsaliev N., Iliasov Sh., Garifulin V., Jumaliev J.
- Batken region, 28.02.2008, Ojereliev N.
- Chuy region, 18 – 20.03.2008 and 25 – 28.05.2008, Ojereliev N., Pavlov Y., Myrsaliev N., Jumaliev J., Garifulin V.
- Jalalabad region, 13 – 16.05.2008, Myrsaliev N., Jumaliev J., Garifulin V.
- Osh region, 11 – 12.05.2008, Myrsaliev N., Jumaliev J.

Project on monitoring in frames of RMP is completed in October 2008. Further activities on monitoring are realized in frames of TPMP.

The monitoring of the activities within the TPMP is still ongoing. National consultants, under the supervision of the Ozone Centre is responsible for the continuous follow-up of the activities.

The PMU is constantly monitoring both consumption and use of ODS within the country. Monitoring results are arranged in accordance with «Manual for report submission within the frames of the Montreal Protocol. Monitoring results of 2008 have been submitted to Ozone Secretariat.

During the reporting period, national consultants realized missions for checking activity of the recycling centers:

- June 19-22, 2009, districts of Issyk-Kul region, “Tehnichesky Center” Ltd, Private businessman R.G. Garifulin and others;
- June 23-28, 2009, districts of Osh and Jalalabad regions, OJSC “Oshtorgmontazh”, JSC “Rembyttehnika” c/o Osh, Private businessmen V.M. Jusupov, T.L. Manyurov, J.D. Vidiburenko, D.T. Manyurov, D.T. Razykov, JSC “Rembyttehnika” Jalalabad and others.

Amount of recycled CFC-12 for the reporting period is 1,674 kg., including 515 kg. of purified. For the whole period of the project realization, 13,158 kg of R-12 were recycled and 4,905 kg purified.

Table of recovered and purified CFC-12 in 2009

No	Date when equipment was passed	Recipient of equipment	Quantity and type of equipment		Amount of recycled refrigerant	Including purified CFC
			Recovery machine TX 200	Hand pump for recovery		
1	05.06.2003	Ozone Center	2	2		
2	05.06.2003	PB Sheremetiev	1		10	
3	05.06.2003	PB Sorokin	1		21	
4	05.06.2003	PB Garifulin		1	39	
5	05.06.2003	“Tehnichesky center” Ltd.	1	1	312	300
6	05.06.2003	JSC “Kyrgyztorgtehnika”	17	1	298	107
7	13.06.2003	“NIS”	1		53	
8	14.06.2003	“TSC “Ayaz” Ltd.		2	9	
9	13.06.2003	PB Kudabaev	1		88	
10	13.06.2003	PB Konnov	1		38	
11	13.06.2003	“Almas” Ltd	2		12	
12	14.06.2003	PB Mindubaev	2		111	32
13	14.06.2003	CJSC “Shoro”	1	1	21	
14	10.06.2003	PB Ahmedov (Kyzyl-Kia)		1	13	
15	10.06.2003	PB Lukyanchenko	1	1	19	
16	10.06.2003	JSC “Rembyttehnika” Jalalabad	1	2	60	
17	11.06.2003	OJSC “Oshtorgmontazh”	4	1	38	19
18	11.06.2003	JSC “Rembyttehnika” Osh		5	13	
19	01.10.2003	PB Jusupov	1		10	
20	01.10.2003	PB Batenkov	1		23	
21	08.10.2003	PB Manyurov T.	1		30	
22	08.10.2003	PB Vidiburenko	1		21	

23	08.10.2003	PB Manyurov D.		1	20	
24	08.10.2003	PB Razykov		1	5	
25	28.05.2004	PB Rahmatov		1	7	
26	24.06.2004	PB Galler		1		
27	24.06.2004	PB Djumaliev		1	12	
28	21.06.2004	“Titan-Yug Service” Ltd.		1	25	
29	20.10.2004	RPA “Ecoholod”		3	54	10
30	20.10.2004	PB Gorin	1		38	
31	20.10.2004	PB Jarabaev		1	23	
32	28.05.2005	“SBT” Ltd.		1	8	
33	24.12.2005	PB Orozaliev	1		200	35
34	24.12.2005	PB Abdybek u.	1		36	12
35	25.12.2005	PB Aitikeev		1	7	
Total:			43	30	1674	515

1.4.7. Technical personnel training

The work was realized on two directions:

- “Training of refrigeration technicians”;
- “Training of the Customs officers”.

Training of Refrigeration Technicians

Under the project “Training of Refrigeration Technicians” a MoU in collaboration with UNEP DTIE was signed (IM/4040-02-61-2224). As the first step, two workshops on training of refrigeration technicians were conducted at the north and south of the republic in the c/o Cholpon-Ata and c/o Osh.

Workshop at the Issyk-Kul lake, c/o Cholpon-Ata.

The list of participants of the workshop in Cholpon-Ata, May 24-28, 2004, included:

- Ministry of Ecology and Emergency Situations – 4 persons;
- UNEP representative – 1 person;
- High education institutions representatives – 5 persons;
- Refrigeration technicians – 28 persons;
- NOU of Kazakhstan – 5 persons;
- Ozone Center of Kyrgyzstan – 7 persons;
- NGO representatives – 6 persons;
- Mass-media representatives – 3 persons.

All participants were provided with the handouts, including special manual. Necessary equipment for practical training was also provided. After the end of the training the test was conducted and 28 refrigeration technicians were certified.

Workshop at the c/o Osh.

The list of participants of the workshop in Osh, June 14-18, 2004, included:

- Ministry of Ecology and Emergency Situations – 4 persons;
- High education institutions representatives – 1 person;
- Refrigeration technicians – 27 persons;
- Ozone Center of Kyrgyzstan and local consultants – 8 persons;
- NGO representatives – 4 persons;
- Mass-media representatives – 11 persons.

All participants were provided with the handouts, including special manual. Necessary equipment for practical training was also provided. After the end of the training the test was conducted and 25 refrigeration technicians were certified.

For conducting first phase there was obtained and given away 50 pieces of monograph of chair of department of refrigerant equipment of Moscow State University of Applied Biotechnology – Mr. Boris Babakin “Refrigerants, oils, service of refrigerant systems”, 460 pages.

For conducting the second phase additional copies of Manual for technicians - 300 pieces, and issued monograph of chair of department of refrigerant equipment of Moscow state university of applied biotechnology- Mr. Babakin “Refrigerants, oils, service of refrigerant systems”, 460 pages, 500 copies.

Phase II

Training of remaining refrigeration technicians was realized by trained refrigeration technicians with the support of the Ozone Center (approximately 500 persons all-over the republic”).

Phase II is realized in two stages. During the first stage about 250 refrigeration technicians were trained. Interim report is prepared. After completion of the second stage, final report will be presented.

Totally, in frames of the first stage, 19 workshops were realized in Bishkek and Chuy region, 258 refrigeration technicians were trained and certified:

- Issyk-Ata district (Kant) – 20;
- Chuy district (Tokmok) – 43;
- Moscow district (Alexandrovka) – 36;
- Karabalta – 27;
- c/o Bishkek (KSU) – 39;
- c/o Bishkek (KTU) – 22;
- c/o Bishkek (KTU) – 25;
- c/o Bishkek (JSC “Kyrgyztorgtehnika”) – 21;
- c/o Bishkek (“Karibe-Jug” Ltd.) – 25.

Every participant has received the following materials:

1. Manual on modern methods of servicing refrigeration equipment, Bishkek, 2004;
2. Agenda
3. List of participants
4. Conceptual note
5. Evaluation form
6. Tests
7. Brochure “20 questions and answers on the Ozone Layer” (in Russian and Kyrgyz), Bishkek, 2004;
8. Posters
9. Manual “Refrigerants, oil, service of refrigeration systems”, Prof. B. Babakin, Bishkek, 2004.
10. A book by professor Babakin B.S. “Diagnostic of operation of small refrigeration compressors”

During the implementation process of phase II, 19 training seminars had been conducted in Bishkek city and Chu regions. 495 specialists had undergone training and received certificates:

- Issyk-Ata region (Kant city) – 20 specialists;
- Chu region (Tokmok city 1) – 23 specialists;
- Chu region (Tokmok city 2) – 20 specialists;
- Moscow region (Aleksandrovka village) – 26 specialists;
- Kara-Balta city – 37 specialists;
- Bishkek city (Kyrgyz State University of Architecture and Construction) – 39 specialists;
- Bishkek city – (Kyrgyz Technical University “Air Conditioning and ventilation”) – 22 specialists;

- Bishkek city – (Kyrgyz Technical University “Food production equipment”) – 25 specialists;
- Bishkek city – JSC “Kyrgyz Trade Equipment” – 21 specialist;
- Bishkek city – JSC “Karibe South” – 24 specialists;
- Cholpon-Ata city – 2 technicians;
- Jalal-Abad city (Jalal-Abad State University, Technology faculty) – 28 specialists;
- Jalal-Abad city (Jalal-Abad State University, Ecology faculty) – 31 specialists;
- Jalal-Abad city – 15 technicians;
- Osh city - 29 technicians;
- Osh city (Kyrgyz National University) – 28 specialists;
- Osh city (Osh Tuu) – 27 specialists;
- Eastern part of Chu province – 17 specialists;

On November 28, 2005 a training center for refrigeration equipment specialists had been established at Osh-city based Technological University. For educational purposes the Ozone Center of Kyrgyzstan had handed over a computer, furniture, CFC gas analyzers and other equipment to the training center.

More detailed information is provided in the final report “National seminars on refrigeration-technicians trainings on modern methods of refrigeration equipment service, phase II”.

Project IM/4040-02-61-2224 “Training of refrigeration technicians” had been completed.

Training of Customs Officers

Under the project “Training of Customs Officers” a MoU with UNEP DTIE was signed. In December 2003 Head of the Ozone Center of Kyrgyzstan Mr. M. Amanaliev and Assistants Mr. Sh. Iliasov and Mr. N. Myrsaliev attended similar workshop in Almaty, Kazakhstan. Necessary materials were gotten from the workshop. The list of necessary equipment was also defined.

Phase I.

After receiving equipment, two workshops for trainers were organized in the frames of the first phase: c/o Bishkek, February 9-11, 2004, c/o Osh, February 16-18, 2004. The main objectives of the workshops are to train necessary skills for monitoring and control of ODS import/export together with skills for smuggling prevention. Recommendations and proposals for the second phase were carried out.

75 persons had participated at the both workshops: 45 at the workshop in Bishkek and 30 in Osh. Among all participants of the workshops 37,3% or 28 persons are representatives of the Customs. They had received appropriate certificate. It is expected they will train other customs officers during the second phase of the project.

6 representatives of regional control bodies of the MEES attended each workshop. Representatives of local industrial companies that use ODS participated at the workshop in Osh. Their participation is explained by possible cooperation with the customs in the future.

The workshops were highlighted in mass-media (TV, radio broadcasting companies, newspapers, republican and local as well). 20 representatives of mass-media reported information about workshops in mass-media.

15 lectures were presented at the workshop in Bishkek and 12 in Osh. Main lecturers were from the ozone Center of Kyrgyzstan:

- Mr. M. Amanaliev – 3 lectures;
- Mr. Sh. Iliasov – 5 lectures;
- Mr. N. Myrsaliev – 3 lectures;
- Mr. V. Garifulin – 3 lectures.

Representatives of the Customs had carried out only 4 lectures (Ms. E. Hojanova and Mr. K. Tokoshev).

There were also additional lecturers at the workshop in Bishkek:

- representative of UNEP, Mr. E. Aysabaev – 1 lecture;
- representative of Russian Customs, Mr. N. Lagirev – 1 lecture;
- representative of the Coordination center on climate change of Kazakhstan, Mr. S. Nurgaliev – 1 lecture;
- international consultant, Mr. Krishna Nair – 5 lectures;

The report is already sent to all participants and members of the contact group on training of Customs officers. It is also available at the web-site of the Ozone Center www.ozonecoconv.org

On completion of the education 31 specialists of the Customs have received appropriate certificates. At the present time the work on preparation of the second phase of the training of Customs officers is undergoing.

Phase 2

Two workshops were conducted on Phase 2 during December 6–8, 2004 in Jalalabat and during December 9–11, 2004 in Osh.

The content of workshops was identical. Training was conducted with efforts of earlier trained officers of Customs with the assistance of Ozone Center.

The agenda of workshops included the following:

1. Problems of preserving the ozone layer;
2. International agreements on protection of ozone layer;
3. State program of Kyrgyz Republic on phase-out of ODS;
4. National legislation in licensing of import/export;
5. Illegal trade of ODS and equipment, containing ODS;
6. Determining ODS and equipment containing ODS;
7. Rules of safety, transportation and keeping ODS;
8. Practical lessons in determining ODS;
9. Session in groups: effective work of system of licensing import/export of ODS and introduction of regulating legal documents;
10. Presentation of decisions of work groups at plenary;
11. Estimation of the workshop and work out of final decision and recommendations of the workshop.

Time was chosen for discussion between participants and organizers on further fulfillment of RMP. There were discussions for adopting decisions and recommendations.

There were 19 people at the workshop in Jalalabat town, out of them 15 representatives of customs service. There were 20 people at the workshop in Osh city, out of them 15 representatives of customs service.

Upon completing of training 30 specialists received certificates.

In 2005, 8 seminars had been conducted. The seminar agenda and sessions were completely similar to the seminars conducted in 2004, II stage. Summary information on stage II seminars is provided in the table.

Information on quantity of trained custom officers and handed-over equipment

#	Territorial sub-department	Number of trained specialists	Quantity of devices passed
<i>Northern region</i>			
Chuy region			
1	Tokmok Customs	9	3
2	Karabalta Customs	9	3
3	Bishkek Customs	10	2
4	FEZ Customs	9	2
5	Manas airport Customs	5	-
6	Chuy Environment Department	2	1
7	Bishkek Environment Department	2	1
Issyk-Kul region			
8	Issyk-Kul Customs	8	2
9	Issyk-Kul Environment Department	2	1
Naryn region			
10	Naryn Customs	10	2
11	Naryn Environment Department	2	1
<i>Southern region</i>			
Jalalabat region			
12	Jalalabat Customs	14	3
13	Jalalabat Environment Department	3	1
Osh region			
14	Osh Customs	13	3
15	c/o Osh Environment Department	2	1
16	Osh Environment Department	2	1
Batken region			
17	Batken Customs	10	3
18	Batken Environment Department	2	1
Total:		114	31

In total, during the implement process of phase II on the whole territory of the country 10 seminars had been conducted. 114 specialists had undergone training and received certificates. There were 97 representatives of the customs, which is 85% of the total number of persons trained.

The representatives of regional controlling bodies of the Ministry of Emergency Situations and companies using ODS took part in some seminars. Their participation is explained by further cooperation with custom authorities.

Ozone Center of Kyrgyzstan and Custom Department had created a monitoring mechanism, contributing to export-import regulation of ODS and ODS-containing products. Ozone Center will review and as far as possible guarantee the implementation of seminars' recommendations.

During August 25-27, 2005 a trilateral meeting between Kazakhstan, China and Kyrgyzstan on illegal ODS trade in Central Asian region took place in Cholpon-Ata city

(Kyrgyzstan). The representatives of ministries and departments overlooking import-export of chemicals, state customs and national ozone center offices had participated in the meeting.

The meeting's overall objective was set to foster cross-border cooperation, encourage the development and adoption of sub-regional solutions to the monitoring of ODS traffic and thus support sustainability of ODS phase-out programs in subregions.

Main agreements reached and recommendations adopted at the meeting included:

- procedures for issuing by China of ODS export licenses for trade with Kyrgyzstan and Kazakhstan in substances controlled under the Montreal Protocol were agreed upon by the countries concerned;
- Kazakhstan and Kyrgyzstan agreed to provide China with information on all cases of illegal trade involving Chinese ODS and products, containing ODS for investigation. China will proceed with necessary investigation of reported cases and keep the two countries informed on the outcome;
- It was agreed to organize joint border custom training workshops/consultations with the participation of the 3 countries to address the issues of common concern with regard to illegal trade;
- UNEP and other implementing agencies were invited to explore the possibility of supporting the establishment of a subregional center for collection and destruction of seized ODS;
- An information exchange mechanism should be established between the border customs of China and Kazakhstan as well as China and Kyrgyzstan under the General Agreements on Customs Cooperation between the two countries respectively.

At the initiative of Ozone Center, a representative of the Kyrgyz State Custom Department had taken part in the national seminar organized for the custom officers and custom management on regional cooperation between countries on ozone protection issues during October 18-21 in Jhuhai, China.

Project "Training of Customs officers" was completed in 2006. Further activities on training of Customs officers were realized in frames of TPMP.

1.4.8. Recovery & Recycling of ODS Programme

Under the project KYR/02/G62 in course of workshops arrangements in April-May 2003 a number of local missions to the northern and southern regions of the country were carried out in order to arrange meetings with refrigeration specialists. The activity covered consultations on the projects' aims and specialists were invited to attend the forthcoming workshops.

To support participants in terms of information materials a translation of Recovery of Refrigerants Manual was done. The information package was arranged as a set of several manuals and distributed to the participants.

During June 1–15, 2003 a mission of Mr. Robert Berkeley, international consultant, Senior UNOPS/UNDP Recovery and Recycling Expert, took place that gave an impetus to overall start of activities. It is worth to note UNDP also supplied 469 units of recovery and recycling equipment with spare parts at cost of 127,979 USD. During the first decades of June 2003 the Ozone Center organized 3 training workshops under guidance of Mr. Berkeley: 3-4 June 2003 – Bishkek covering northern regions (43 people – JSC "Kyrgyztorgtechnika"), 10-11 June 2003 – Osh covering southern regions (42 people – "Pivnaya Akademia" LTD), 13-14 June 2003 in Bishkek covering technicians working in the city and nearby districts (52 people – JSC "Kyrgyztorgtechnika"). The list of participants is provided in workshops reports. The main subject of the sessions was training people on proper practices of safe refrigerants handling, methods of refrigerants recovery and recycling using the supplied equipment. Also, during the process of training some issues of ODS emissions into the atmosphere and their consequences and harmful effects of ultraviolet radiation to the health of people and wildlife were raised. Throughout the workshops a video on the ozone layer protection; the workshops' programme is given in the workshops' reports. Upon completion of the training courses all participants

received according to arranged agreements the equipment supplied. Along the course of training all participants listened to lectures on basics of recovery and recycling refrigerants' amounts monitoring.

Before the actual distribution of the equipment certain agreements for hand over of equipment sets were arranged along with special Certificates of Completion according to UDP/UNOPS format that included lists of equipment distributed. All agreements were signed by the participants and the Ozone Center. According to such agreements there are some provisions related to expected levels of monthly recovery of CFC-12 and reporting conditions to National Consultant and Ozone Center. The provisions were compiled taking into account recommendations of Mr. Robert Berkeley and include requirements for mandatory training of chief engineers or technicians of those enterprises participating in the project. Participants learned about the provisions of the equipment use that expect a possible redistribution of the equipment given the provisions and rules are violated by a given enterprise or monthly established amounts of CFC-12 recovery are not met. CFC-12 was defined as a main refrigerant considered under the present project.

All workshops were also attended by state environmental inspectors from regional environmental divisions with purpose to learn about the basics of control over ODS import and application in the country in terms of existing legislation basis and the country's obligations under the gradual phase-out of ODS use.

There are three CFC-12 recycling centers including one mobile center for substances collection and treatment on the spot: JSC Kyrgyztortekhnika – 1 fixed and 1 mobile; JSC Oshtorgtehnika – 1 fixed. These companies are the main organizations involved into the repairs and maintenance of refrigeration equipment. Operators from these companies also received necessary training under guidance of Mr. Robert Berkeley.

Expected results:

- a decrease or complete eliminations of uncontrolled emissions of ODS into the atmosphere will take place through the use of the equipment supplied and compliance to guidelines on behalf of technicians who received necessary training;
- a safe refrigerants handling will be introduced in general practice;
- CFC-12 imports will decrease;
- The implementation of joint initiatives between the Government and industrial and commercial refrigeration equipment sector for gradual ODS phase-out will be ensured.

All actions were presented in mass media.

A certain activity was carried out with participants of the project during July, August and September 2003. On July 5, 2003 a set of 30 manual recovery pumps, 90 recovery bags, 3 boxes with spares for 10 units of recovery equipment was received. It was transported and dislocated at the storage of Ozone Center. In the last part of July 2003 this equipment was distributed according to the plan.

Apart from that in July 2003 a consulting work with directors of JSC Kyrgyztorgtehnika in Bishkek and JSC Oshtromontage in Osh was carried out aimed at timely installation and start of the equipment designed for recycling center. A training for mechanics working at these centers was provided stressing the proper and effective use of the equipment supplied.

In August 2003, a number of meetings with owners of larger refrigeration installations took place where CFC-12 recycling and retrofit tasks and objectives were discussed along with a number of legislation acts adopted by the Government of the Kyrgyz Republic and related to prevention of deliberate emissions of CFC-12 to the atmosphere.

In September 2003, some guiding principles "Manual for trainers to train technicians on methods of modern refrigeration equipment maintenance practices" were developed where a description of retrofit, recycling and recovery of CFC-12 with use of the equipment supplied is provided along with characteristics of alternative refrigerants and their thermophysical parameters and specific types of oil.

Along the monitoring activities of the R&R equipment use, during III quarter of 2003 an inventory and redistribution of 7 equipment sets was made according to the plan of CFC-12 recycling: 3 sets - to JSC Kyrgyztorgtechnika and 4 sets - to JSC Oshtorgtechnika.

A certain activity on collection of the information, inventory and redistribution was carried out with participants of the "Recovery and Recycling" project from February until July 2004. The information on the volumes of recovered and recycled R-12 was collected together with inventory.

During first half of 2004, the volume of recycled CFC-12 was 1205.5 kg; 522.0 kg of CFC-12 (of recycled) were purified in R&R center.

In 3rd quarter of 2004 the volume of recycled CFC-12 was 853.7 kg; 309.4 kg of CFC-12 (of recycled) were purified in R&R center.

In 4th quarter of 2004 the volume of recycled CFC-12 was 805.3 kg; 270.5 kg of CFC-12 (of recycled) were purified in R&R center.

In 2004 there was inventory and redistribution procedure during the missions to regions of the republic: north (July 1–9, 2004), south (September 21–30, 2004), Issyk-Kul region (August 26 – September 4), Osh, Jalalabat and Batken regions (October 8–17, 2004).

During October 19–20, 2004, National Workshop "Methods of recovery and recycling of refrigerants" was conducted in Jalalabat.

Purpose of the workshop:

- Information of refrigeration technicians about Recovery and Recycling Project in the Kyrgyz Republic;
- Familiarization with the Country Program, International Agreements and efforts of the Government directed to phase-out of ODS;
- Information about methods of recovery and recycling of refrigerants using equipment available in frames of the project;
- Certification;
- Redistribution of equipment.

Training program also included other questions:

- Raising awareness on the ozone layer depletion issues;
- Interaction between provisions of the Montreal Protocol and National RMP;
- Familiarization with the Schedule of ODS phase-out according to the Country Program;
- Familiarization with alternative refrigerants;
- Recovery and reuse of CFC-12

Total amount of participants was 37 person, 24 of them are specialists from refrigeration sector.

All participants had positively evaluated the workshop. They considered the information presented at the workshop as necessary and well-timed. They also admitted that it was necessary to carry out preventive measures for replacement of equipment and retrofit. All representatives of business had showed interest in applying for incentive payments.

During the monitoring of the R&R equipment use, within the 3rd quarter of 2004, 7 sets were redistributed under the framework of the redistribution of the equipment. And, in addition, 1 set was redistributed in 2nd quarter of 2005.

On January 20, 2005 there was a review of the Action Plan for 2005 at UNDP-Bishkek with participation of the Ozone Center, which was adopted.

From May 10-16, 2005 there were local business trips along the northern region of the country, where the southern region was visited from June 27-July 10 2005. The results of monitoring are provided below.

In 1st quarter of 2005 the volume of recycled CFC-12 was 298.4 kg; 231.3 kg of CFC-12 (of recycled) were purified in R&R center.

In 2nd quarter of 2005 the volume of recycled CFC-12 was 664.2 kg; 306.5 kg of CFC-12 (of recycled) were purified in R&R center.

In 3rd quarter of 2005 the volume of recycled CFC-12 was 1989.9 kg; 705.3 kg of CFC-12 (of recycled) were purified in R&R center.

In 4th quarter of 2005 the volume of recycled CFC-12 was 978.3 kg; 258.7 kg of CFC-12 (of recycled) were purified in R&R center.

At present time the amount of CFC-12 recycled over 2006 year is 1569.8 kg, including refined 903,8 kg.

During September 7-11, 2005 Mr. Robert Berkeley an international consultant visited the country with the purpose of supervision of Refrigerant Recovery and Recycling and End-User incentives projects and development of further plans of CFC withdrawal from circulation. During the mission he visited recycling center located in Bishkek and Cholpon-Ata cities. He adjusted a list of spare parts in the amount of 62 items at a cost of 11 298 USD for previously bought equipment within "Refrigerant Recovery and Recycling project". The spare parts were received in December 2005. Also a program of an additional seminar on "Refrigerant Recovery and recycling methods" was adjusted with Mr. Berkeley.

During December 22-23, 2005 a National seminar "Refrigerant Recovery and recycling methods" had been conducted in Cholpon-Ata city. 28 people had participated in the seminar, 23 out of which were specialists of cooling equipment and upon seminar completion they received certificates on CFC recovery and recycling methods. Other participants were awarded certificates on undergone trainings; new agreements had been made with mechanics on redistributed equipment. Also refrigerant recovery and recycling equipment had been handed over.

In 2005, during the monitoring of the operation of recovery and recycling equipment an inventory-taking and redistribution of 7 equipment sets had been done in accordance with the implementation plan of CFC-12 recycling.

For the whole period of the project operation till at the end of 2006 the volume of recycled CFC-12 totaled 9115.2 whereas 3617.0 kg of CFC-12 (out of the recycled volume) were purified at the R&R Center.

On March 2007 there were a number of meetings with owners of big refrigerators. Agenda of these meetings included: goals and tasks of R-12 recovery and recycling, legislation that regulates emission of CFC.

On February 2007, with the support of the Ozone Center, Guidelines "Training refrigeration technicians modern methods of MAC servicing" was published. The publication contains detailed description of retrofit, recovery and recycling of R-12 with use of received equipment.

Project KYR/02/G62 on recovery and recycling of ODS was completed in 2007. Further activities on recovery and recycling of ODS are realized in frames of TPMP.

1.4.9. Assistance to local industrial sector.

Specialists and National Consultants of the Ozone Center conduct on regular basis consultations with representatives of industrial sector. Special literature is being distributed among them. In 2004, devoted to the Ozone Day, the Ozone Center organized an exhibition of literature on the Ozone Layer issues at the Republican Scientific and Technical Library of the Kyrgyz Republic.

On July 8, 2005 a Republican Public Society (RPS) "Echoholod" (EchoCold) had been found with the help of Ozone Center. Now, the society counts 150 specialists as members. In

2005, RPS “Ecoholod” became a member of the International Academy of Cold. The following had been accomplished:

1. A Constituent Assembly had been held. A charter of society had been developed with the technical and financial support of Ozone Center. The society got through registration process and obtained new bank account.
2. New office and training center had been opened and equipped, an official presentation of office opening had been covered in Mass media;
3. Contacts with the International Academy of Coldness had been established. Corresponding member certificate had been received.

A work with the leading companies and specialists servicing refrigeration systems is underway.

4. The authors of the book “Diagnostics of operation of small refrigeration compressors” Prof. Babakin B.S. gave permission to publish his book in amount of 200 copies.

On November 18, 2005 a general meeting of RPS “Ecoholod” took place. The Ozone Center invited Mr. Shabanova N.I. - a representative of Kyrgyz Testing and Certification Center (she provided the instructions “On certification rules of imported and produced products”) and a representative of the State Construction Agency of Kyrgyz Republic (he provided the instructions “On licensing and certification rules of refrigeration system specialists”). Special attention had been drawn to the ban on operation of construction and erection companies without proper certificates. An exhibition for the general meeting had been organized, participated by the following companies as “Gelfa-Asia”, “Titan-South-Service”, “Budan-Cold-Service”, “Complex consumer appliances” “NIS”. They displayed modern service equipment for refrigerant recovery and recycling. During the meeting, Mr. Garifulin V.K. - a national consultant of Ozone Center provided information on worldwide trends in alternative refrigerants applied in refrigeration systems.

On February 27-28, 2009, the 3rd convention of Republican Public Association “Ecoholod” was conducted in Issyk-Ata. Specialists from all regions participated at the meeting (26 persons). The following was discussed:

- Report about activities in refrigeration sector, current refrigeration equipment;
- Realization of the Regulations on state certification of specialists working with CFCs, natural refrigerants, and alternative to Methyl Bromide pesticides;
- Certification of specialists for commissioning and servicing in Intersectoral Training Center under Gosgortekhnadzor of MES;
- Presentation of the draft of certificate for authorizing specialists for commissioning, work with low-voltage equipment and servicing of refrigeration equipment;
- Training of qualified refrigeration engineers in KSTU named after Razzakov;
- Establishment of the web-site of “Ecoholod”;
- Message “On correction to the Montreal Protocol, regarding further application of R-22”;
- Message about the Technical Regulations “On requirements to safety of refrigeration equipment”;
- Development of relations with international associations of refrigeration technicians;
- Methodology of estimate of costs for commissioning and servicing works, according to price lists of Kyrgyzgosstroj;

The following decisions were accepted, as result of the convention:

- To create permanent training courses for preparation of specialists, on a base of vocational schools and Intersectoral Training Center under Gosgortekhnadzor of the Kyrgyz Republic.
- To create training courses for sales managers, dealing with refrigerants and refrigeration equipment;
- To start publication of specialized journal;

- To establish special web-site for refrigeration technicians and provide it with content;
 - To approve the working plan of “Ecoholod” for 2009.
- During the reporting period, NRA “Ecoholod” prepared and published:
- Book “Guidelines for repair of MACs”;
 - Brochure “Domestic and mobile air conditioners”
 - Brochure “Guidelines for beginning refrigeration technicians” in Russian and Kyrgyz languages.

1.4.10. Involvement of public

The main information on this section is provided in item 1.1. Certain suggestions and recommendations of the Ozone Center aimed at improvement of education system were additionally developed and introduced into the Inter-branch Educational Center under the State Inspection for Technical Standards Supervisions of the Kyrgyz Republic where a training and certification of operators of compressor-based ammonia and freon refrigeration installations are carried out. The training was attended by:

- 21 people in 2001;
- 19 people in 2002;
- 17 people in 2003;
- 18 people in 2004;
- 19 people in 2005;

All materials and manuals that were handed over to higher education institutions are used in the training courses.

The Ozone Center officers took an active part in the work of conferences, seminars and round table discussions on related matters. They made reports on the following themes:

- “Environment monitoring”, a seminar on February 6-8, 2005;
- Final open session meeting on the results of ecological control in Kyrgyz Republic, February 9, 2005;
- Seminar on assessment of project proposals (including ozone layer protection) for trade-off of external debt of Kyrgyz Republic for sustainable development, on May 23, 2005 in UNDP-Bishkek office;
- National seminar on priority defining in rational management of chemicals, September 12-13, 2005, Bishkek;
- Training seminar “Ecological assessment in strategic planning”, November 28-29, 2005, Bishkek;

On Climate change

- International seminar on problems of climate change. UN Framework convention on climate change b Kiot Protocol, January 25, 2005, Bishkek;
- Round table discussions on problem of stock-taking of greenhouse gases and legal support of climate change problem, June 8, 2005, Bishkek;
- Ecological training “PRESIS - Regional Climate model”, September 5-9, 2005, Alania city, Turkey;
- Regional conference on climate, Issyk-Kul, September 14-16, 2005;
- Seminar on preparation of the Second National Statement on climate change in Kyrgyz Republic, October 4, 2005, Bishkek city;

- Regional conference on climate, Issyk-Kul, October 27-28, 2005; Minsk city, Belorussia;
- Round table discussion on stock-taking of greenhouse gases within the frames of the Second National Statement on Climate change, November 25, 2005, Bishkek city;
- Training seminar “Introduction in Clean Development Mechanism”, February 22-24, 2005, Bishkek;
- Training seminar “Preparation of CDM small-scale projects”, June 2, 2005, Bishkek;
- Training seminar “Preparation of CDM projects”, November 21-22, 2005, Bishkek;

On persistent organic pollutants:

- Seminar on persistent organic pollutants. March 2005, Bishkek city;
- Seminar on preparation of National profile on persistent organic pollutants, June 2005, Bishkek;
- National seminar “Information system on persistent organic pollutants in Kyrgyz Republic”, September 19, 2005, Bishkek;
- National seminar “Assessment of priorities and task assignments for the National Plan on compliance with Stockholm Convention on persistent organic pollutants”, November 22-24, 2005, Bishkek;

2006-2007 academic year was the first year of education for students with major “Refrigeration and air-conditioning”. In 2008 the second admission of students was realized.

1.4.11. Assistance to monitoring of the ozone layer’s state

Certain contacts with organizations dealing with monitoring of the ozone layer’s condition were established. There are two organization:

- lidar scientific station “Teplokluchenka” – headed by Mr. B.B. Chen (Kyrgyz Russian Slavonic University);
- lidar scientific station “Issyk-Kul” – headed by Mr. V.K. Semenov (Kyrgyz National University).

The Ozone Center had nominated Mr.Chen B.B, a professor, for participation in the 6th Conference of Scientific researches in ozone layer field. Mr.Chen B.B made a scientific report at the conference, which took place in Vena city, September 19-21, 2005.

1.4.12. Phase-out of Methyl Bromide use

With consultations from UNDP-New-York (Mr. Jacque Van Engel) an international consultant for the country was determined –Dr. Paul Fields. During the last part of August 2002 an initial mission of the consultant took place throughout the north of the country for collection of data needed for development of MB phase-out project proposal. Relevant information of this subject, but with specifics to other countries was found and collected from the Internet. A report on the present use of MB in the country was prepared, which includes also perspectives of possible changes taking into account the planned development of the agricultural sector. The MOU was already signed up. It defines alternative technologies for fumigation of grain and grain-storages. The necessary equipment is chosen and the bidding procedure is on the way.

Training workshop “Modern methods for grain protection” was conducted. 58 specialists, mainly from agriculture sector, participated in the workshop. The following issues were discussed:

- Problems of the Ozone Layer protection;
- Legislation of the Kyrgyz Republic on the Ozone Layer protection;
- Country Program for ODS Phase-out;
- Basics of fumigation;
- Development of pests;
- Methyl Bromide – basic fumigant;

- Methyl Bromide alternative methods and its application technologies, economical assessment of activities for grain protection.

A discussion to work-out recommendations to raise project activity effectiveness had been held at the end of presentation.

A number of negotiations with the following specialists from Russia had been conducted with the purpose of invitation one of them to the project as international consultant.

- Mr.Mordokovich Y.B. – a candidate of agricultural science of the State Plant Quarantine Inspection of Russian Federation;
- Mr.Sokolov E.A. – a leading scientific officer of the Russian Scientific Research Institute
- Mr.Zakladnoi G.A. – a doctor of Biological Science, at the Russian State Scientific-Research Grain Institute ;
- Mr.Vashakmadze G.G. – a leading scientific officer and a candidate of agricultural science of the State Plant Quarantine Inspection of Russian Federation;

Mr.Zakladnoi G.A. had been chosen as the international consultant.

On June 20-27, 2005 local consultants Mr.Pavlov Y.A. and Mr.Ojereliev N.S. had been sent on mission to Russia (Mocsow and Tambov city) to study modern treatment methods of grain pests at the State Grain Research Scientific Institute under the Russian Agricultural Academy.

Three training seminars on modern methods of grain pest protection had been conducted for the heads of farming companies, plant protection specialists and seed inspection officers.

- During October 26-27, 2005 in Issik-Ata region in agricultural collective farm “MIS”, 34 participants;
- During November 2-3, 2005 in Sokuluk region in agricultural collective farm “Rassvet”, 43 participants;
- During November 10-11, 2005 in Tup region in seed farm named after Mr.Pristavkin N.Y. – 32 participants;

Participants were provided with the information on ozone layer protection problem, measures being taken in the country, national legal support in ozone layer protection field, theoretical and practical recommendations to install methyl bromide alternatives, methods of “Deksofal” fumigant application to fight with grain pests (grain disinfection in warehouses, under tape cover, piles and tanks). Overalls and personal protective means (respirator, gas-mask, rubber gloves) and its practical application had been displayed to the participants. Seminar participants were given certificates on modern methods of grain protection from pests and application of methyl bromide alternative technologies.

During August 28-30, 2006, a national seminar “Modern methods of protection of grain and grain products” had been held at the bread production site of JSC “Buudai Karabalta” in Kara-Balta city with the participation of bread production specialists of the country, grain and grain product experts, seed inspection officers, protection and quarantine officers, representatives of the Kyrgyz State Material Reserve Agency and Agrarian Academy.

The heads of Ozone Offices of Georgia, Moldova, Armenia and Turkmenistan participated at the seminar.

The theoretical part of the seminar was conducted in Bishkek city by Dr.Zakladnoi G.A., a head of grain and grain product protection laboratory of the Russian Academy of Agricultural Sciences. The following theoretical issues were covered by Dr.Zakladnoi G.A.:

- grain mass as storage object;
- characteristics of insects united into a group as grain pest;
- types of insects, their biological characteristics and development;
- harm inflicted to grain by insects;
- infestation concept and concept of grain contamination with insects;

- aggregate density and its calculation;
- insect migration and distribution in grain mass;
- sampling techniques and detection of premises infestation;
- forecast of insect amount and grounds for grain disinfection;
- grain protection system from insects;
- pesticide classification, the character of its impact on insects;
- storage facility and site preparation;
- requirements to silo elevator tightness;
- ways of chemical disinfection of grain storage facilities and territories;
- fumigation of premises with methyl bromide, dangers while using MB;
- fumigation of premises with phosphine, phosphine-based chemicals;
- Fumigation process control, ПКЭ indicators and its calculation;
- disinfection of premises and territories with the use of liquid insecticides of contact impact;
- preparation of grain for storage: cleaning, drying, cooling;
- grain conservation with the use of liquid insecticides;
- control of grain for presence of infestation;
- ways of destruction of insects in grain;
- removal of insects by way of separation;
- thermal disinfection;
- freezing;
- ways of chemical disinsection of grain;
- grain fumigation with MB in stores and elevators;
- grain fumigation with phosphine in elevators in streams;
- grain probing in stores;
- grain disinsection and conservation in streams with the use of contact impact insecticides;
- pheromone ways of combating flour-moth (pickleworm, pyralid);
- removal of insecticide remainings from grain;
- assessment of desinsection efficiency;
- documents related to desinsection;
- rodents and ways of combating;
- grain protection from birds;
- public and personal safety during the use of pesticides;
- first signs of poisoning and rendering the first aid;
- main regulation documents and reference literature.

The practical part of the seminar was conducted in Kara-Balta city at the bread production plant of JSC «Buudai Karabalta». The national consultants had demonstrated new devices and equipment in action and had carried out practical assignments :

- phosphine fumigation of grain in streams with the use automatic dispenser;
- phosphine fumigation of grain in horizontal stores by way of probing;
- phosphine fumigation of packed products under cover;
- “Prostor” insecticide aerosol treatment of grain in streams with the use of pneumatic insecticide sprayer (PRI);
- “Prostor” insecticide aerosol treatment of mills and empty premises;
- defining grain infestation with the use of “Lozar” device;
- signaling and mass capturing of flour-moth with sticky pheromone traps «Flog»;
- express grain temperature and moisture test;
- defining of limited concentration of phosphine in the air with the help of tubes «Drager»;

- safety and protection means during the works with pesticides.

Before the seminar, during August 14-18, the national consultants had organized a work on clearance and tightening of elevators, mills, ready made product stores, grain store and grain was fumigated in streams with «Fostoksin» and “Prostor” insecticide.

After demonstration activities, mills, ready-made product store area and elevators were aerosol treated with “Prostor” insecticide.

The amount of storage pest had been calculated before and after chemical treatment of grain in elevator, grain and flour under cover. flour-beetle death – 100%, storage weevil – 94%, pyralid moths – 100%

Upon seminar completion in Kara-Balta, all participants were awarded with certificates.

The work of the seminars was highlighted in mass media.

During November 16-18, 2006, a national training seminar on “Modern methods of grain protection under conditions of collective farms and households” had been held in Aleksandrovka village at collective farm “Drujba”.

The heads and specialists of farms and collective households, seed inspection, chemicalization department and plant protection officers as well as regional government authorities..

The practical part of the seminar had been conducted in grain storage facility, with the demonstration of aerosol generators. They were used for chemical treatment of empty storage premises with insecticide “Prostor”. About 100 tones of grain under cover were treated with chemical “Fostoksin”. The operation of a”Lazar” device used for determining the amount of insects had been demonstrated, as well as operation of a moisture meter “Vais-55”, temperature meter rod “TNIT-1”. Also the correct way to prepare for fumigation of storage facilities, grain and adjacent area had been demonstrated. Special attention of the seminar participants had been drawn to technical safety while handling with poisons. 45 persons took part in the seminar.

Upon seminar completion all participants were given certificates.

During November 20-22, 2006, a seminar on ODS export/import control had been conducted for Custom officers. During the seminar the following issues were addressed:

- Ozone layer protection problem;
 - International agreements on ozone layer protection;
 - Kyrgyz Republic Country program on ODS phase-out;
 - National legislation in the field of ODS export/import licensing;
 - UNEP initiative “Green Customs”;
 - International convention synergism (Montreal Protocol, Rotterdam, Basel, Stockholm conventions);
 - The role of Custom officers and other key parties interested in the implementation of ODS export/import control;
 - Documents, forms and permissions inspection procedures;
 - ODS trade in the global and regional scale;
 - ODS determining and determining of ODS-containing equipment and products. Specific questions related to MB;
 - ODS and ODS-containing equipment illegal trade. Ways of MeBr penetration into Central Asian region;
 - Safety during transportation and storage of MeBr;
 - General discussion. Recommendation.Seminar assessment. Certificate awarding.
- 45 persons took part in the seminar.

At the invitation of Bulgarian Ministry of Ecology and Water recourse and UNEP the head of Ozone Center and ten national consultants visited Bulgarian and participated in the seminar.

As a result of taken measures, consumption of MeBr had been lowered from 14.2 tones with consideration of ODP (basel level) to 7.8 tones with consideration of ODP in 2005.

In 2007

The following work was realized in 2007:

- production and finance plans for were prepared;
- consumption of MB in 2007, with quarantine;
- documents, tools and equipment for training seminars were prepared;
- Training centers for implementation of MB alternatives were established under Osh Technological University (c/o Osh), under Kyrgyz Agrarian University (c/o Bishkek), under Bread products enterprise “Buuday-Kara-Balta” (c/o Kara-Balta).

- Methodical recommendations for combating grain pests were developed and published;
- Video “To the future without Methyl Bromide” was produced.

On January 16-17, 2007 at the Training Center of Bishkek Customs, National Training Workshop “Regulation of Export/Import of ODS” was conducted. 30 Customs officers participated at the meeting. The following issues were covered at the workshop:

- problems of the Ozone Layer;
- review of the Country Program on ODS phase-out;
- review of international and national legislation on protection of the Ozone Layer;
- UNEP initiative “Green Customs”;
- ODS trade in global scale;
- ODS illegal trade;
- Ways of MB illegal trade;
- Safety measures;
- Demonstration of equipment;
- Procedures of document checking.

A number of training seminars “Modern methods of rain protection in conditions of farms” were conducted:

- 28-29 March, in Osh region. Theoretical part in Osh Technological University, practical part in enterprise “Tameki”, c/o Uzgen.
- 15-16 May, in Bishkek. Theoretical part in Kyrgyz Agrarian University, practical part in enterprise “Buuday-Karabalta”, c/o Karabalta.
- 4-11 June, in Talas region. In enterprise “Talas-Dan-Azyk”, for Talas and Bakayata districts, and in enterprise “Nazar” for Karabura and Manas districts.
- 13-14 September, in Jalalabad region. In enterprise “Barpy”, Suzak district.
- 10-11 October, in Naryn region, Aktala district.

Number of participants:

Osh region – 60

Talas – 82

Jalalabad – 42

Aktala district – 42

Bishkek – 27

All participants received certificates of participation.

On April 5, 2007 Public Association “Ecofum” was established by initiative of the Ozone Center. Main goals of the association are:

- Participation in working out and realization of the international and national programs, recommendations and the statutory acts connected with environmental problems, introduction of new technologies of protection grain, tobacco, cotton and products of their processing, technologies and the chemical preparations necessary for pest control of industrial and food stocks from vermin;
- Organization of conferences, symposiums, seminars, scientific meetings, exhibitions and others scientific events at national and international level;
- Carrying out of scientifically-methodical researches.

Main tasks of the association:

- ☐ ☐ Demonstration and popularization of new technologies of protection of grain stocks and other agricultural crops from vermin;
- ☐ ☐ Carrying out own practical research and studies on introduction of modern methods of protection of grain and other agricultural crops from vermin;
- ☐ ☐ Rendering assistance to interested legal and physical persons in development and introduction of new technologies of protection of grain stocks and other agricultural crops from vermin;
- ☐ ☐ Implementation of new ozone-friendly preparations for protection of grain stocks and other agricultural crops against vermin;
- ☐ ☐ Introduction of new equipment and rules of its service;
- ☐ ☐ Participation in national and international actions corresponding to the purposes and problems of association;
- ☐ ☐ Sociological researches and an independent expert appraisal;
- ☐ ☐ Publishing;
- ☐ ☐ Information-educational activity;
- ☐ ☐ Cultural-educational activity.

For creation of mobile fumigation chamber, in December 2007 vehicle “KAMAZ” was purchased.

Volume of treatment, regions and administrative districts
2005

Region/Administrative District	Venue		Number of participants	Number of given certificates	Treated					Fumigation under film
	Theory	Practice			Phosphine		PROSTOR			
					t.	m ³	t.	m ³	m ²	t.
Issyk-Ata	Kant	“MIS” enterprise	34	34		240				165
Sokuluk	“Rassvet” enterprise	“Rassvet” enterprise	43	43		350				90
Tup	“Semhoz Pristavkina” enterprise	“Semhoz Pristavkina” enterprise	32	32		280				135
TOTAL			109	109	-	870				390

2006

Region/Administrative District	Venue		Number of participants	Number of given certificates	Treated					Fumigation under film
	Theory	Practice			Phosphine		PROSTOR			
					t.	m ³	t.	m ³	m ²	t.
Issyk-Kul	c/o Cholpon-Ata	c/o Balykchy	40	40		13800	-	9410	-	110
Republican	c/o Bishkek	c/o Karabalta	51	51	530		1500	172129	5220	70
Moskovsky	“Druzhba” enterprise	“Druzhba” enterprise	47	47				6660		100
Aksuu	Teplokluch	“Zarya” enterprise	46	46				5600	3172	200
Djety-Oguz	v. Kyzyl-Suu	v. Kyzyl-Suu	35	35		40		5715		160
c/o Osh	c/o Osh		45	-	-	-	-	-	-	-
c/o Tokmok	c/o Tokmok		34	-	-	-	-	-	-	-
Итого			298	219	1530	13840	1500	199505	8392	640

2007

Region/Administrative District	Venue		Number of	Number of given	Treated		Fumigation under film
	Theory	Practice			Phosphine	PROSTOR	

[illegible]

2008

Region/Administrative District	Venue		Number of participants	Number of given certificates	Treated					Fumigation under film
	Theory	Practice			Phosphine		PROSTOR			
			чел.	шт.	t.	m³	t.	m³	m²	t.
Panfilovsky	OJSC “Geroi panfilovtsy”	OJSC “Geroi panfilovtsy”	35			200		5200	950	300
Bishkek, Kara-Balta	Bishkek	Kara-Balta	22	22	1200	16200	1000	42820		
Osh, Karasuu	Osh	Karasuu	43	43	1000	14350	900	25100		100
Chuy	Tokmok	“Nurbek” enterprise	27		200	2500		2500	1000	
Ton	Bokonbaevo	“Aikol” enterprise	35			4000		3500	1800	300
Total			162	65	2400	37950	1900	79120	3750	700
Grand total			854	648	5530	61360	4250	332175	19370	3260

Effectiveness of treatment

Action	Phosphine						PROSTOR					
	% of insects died						% of insects died					
2006												
	Treated	Rate of applicat ion	stem sawflies	granary weever	snout moths	flour beetle	Treated	Rate of applicati on	flour beetle	granary weever	Europea n grain moth	snout moths
Treatment of grain in stream, Altyn Dan	1000 t	10 g/t		84		100						
Fumigation of mill, Altyn Dan	1000 m ³	5 g/m ³			100							
Treatment of grain in stream, Karabalta	500 t	10 g/t		94	100	100	1500 t	15 g/t	100			

Fumigation of flour, Karabalta	30 t	10 g/t	67	75	100	99						
Aerosol treatment of mill, Karabalta							28000 m ³	0,15 g/m ³	96	89	100	100
2007												
Treatment of grain in stream	1640 t	10 g/t	89			92	850 t	15 g/t	100	100		
Aerosol treatment of empty spaces							17500 m ³	0,35 g/m ³			100	100

2008.

At the beginning of the year there were preparatory works for training workshop “Modern methods of protection grain and products of its processing in condition of furms”.

On March 18-20, 2008, training workshop on protection grain with alternatives to Methyl Bromide was organized in Jayil district on a base of OJSC “Geroi Panfilovtsy”. Among 35 participants there were representatives of seed-growing enterprises, farms, quarantine and protection specialists.

Necessary equipment, materials and overalls were purchased for further activities after completion of the project. It is also expected to equip vehicle “KAMAZ” with fumigation chamber.

Preparatory works for publication of brochure “To the future without methyl bromide” have been started.

It is planned to organize training courses for preparation of fumigators on a base of training center of Kyrgyz Agrarian University or Ministry of Emergency Situations of the Kyrgyz Republic.

On March 19, 2008 training workshop “Methods and ways of informing public about problems of the Ozone Layer” was conducted at the conference hall of the Ministry of Emergency Situations of the Kyrgyz Republic. On April 11, 2008 the round table “Problems of storage of agricultural and industrial products” was organized for representatives of mass-media: newspapers “Moskovsky Komsomolets”, “Moya Stolitsa”, “Komsomolskaya Pravda”, “Kyrgyz Tuusu”, “Argumenty i fakty”, TV-channels “NBT” and “NTS”.

These mass-media presented information about protection of the Ozone Layer and implementation of alternatives to Methyl Bromide.

Training program of two-week course for preparation of fumigators was developed (“Protection of grain and products of its processing from vermin”).

Theoretical part will be conducted in the Kyrgyz Agrarian University during July 8-14, 2008. Practical part will be organized at the Bread Enterprise JSC “Buuday-Kara-Balta” where students will be familiarized with new technologies and equipments, chemical processing, detection of vermin, determination of concentration of phosphines.

During the period September 17-22, 2008 the following enterprises were visited with the purpose to select place for practical lessons: OJSC “Azrat-Aiyb” c/o Jalalabad; JSC “Dan Azyk” c/o Uzgen, JSC “Karasuu-Dan-Azyk”, “Maryam” Ltd., “Buudai-Nan” Ltd., “Corporation Salamat” Ltd., seed-growing enterprises “HazyI”, “Ergesh-Ata”, “Mady”, “Otuz Adyr”, Kyrgyz experimental station on cotton growing, JSC “Aktash”, JSC “Savay”, seed-growing enterprises “Yanga-Yul”, “Berlik”.

As result of the missions, in cooperation with regional administrations and owners, it was planned to conduct training of fumigators on a base of JSC “Karasuu-Dan-Azyk” and Kyrgyz experimental station on cotton growing.

During September 22-29, 2008, on a base of Osh Technological University (theoretical part) and JSC “Karasuu-Dan-Azyk”, Kyrgyz experimental station on cotton growing (practical part) training courses for fumigators from the southern regions were conducted.

Teachers and students of OshTU, private entrepreneurs and specialists from Jalalabad, Uzgen, Osh, Kyzyl-Kia, Karasuu were trained.

During practical lessons 100 MT of grain were processed with Phosphine under film, 900 MT of grain processed in stream, 16950 m³ of spaces were treated. Aerosol treatment with “Prostor” was also realized (empty warehouses – 5400 m³, empty silo towers – 8500 m³, elevator galleries – 11200 m³).

Upon end of the training courses all participants received certificates (35). After exams (testing) 19 persons received certificate of fumigator.

The courses for fumigators were presented in regional TV – “Mezon TV” and “Keremet”.

During October 23 – 25, 2008, in Chuy district, Chuy region, on a base of “Nurbek” enterprise, training workshop “Modern methods of protecting grain and products of its processing in conditions of farms” was conducted.

Specialists of seed-growing and agricultural enterprises, seed inspections and regional departments of agrarian development participated at the workshop.

Practical part was realized at grain warehouse of “Nurbek” enterprise. 27 persons participated at the workshop.

During October 29 – 31, 2008, in Ton district, Issyk-Kul region, on a base of “Aikol” seed-growing enterprise training workshop “Modern methods of protecting grain and products of its processing in conditions of farms” was conducted.

Specialists of seed-growing and agricultural enterprises, seed inspections and regional departments of agrarian development participated at the workshop. 35 persons participated at the workshop. Information about workshop was presented at district newspaper “Emgekchil”.

The project was completed; consumption of Methyl Bromide is terminated, except for quarantine and pre-shipment treatment.

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The project was completed, consumption of Methyl Bromide is terminated, except for quarantine and pre-shipment treatment.

В 2009 году проведен аудит со стороны головного офиса ПРООН по завершённому проекту по метилбромиду, в котором отмечается успех по выводу бромистого метила из использования в стране и целевое использование направленных средств.

1.4.13 Phase-out of halons

In the beginning of 2005, Kyrgyzstan had sent a report on zero consumption of halon in the amount of 0.75 metric tons for 2004, and thus fails to meet the commitments under Group A of the Montreal Protocol. During 2005, Ozone Center together with UNEP had prepared a project on bringing the country back to compliance under this ODS group and had presented it at the 47th meeting of Executive committee of the Multilateral Fund.

As a result the Executive Committee had recommended resubmitting the project proposal at the next 48th meeting, motivating it by an increase of financing of projects for countries with low level halon consumption. During 2005-2006 a preliminary information on used halon volume in Kyrgyz Republic had been collected. The results of preliminary information is as follows:

Departments	Quantity of halon on types, kg, with consideration of ODP		
	1301 [13B1]	1211[12B1]	2402[114B2]
Army	-	-	64 848
Civil aviation	-	-	7 728
Oil-gas industry	-	2 400	-
Gold-mining industry	32 000	-	-
Other	-	-	8 160
Total:	32 000	2 400	80 736

There are 115, 1 ODP tones of halons in the country. Assessment of consumption for 2004 is 2.4 ODP tones.

Based on collected information, an updated project proposal on halon phase-out in Kyrgyz Republic had been prepared. During April 3-7, 2006 at the 48th meeting of the Executive Committee of the Multilateral Fund a project proposal on halon phase-out of Kyrgyz Republic had been reviewed by UNIDO Implementing Agency.

By this time the project had been approved, personnel recruited, the equipment is being purchased and training guidance is being prepared. A preference had been given to recovery and recycling equipment for 2402 type as the most common in the country. The representatives of Ozone Center had taken part in the meeting “On Halon Management” held during June 22-23 in Prague, Czech.

During 2007, brochure “Phase-out of Halons consumption” was prepared and published. It contains information about problems of halons phase-out, main fields of their application, influence on the Ozone Layer, volumes of production worldwide, and requirements of the Montreal Protocol for their phase-out. Special attention paid to possible plan of actions for phase-out of halons in countries with small consumption, like Kyrgyzstan. Number of copies – 500.

The report on precise consumption of halons and prognosis of their consumption in the republic was prepared. The strategy of actions for termination of consumption of halons was prepared. The works on perfection of legislation and preparation to the workshop are ongoing.

During the second half of 2008, in frames of the project, equipment for recovery and recycling of halons was purchased (total sum is 26967.95 USD):

- Air compressor (0.6 m³/min. 1.25 MPa, 1 pcs.);
- Cylinders for halons (50 lt., 3 pcs.);
- Electronic scales (600 kg, 1 pcs.);
- Two-stage vacuum pump (50 lt/min., 1pcs.);
- Unit for recovery of halons 1211/1301/2402 (1 pcs.);
- Set of tools for two-stage vacuum pump and spare parts (1 pcs.);
- Engine for two-stage air pump (1pcs.);
- Spare parts for pump (1 pcs.);
- Filter for recovery unit (1 pcs.).

Publications in mass-media (more than 15, TV, radio, newspapers) were prepared.

The works on perfection of the legislation are ongoing:

- The main law, defining main principles of handling ODS, is the Law “On Protection of the Ozone Layer”, # 206, 18.12. 2006.
- The Ozone Center had prepared the Resolution of Government # 374 “On termination of use of ODS” dated 11.07.2008. This resolution introduce ban on import of halons since June 1, 2008, except special kinds of application.
- This resolution also approved Country Program on termination of use of ODS, that defines schedule of phase-out of halons.
- On April 24, 2008, the Law “On amendments to Administrative Code” was approved. It introduced Article 181-1 about responsibility for non-fulfillment of measures for phase-out of chemicals that have negative influence on environment, particularly on the Ozone Layer.
- Draft of methodology instructions for transition to alternative refrigerants, mainly directed to be used in design of new stationary fire-fighting systems, was developed. It also covers issues of recycling, environment friendly disposal and handling.

It is planned to conduct workshops in January – February 2009. At the workshops participants will be informed and trained about the following:

- Problems of the ozone layer and emissions of halons;
- Existing national legislation in field of halons use and planned measures for its perfection;
- Requirements of the Montreal Protocol for phase-out the use of halons and appropriate national actions;
- Introduction of modern standards of design, installation and maintenance of halons fire-fighting systems;
- Possible alternatives to halons in fire-fighting;
- Recovery and recycling of halons;
- Practical lessons of work with the purchased equipment.

It is expected to gather recommendations from participants of the workshops and submit them to the governmental authorities.

4. Training of gallon users

The training of gallon users was conducted within the frames of two National training seminars on introduction of alternatives to gallons in firefighting. The seminar (for northern regions of the Republic) took place on February 10-11, 2009 in Central Administrative Board of the state firefighting service under the Ministry of Emergency of the KR in Bishkek. The seminar (for southern regions of the Republic) took place on March 11-12, 2009 in a Regional state firefighting service under the Ministry of Emergency of the KR in Osh city.

Experts of the Central and Regional Administrative Boards of the state firefighting service under the Ministry of Emergency, Ministry of Defense, Civil aviation, the State Construction and Architecture Agency, "Manas-aviaservice" Ltd., Administration of the Environmental Protection and Forestry Agency and other interested persons took part in workshops.

The basic topics of the training:

- ☐ ☐ Definition of the seminar's purposes and problems according to the State program on ODS use stopping in the Kyrgyz Republic for 2008-2010;
- ☐ ☐ the Problem of preservation and restoration of Ozone layer;
- ☐ ☐ International and national legislation in the field of ozone layer protection;
- ☐ ☐ Alternatives to gallons;
- ☐ ☐ Discussion of the methodology project about transition to alternative substances;
- ☐ ☐ Safety precautions in the time of using gallons;
- ☐ ☐ Practical working methods with the equipment on a reuse of gallons;
- ☐ ☐ Discussion of conclusions and recommendations of seminar participants.

The program of seminars is in the Appendix 1.

A discussion of the project about methodological recommendations of modern methods of firefighting for firefighting systems using gallons for transition to alternative systems of firefighting purpose was also conducted on seminars. The representatives of the Architecture and Construction State Agency expressed the highest interest in realization of the methodological recommendations as well as the majority of the remarks and proposals.

There were 67 experts who took part in the seminars. The seminars' work had been reported in local mass-media including the news TV channels such as HTC (Bishkek); JITP, HTM (Osh), and on information web-site IA «Акипресс».

5. Training of customs employees

Training of customs employees was carried out at special seminars organized in association with this and TPMP project.

The following seminars were held in 2009:

№	State control of import/export of ODS seminars	Holding dates	Number of participants
1	Tokmok city	February 6-7, 2009	22
2	Kara-Balta city	March 2-3, 2009	32

Seminars' work had been reported in local mass-media. The participants were given certificates of achievement by the end of the seminars.

6. A ban for import of the equipment containing galons

The governmental order of the Kyrgyz Republic «About ODS use termination» №374 from 11.07.2008 from 1.09.2008 imposed a ban on import of gallons, except exclusive kinds of

application (civil aircraft, military technology) as well as the equipment containing and/or using gallons.

8. Informing and public involving, including information placing on sites, edition and reproduction of popular printing materials on gallons problem

9. Gallon problem introduction in academic courses in institutes of higher education.

10. Monitoring of plan of action performance and regular reporting competence

11. A ban on import of gallons

The governmental order of the Kyrgyz Republic «About ODS use termination» №374 from 11.07.2008 from 1.09.2008 a ban on import of gallons was imposed, except exclusive kinds of application (civil aviation, military technology) as well as the equipment containing and/or using gallons.

12. Acquisition equipment transfer

13. Performance evaluation

In general, «gallons consumption end in the Kyrgyz Republic» project has been successfully accomplished in strict conformity with the project task and allocated financing for it.

A creation of the bank of gallons would be optimal continuation of actions. However, there are no financial possibilities for the bank of gallons organization in Kyrgyzstan. Within the terms of the accomplished project, due to the narrowness of the allocated funds a creation of the bank of gallons was not included and a necessary for it equipment was not provided (for example, gallons leak control equipment).

It is necessary to consider an issue of additional financing of gallons consumption termination problem. Thereupon, it will be possible to solve a problem of the full-value bank of gallons organization in Kyrgyzstan. Today not used, preserved or out of order equipment with gallons is stored at users in various departments and without the organization of the full-value bank of gallons it is difficult to create an effective system for a reuse of gallons.

The issues with gallons recycling (as well as with other ODS) not suitable for a reuse should be solved out on the republican or regional scale.

1.5. Terminal CFC Phase-out Management Plan (TPMP)

Since July 1, 2007, instead of RMP (1.4.5, 1.4.6, 1.4.7, 1.4.8), all phase-out activity is realized in frames of TPMP.

1.5.1. Inter-ministerial meeting (April 19, 2007)

Inter-ministerial Commission on coordination of Country Program meeting was held at the Ministry of Emergency Situations. Participants of the meeting were members of Inter-ministerial Commission, representatives of international implementing agencies, interested ministries and departments, users of imported ODS, representatives of mass-media. Head of the Ozone Center presented Activity Report for the year 2006 and TPMP.

All the TPMP projects were reviewed and adjusted during the course of the meeting; specifications of the supplied equipment by the projects were specified and amplified.

An annual meeting of the ozone inter-agency coordinating committee took place in conference-centre of the “Korund” hotel on the 25th of April, 2008. An annual report about the activities of the ozone center for 2007, about the plans for 2008 and further perspective activities was heard. The committee approved the activities of the Ozone Center of Kyrgyzstan for 2007 on the State program realization – ODS use phase out and a work plan for 2008 about the ultimate use phase-out of HFC (TPMP) was supported.

An annual meeting of the ozone inter-agency coordinating committee took place in conference-centre of the “Korund” hotel on the 3rd of June, 2009. Ozone Center’s activities for 2008 were approved; a work plan for 2009 about the ultimate use phase-out of HFC (TPMP) was supported.

1.5.2. Training of refrigeration technicians

1.5.2.1. Servicing of mobile air conditioners

Preparatory works started in August 2007. National consultant Mr. Jumaliev went for business trip to Jalalabad and Osh to create the list of participants from the south region. At the same time, other works had been started – translation and editing of guidelines for servicing MACs; preparation the list of equipment and agenda of the workshops. In November Mr. Jumaliev went to Chui and Issyk-Kul region for creation the list of participants from northern region.

On November 5-6, 2007, the workshop “Modern methods of servicing MACs” was conducted in Bishkek for representatives of the northern regions. 71 persons participated at the workshop. Representatives of servicing companies used their equipment for demonstration of recovery, recycling and charge of MAC systems with R 134a. The workshop consisted of theoretical and practical part. Demonstration of recovery and recycling of R-12 was demonstrated with the use of RTI-770 MAC machine.

On November 8-9, 2007, similar workshop was organized in Osh Technological University, for southern region. 49 persons participated at the workshop. Equipment of training center under the University was used for workshop. During the workshop, practical lessons were conducted: diagnostics, leak detection, removal of moisture and acid, replacement of filters, etc.

Upon completion of the workshops, participants received certificates of participation.

1.5.2.2. Best practices in servicing refrigeration equipment

The main purpose of training workshops is to phase-out CFC consumption through competent approach and implementation of a number of activities, as follows:

- Raising awareness of participants of the workshop about depletion of the Ozone Layer and measures for its recovery;
- Training procedures that exclude emission of refrigerants during the service procedures;
- Use of information about technologies that avoid application of CFCs for the work and recharge of equipment;
- Transfer of existing refrigeration equipment to alternative technologies, through retrofit;
- Familiarization with concept of incentive payments for end-users;
- Training technicians servicing MACs;
- Creation of local and strategic supplies of CFC-12, for its use after stopping of import;
- Improvement of servicing practices, including recovery and recycling of refrigerants in recycling centers;
- Assistance to the country in achievement of planned level of consumption of CFC through coordinated and effective way, allowing use of existing equipment till its physical depreciation.

Methodology

Lecturers and highly skilled practitioner were invited for conduction of workshops. Three-days long workshops consisted of theoretical and practical parts, with use of modern demonstration equipment. UNEP and Ozone Center publications were used as reference materials. Special video films were demonstrated.

Expected results

Particular result of training workshops is phase-out of CFC-12 from 4.25 ODP ton in 2007 to 0 ODP ton in 2010, because of reduction of leakage of refrigerants during repair and operation.

According to estimation, annual indicators of leakage of refrigerants, for the period 2004 – 2007, decreased for 7-10%, if in 2000 – 2003 it was 27% of bank of refrigerants, now it is no more than 17-20% because of:

- Improvement of equipment, that use less amount of refrigerants in the system (modernization);
- Raising of efficiency of measures for protection from overloads (automatization) ;
- Raising of energy and refrigeration coefficient of efficiency – at the expense of new heat exchanging devices (intensification of heat exchanging processes);
- Installation of equipment with less capacity, according to the minimum of production load ;
- Reorientation of “refrigeration chain”, from supply of goods from “today-week-month” to “today-tommorow”, it can transfer main load of storage to wholesale warehouses, where ammonia systems are used;

Technicians use machines and tools on a temporary basis from PA “ECOHOLOD”, c/o Bishkek and Osh.

I. Training for Refrigeration Technicians in Good Practices

55 and 495 specialists were trained in Kyrgyzstan in frames of RMP Phase I and II accordingly. Many specialists got practical training in technical centers. But there are many technicians, working in informal sector, their training is based on “experience” or “training at work”.

Approximately 300 technicians who did not receive training under the original RMP were identified and recruited for training sessions conducted by local experts, using the training facilities of the Osh Technical University.

In 2009 131 specialists were trained.

The trainings covered a comprehensive package, including:

- Good Practices in Refrigeration Servicing;
- Recovery, Recycling and Reuse of chemicals; and
- Retrofitting of CFC-based fixed and mobile equipment.

Table of Workshops for training technicians best practice of servicing refrigeration equipment

No.	Date	Place	Number of participants
1	June 10 – 12, 2009	Bishkek	27
2	June 29 – July 2, 2009	Cholpon-Ata	18
3	July 3 – 6, 2009	Karakol	16
4	July 14 – 16, 2009	Osh	32
5	July 18 – 21, 2009	Jalalabad	27
6	July 27 – 29, 2009	v. Aleksandrovka	21

1.5.2.3. Recovery and recycling of R12, R22

The main purpose of training workshops is to phase-out CFC consumption through competent approach and implementation of a number of activities, as follows:

- Raising awareness of participants of the workshop about depletion of the Ozone Layer and measures for its recovery;
- Training procedures that exclude emission of refrigerants during the service procedures;
- Use of information about technologies that avoid application of CFCs for the work and recharge of equipment;
- Transfer of existing refrigeration equipment to alternative technologies, through retrofit;
- Familiarization with concept of incentive payments for end-users;
- Training technicians servicing MACs;
- Creation of local and strategic supplies of CFC-12, for its use after stopping of import;
- Improvement of servicing practices, including recovery and recycling of refrigerants in recycling centers;
- Assistance to the country in achievement of planned level of consumption of CFC through coordinated and effective way, allowing use of existing equipment till its physical depreciation.

Content of workshops:

- National legislation on protection of the Ozone Layer;
- Obligations under the Montreal Protocol;
- Basic principles of refrigeration, physical and thermodynamic characteristics of CFC, HFC, HCFC, HC, and natural refrigerants;
- Use of refrigerants for retrofit of commercial, industrial refrigerators and MACs;
- Practical lessons on use of machines for recovery, cleaning, recycling, charging of R-12, R-22, detection of refrigerants, and quality of oil.

National consultants were sent on official trips to verify recycling centers activities for the first 2009 semester to the following regions:

- June 19 - 22 Issyk-Kul oblast regions;
- June 23 - 28 Osh and Jalalabad oblasts regions.

15892 kg were recycled, 5748 kg refined for the whole period of work of the Ozone Center.
2734 kg were recycled, 843 kg refined in 2009.

Table of recovered and purified CFC-12 in 2009

No	Date when equipment was passed	Recipient of equipment	Quantity and type of equipment		Amount of recycled refrigerant	Including purified CFC
			Recovery machine TX 200	Hand pump for recovery		
1	2008	Professional lyceum #3	1			
2	2008	Technical University(KSTU)	1			
3	2009	Professional lyceum #94		1		
4	2009	Professional school GUIN#6		1		
5	05.06.2003	PB Sheremetiev	1		10	
6	05.06.2003	PB Sorokin	1		36	
7	05.06.2003	PB Garifulin		1	64	
8	05.06.2003	“Tehnichesky center” Ltd.	1	1	420	363
9	05.06.2003	JSC “Kyrgyztorgtehnika”	17	1	454	208
10	13.06.2003	“NIS”	1		71	
11	14.06.2003	“TSC “Ayaz” Ltd.		2	9	
12	13.06.2003	PB Kudabaev	1		141	
13	13.06.2003	PB Konnov	1		53	
14	13.06.2003	“Almas” Ltd	2		30	
15	14.06.2003	PB Mindubaev	2		212	105
16	14.06.2003	CJSC “Shoro”	1	1	21	
17	10.06.2003	PB Ahmedov (Kyzyl-Kia)		1	13	
18	10.06.2003	PB Lukyanchenko	1	1	19	
19	10.06.2003	JSC “Rembyttehnika” Jalalabad	1	2	79	
20	11.06.2003	OJSC “Oshtorgmontazh”	4	1	66	19
21	11.06.2003	JSC “Rembyttehnika” Osh		5	28	
22	01.10.2003	PB Jusupov	1		30	
23	01.10.2003	PB Batenkov	1		46	
24	08.10.2003	PB Manyurov T.	1		46	
25	08.10.2003	PB Vidiburenko	1		21	
26	08.10.2003	PB Manyurov D.		1	25	
27	08.10.2003	PB Razykov		1	8	
28	28.05.2004	PB Rahmatov		1	17	
29	24.06.2004	PB Galler		1		
30	24.06.2004	PB Djumaliev		1	31	
31	21.06.2004	“Titan-Yug Service” Ltd.		1	25	

32	20.10.2004	RPA "Ecoholod"		3	117	25
33	20.10.2004	PB Gorin	1		78	
34	20.10.2004	PB Jarabaev		1	54	
35	28.05.2005	"SBT" Ltd.		1	29	
36	24.12.2005	PB Orozaliev	1		390	91
37	24.12.2005	PB Abdybek u.	1		84	32
38	25.12.2005	PB Aitikeev		1	7	
Total:			43	30	2734	843

1.5.2.4. Use of blends for direct replacement of R-12 (drop-in) in refrigeration equipment

The main purpose of these workshops is to phase-out of CFC in sector of refrigeration equipment, through skilful servicing, recovery, recycling of R-12, R-22, use of blends as "Astron" and R-409a for direct replacement of R-12 (drop-in).

At the workshops special accent was made on questions of drop-in and retrofit of commercial and industrial refrigeration machines. During practical lessons, participants used equipment for recovery, cleaning, detection of refrigerant, quality of oil and direct replacement of R-12 to such blends as "Astron" and R-409a.

1.5.2.5. Natural refrigerants

The main purpose of these workshops is to phase-out of CFC in sector of refrigeration equipment, through skilful servicing, recovery, recycling of R-12, R-22, and use of natural refrigerants on a base of hydrocarbons - R-600, R-290, CO₂, R-744 and NH₃.

During practical lessons, participants used equipment for recovery, cleaning, charging the system with R-600a, detection of refrigerant, quality of oil.

For assistance in theoretical and practical parts of workshops the following persons were attracted: Dean of Moscow State University of Applied Biotechnology, professor, academician of IAR, Mr. B.S. Babakin., vice-rector on scientific work of Osh Technological University named after M.M. Adyshev, Mr. B.A. Toktoraliev, head of chair "Machines and food processing equipment" of Kyrgyz State Technical University named after I. Razzakov, Mr. B. K. Djunusov, and other specialists.

Information about workshops was presented in mass-media.
A table of seminars on refrigerating equipment and air conditioning technicians training.

The participants of the seminars were merited with certificates of achievement upon the completion of seminars and trainings.

№	Workshop	Date	Place	No. of participants
Refrigeration equipment sector				
1	Servicing MACs	5-6.11.2007	Bishkek, Hotel "Dostuk"	71
2		8-9.11.2007	Osh, OshTU	49
3	Best practice of servicing refrigeration equipment	24-26.12.2007	Osh, OshTU	47
4		15-17.01.2008	Bishkek, Hotel "Dostuk"	63

5		11-13.03.2008	Bishkek, VS #94	29
6		14-16.05.2008	Jalalabad, VS #1	35
7		26-28.03.2008	Karabalta	33
8		13-16.10.2008	Tokmok	32
9		3-7.11.2008	Osh	29
10		10-12.11.2008	Bishkek, Hotel “Dostuk”	36
11		26-28.11.2008	v. Aleksandrovka	34
		23-26.12	Cholpon-Ata	20
13		2-5.9.2009	Karabalta	25
14		8-10.9.2009	Cholpon-Ata	25
15		14-17.9.2009	Karakol	25
16		20.-22.9.2009	Osh	25
17		29.9- 2.10.2009	Jalalabad	27
12	Integrated preparation of specialists of refrigeration sector	28-31.07.2008	Cholpon-Ata	28
13	Recovery and recycling of refrigerants R12 and R22, during servicing of refrigeration equipment	9-11.10.2008	Bishkek, VS #3	30
14		20-22.10.2008	Osh	27
15		23-25.10.2008	Jalalabad	26
16		28.10- 31.10.2008	Cholpon-Ata	25
17	Application of blends for direct replacement of R12 (drop-in) in refrigeration equipment	12-15.11.2008	v. Aleksandrovka	24
18		17-19.11.2008	Osh	26
19		20-22.11.2008	Jalalabad	23
20	Natural refrigerants	3-5.12.2008	Kant	30
21		11-13.12.2008	Osh	22
22		16-18.12.2008	Jalalabad	20

Upon completion of workshops all participants received certificates of participation.

Professional training and certification of refrigeration specialists

For training classes in the system of vocational training, national consultants developed scheme of demonstration stand, necessary for practical lessons. “Buudan-Holod-Service” Company produced four stands and they were passed to Vocational School No. 1, c/o Jalalabad, Vocational Schools No. 3, No. 93, c/o Bishkek. Separately, special stand of refrigeration machine for students studying “Refrigeration machines and systems of air conditioning” at Kyrgyz State Technical University was produced. Also 5 sets of tools and supplies were purchased for abovementioned educational institutions.

On a base of these educational institutions training classes were organized for preparation of regional specialists in modern practice of servicing refrigeration equipment. On June 3, 2009 the Ozone Center passed to Vocational School No. 93 the following equipment and tools.

43 beginner refrigeration technicians were trained at Vocational School No. 3, according to study program developed by RPA “Ecoholod” in cooperation with the State Agency of Vocational Training. The students successfully passed qualification exams and received state diplomas and certificates.

According to the agreement between the Ozone Center, RPA “Ecoholod” and MSU ABT (c/o Moscow), 9 persons from Kyrgyzstan were selected and admitted to the Moscow State University of Applied Biotechnology, faculty of refrigeration equipment.

9 refrigeration specialists from “Kyrgyztelecom” were trained in Intersectoral Training Center of Gosgortekhnadzor (40-hours training program). The students successfully passed qualification exams.

In 2009 the Ozone Center passed to Vocational Schools No. 1 (Jalalabad), No. 3, No. 93, No. 94 (Bishkek) the following equipment and tools.

No.	Item	Quantity
1	Recovery machine (including 1 cylinder)	1
2	Cylinder for recovery with two connection pipes and overfilling protection device (30 lb.)	2
3	Service kit for recovery equipment: Two-valve collector, charging hoses (5 pieces), electronic scales for refrigerants, electronic halogen leak detector, thermometer (-10°C - 100°C), humidity indicator, pincers (2 pieces), device for replacement of charging valve, adapters (2 pieces)	1
4	Hand pump for recovery of refrigerants	1
5	Cylinder for refrigerants	3
6	Set of rolling for copper pipes	1
7	Pipe cutter for copper pipes	1
8	Solder for copper pipes	1
9	Soldering flux	1
10	Vacuum pump	1
11	Oxygen-propane torch	1
12	Tube bender	1
13	Charging pipes	10
14	Copper pipe d6	10
15	Infrared thermometer	1
16	Training stand (refrigeration machine)	1

Supply of demonstration equipment

At the present time the list of auxiliary assembly equipment for training centers was defined, tender was conducted and delivery has started.

No.	Item	Quantity
1	Single-phase portable welding device	2
2	Electric welding device, semiautomatic, working on CO2	2
3	Powerful metal cutting tool	2
4	Set of cutoff wheels	2
5	Small metal cutting tool	2
6	Set of cutoff wheels for small metal cutting tool	2

7	Electric drill	2
8	Set of drills (d6-d18)	2
9	Drill-screwdriver	2
10	Set of drills (d1-d12)	2
11	Riveting tongs	2
12	Set of clinchers	2
13	Perforator	2
14	Set of drills SDS-max DBOR	2
15	Light perforator	2
16	Set of drills SDS-Plus DBOR	2
17	Groove cutting tool	2
18	Set of diamond wheels	2
19	Universal set of bench tools	2
20	Universal set of tools for electrician (88 tools)	2
21	Industrial vacuum cleaner	2

1.5.3. Training of Customs officers

On July 10-12, 2007, three-day long National seminar on regulation of ODS import and export was conducted for Customs officers from the northern region.

Similar workshop for Customs officers from the southern region (Osh, Batken, Jalalabad) was conducted on December 28-30, 2007, in Training Center of OshTU, c/o Osh.

The workshop consisted of theoretical part and practical lessons.

Participants were divided into three groups: perfection of legislation, improvement of licensing system, handling of confiscated ODS. .

Experience of China in combating illegal trade, activity of RILO-Moscow and UNEP Green Customs Initiative were presented at the workshop.

№	Workshop on regulation of export/import of ODS	Date	Number of participants
1	Bishkek (northern region)	July 10-12, 2007	50
2	Osh (southern region)	December 28-30, 2007	30

During 2008 realization of workshops for Customs officers were continued.

№	Workshop	Date	Place	Number of participants
1	Regulation of export/import of ODS	4-6.08.2008	c/o Balykchi, Issyk-Kul region	19
2		11-13.08.2008	c/o Talas, Talas region	17
3		21-23.08.2008	c/o Naryn, Naryn region	21

After conduction of two main workshops in the north and south of the republic, taking into consideration the small number of participated customs officers from the regions, the Ozone Center had made a decision to conduct training workshops on-site. Participants of main workshops were attracted to work of these workshops. The agenda was specially developed, taking into consideration practical direction.

Table of workshops for training customs officers

No.	Name of event	Date	Place	Number of participants
1	Regulation of export/import of ODS	February 6-8, 2009	Eastern part of Chui region, Tokmok Customs	22
2		March 2-4, 2009	Western part of Chui region , Karabalta Customs	32
3		June 15-19, 2009	Osh Customs	36
4		July 13-17, 2009	Naryn Customs	18
5	October 6 – 10, 2009.	Jalalabad	23	

After completion of training, all participants received the training certificates.

Specialists of the Ozone Center, with the support of UNEP, had developed software for bodies involved in issuance of licenses and realization of the control over import/export of ODS. For implementation of the electronic licensing system two sets of equipment were purchased and passed to the Ministry of Economic Development and Trade and to the State Customs Committee; responsible specialists were trained.

Certification of refrigeration specialists

For the purpose of training specialists for refrigeration sector and compliance with the Montreal Protocol, on July 28-31, 2008 the workshop “Integrated preparation of specialists of refrigeration sector” was conducted in Cholponata. Representatives of State agency on vocational training, administration of education institutions, teachers participated at the workshop. Mr. Y. Aisabaev, representative of UNEP DTIE also participated at the workshop.

As a result of the workshop, participants adopted recommendations:

1. To develop training curriculum for refrigeration technicians and sales clerks. To introduce two-level special education system.
2. To establish distance education of refrigeration engineers on a base of KSTU named after Razzakov
3. For the implementation of the Resolution of Government # 374, dated July 11, 2008, to prepare the letter to the Ministry of Education and Science regarding budget places in KSTU and vocational schools.
4. To support relations with MSU AB, IAR, leading companies and profile NGOs for teachers exchange programs.

5. To appeal to the Government, International organizations, business and industrial enterprises for support in creation of material and technical basis of appropriate educational institutions.

6. On a base of Item 8 of the Resolution of Government # 374 “On termination of use of ODS”, it was recommended to the working group, that will develop implementing mechanism, to:

- organize training in Gosgortekhnadzor under MES;
- develop two training programs for different level of specialists (engineers and technicians), with certification about permission to the work with ozone-depleting and alternative refrigerants.

For the lessons in vocational schools, national consultants had designed diagram of demonstration stand, necessary for practical lessons. Company “Buudan-Holod-Service” produced 3 stands for Vocational School #1, c/o Jalalabad, Vocational Schools #3 and #94, c/o Bishkek. Special stand was produced for Kyrgyz State Technical University named after Razzakov. Also, 4 sets of tools were purchased for above mentioned institutions.

On a base of these educational institutions training classes were organized for preparation of regional personnel. These classes are provided with tools and equipment given by the Ozone Center.

List of transferred equipment:

№	Equipment	Quantity
1	Recovery unit (including 1 cylinder)	1
2	Cylinder for recovery with two adapters (30 lb.)	2
3	Service kit for recovery: two-valve manometer manifold; recharging hoses; electronic scales; electronic leak detector; thermometer; moisture indicator; piercing clamps, adapters.	1
4	Hand pump for recovery of refrigerants	1
5	Vessel for refrigerants	3
6	Set of tube expanders	1
7	Pipe cutter	1
8	Solder	1
9	Flux	1
10	Vacuum pump	1
11	Oxygen-propane torch	1
12	Pipe bender	1
13	Carging pipe	10
14	Copper pipe d6	10
15	Infrared thermometer	1
16	Training stand (refrigeration machine)	1

Specialists of the Ozone Center and Training Center of Gosgortekhnadzor of MES have prepared draft of Regulations on state certification of specialists, working with CFCs, natural refrigerants and pesticides, alternative to Methyl Bromide. At the present time the draft is submitted for endorsement to interested departments.

1.5.4. Phase-out of CFC-based MDIs

On July 24, 2007, presentation of MDI project was conducted at the Conference Hall of the Ministry of Emergency Situations. Pulmonologists, representatives of public associations of patients and lecturers of medicine institutions were invited to the presentation.

Phase-out of CFC-based MDIs, preparation of National strategy of transition to alternatives, and questions of information exchanges were discussed during the meeting. The meeting was for raising awareness of medical personnel about problems of the Ozone Layer and negative influence of higher UV radiation. Two national consultants were hired for the project implementation. They realized review of MDI consumption, including number of patients with BA, suppliers of MDIs and kinds of imported MDIs.

In April 2008 two brochures “Breath better, save the planet” were prepared by national consultant for physicians and patients.

Based on the results of preliminary analysis, a draft of Strategy of transition to alternative ozone-friendly MDIs in Kyrgyzstan was developed. The main provisions of transition strategies were discussed at the round table “Inhalation therapy of chronic respiratory disease and the protection of the ozone layer”, on May 13, 2008, organized by NCCT named after Academician M. Mirrahimov and Ozone Center, with supported of the Ministry of Health. Representatives from all interested health care organizations and agencies, and mass-media participated at the meeting. Information was provided about the market of CFC-based MDIs, as well as the problems of availability of alternative CFC-free inhalators for bronchial asthma (BA) and chronic obstructive pulmonary disease (COPD). Based on the recommendation of the Round Table, the Ministry of Health issued Order, dated May 20, 2008 that had established a working group for improving the Strategy and begin implementation of its educational component. The transition Strategy was also discussed in the context of national training seminars with physicians, pharmacists, representatives of FOMS, DMP, and MT in all regions of Kyrgyzstan, as well as during meetings with leading experts, owners of pharmaceutical companies-suppliers of MDIs, representatives of NGOs (Osh, 17.10.2008, Bishkek 27.10.08).

At the present time the Strategy is amended. It is planned to organize its presentation and discussion at the board of the Ministry of Health.

A transfer strategy to the ozone safe MDI was approved by the order of the Public Health Ministry from April 27, 2009

The following methodological recommendations were developed and issued for the purpose of doctors', sick's, and locals' awareness increase:

“Medical Dosing Inhalators and ozone layer protection” – for doctors,

“Breath better saving the planet” – for patients in Russian and Kyrgyz languages,

Brochures on ozone safe MDI were developed and distributed during the seminars.

National training workshops

In frames of the project, national training workshops on “Inhalation Therapy of COPD and Transition to Alternative CFC-free MDIs” were conducted in all regions of the republic. The following categories participated at the workshops: physicians, representatives of FOMS, administration of hospitals, centers of family medicine. Special training workshop was organized for BA patients at mountain hospital at Too-Ashuu pass – “Treatment of BA in mountainous climate – as alternative to CFC-based MDIs”. There were workshops for pharmacists and representatives of pharmaceutical companies – suppliers of MDIs. The questions of protection of the Ozone Layer and transition to new inhalation remedies were discussed at the workshops.

Training workshops

№	Workshop “Inhalation therapy of chronic respiratory diseases and protection of the Ozone Layer”	Date	Number of participants
1	Bishkek (project presentation)	July 24, 2007	17
2	Bishkek (round table)	May 13, 2008	32
3	Bishkek, Central Ambulance Station	May 27, 2008	43
4	Osh, regional hospital	June 11, 2008	49
5	Jalalabad, Center of Family Medicine	June 12, 2008	40
6	Too-Ashuu pass, “Treatment of BA in mountainous climate – as alternative to CFC-based MDIs”	July 18-19, 2008	52
7	Karakol, Center of Family Medicine	August 7-9, 2008	28
8	Naryn, Center of Family Medicine	August 14-16, 2008	34
9	Talas, Center of Family Medicine	August 20-22, 2008	44
10	Osh, Center of Family Medicine	October 16-18, 2008	38
11	Bishkek, Department of Pharmacy Supply	November 10, 2008	34
11	Osh city, regional hospital, educational seminar “New inhalation technologies of chronic respiratory diseases treatment and ozone layer protection”	June 22 – 23, 2009	78
12	Naryn, regional hospital, educational seminar “New inhalation technologies of chronic respiratory diseases treatment and ozone layer protection”	July 16 – 17, 2009	32
13	Issyk-Kul region, “New inhalation technologies of chronic respiratory diseases treatment and ozone layer protection” seminar	October 5 – 6, 2009	35
14	Talas, “New inhalation technologies of chronic respiratory diseases treatment and ozone layer protection” seminar	December 1 – 2, 2009	38

Upon completion of workshops, participants received certificates.

Raising awareness of physicians, patients and population

For the purpose of raising awareness of physicians, patients and population about ozone-depleting and ozone-friendly MDIs, and about harmful influence of UV radiation, number of articles and broadcasts was organized in mass-media. (GTRK, 5th channel, NTS, ElTR, Piramida). Educational video film about ozone-depleting and ozone-friendly MDIs was produced.

Strengthening potential

Main CFC-free MDIs are included into the list of essential medicines in Kyrgyzstan, and into clinical protocols, manuals on diagnostics and treatment of respiratory diseases.

There was a work done, on definition of groups of patients who are the main consumers of CFC-based MDIs, because of their low price. About 10 000 BA patients are included into the program of state guarantees. According to some estimations, about 5 000 patients belong to the most

socially vulnerable group (with very low income). That is why it is necessary to examine possibility of creation of stockpile of chipper CFC-based MDIs for transition period, and use of alternative therapy methods.

The local tender announcement about the TPMP project equipment supply (except MDI) was published in “Vecherniy Bishkek” newspaper on the 9th of October, 2009.

The list of equipment for refrigerant machines service TPMP

LOT #1		
#	Name	Quantity
1	Specialized chromatograph for analysis of refrigerants	1
LOT #2		
#	Name	Quantity
1	Professional software for design and projecting of refrigeration systems (updated by 2009)	
LOT #3		
#	Name	Quantity
1	Automated recovery and recycling station for refrigerants: R410A, R22, R134a, R407C, R404A, R507A, with electronic scales up to 35 kg.	2
2	Portable device for regeneration of refrigerants: R410A, R22, R134a, R407C, R404A, R507A, with oilless compressor, and oil separator	2
3	Nitrogen kit. In case with cylinder (up to 1000 g.). For pressure test of the system and flushing of internal systems with nitrogen	2
4	Special kit for installation of air-conditioners and refrigeration systems, consisting of devices and tools (more than 10 items).	2
5	Electronic leak detector (3 g/a) for CFC, HFC and HCFC refrigerants, with flexible probe (more than 35 mm.)	2
6	Tee extractor for manual execution of branches or flanges on rigid and annealed copper tubes (3/8 – 2.1/8”)	2
7	Set of extraction caps for Tee extractor (6.)	2
8	Flaring and swaging tool for copper tubes 1/8” – 3/4”	2
9	Bending kit for tube O.D. 1/4” – 7/8”	2
10	Portable soldering unit for soldering iron, steel, tin, and nonferrous metals with brazing alloy	2
11	Propane charging adapter, for propane cylinders for Portable soldering unit (10.)	2
12	Oxygen charging adapter, for oxygen cylinders for Portable soldering unit (10.)	2
13	Portable electronic leak detector for all flammable gases	2
14	Portable double-stage vacuum pump with connections tubes 1/4",1/2" and 3/8".	2
15	Portable electronic sound level meter, with digital display, resolving ability – 0.1 dB, 6 measuring ranges (30 – 130 dB)	2
16	Electronic Anemometer Range: 0 – 45 m/second	2
17	Small multi-test-instrument for humidity, air-speed, light intensity and temperature.	2
18	Gas analyzer for detecting composition of blend refrigerants	2

19	Pipe-slice Tube Cutter, for copper tube cutting (1/2")	2
20	Special refrigeration tool set In case, for installation of refrigeration systems, more than 80 items	2
21	Capillary check-capillary-tube cleaning device	2

1.6. HCFC Activities

2009

Within the UNDP KYR/PHA/55/PRP/20 project the document describing the measures and budget for preparing the management plan of phasing out HCFC (HPMP) for Kyrgyz Republic is worked out. Proposed measures:

a) take into account the national characteristics and priorities, national politics, development strategy and endorsed with Ozone center of the State agency on environmental protection and forestry under the Government of Kyrgyz Republic;

b) facilitate the use of proposed measures to the first phase of HPMP implementation as soon as it will be approved;

c) use the experience adopted while implementing measures, provided in TPMP and take all advantages of opportunity of integration in existing infrastructure;

d) considered in its dynamic development with the aim of maximum openness for possible corrections and adaptation as necessary as the reaction to situation change.

Within the project's framework the HCFC consumption survey is carried out in the republic and together with the international consultant of UNDP Rick Cooke the draft project proposal is prepared on management plan on phasing out the HCFC consumption (HPMP) that will be worked out during 2010.

- contact meeting of the countries Armenia, Georgia, Kyrgyzstan, Hungary, Turkmenistan took place in Bishkek city, Kyrgyzstan on 24-27 August 2009. The assistants of National Ozone units, national experts of the Refrigeration associations of the countries Armenia, Hungary, Georgia, Kyrgyzstan, Moldova, Turkmenistan, Russian Federation, representatives of the international executive agencies and international consultants (UNEP, UNDP, UNIDO) took part in this meeting. The participants of the meeting exchanged experience of activities on phasing out CFC and other ODS.

1.6 Organization and monitoring of training sessions

Please refer to item 1.4.7.

1.7 Assistance to law-makers on ozone issues

Please refer to items 1.4.3, 1.4.4.

1.8 Implementation of RMP

Please refer to items 1.4.3 – 1.4.8.

1.9 Communication between Government and international organizations

Session meetings are conducted on regular basis with the Interdepartmental Governmental Ozone Committee for the purpose of work coordination on implementation of the State program on discontinuance of ODS application.

In September 2005, the Office of Public Prosecutor of Kyrgyz Republic had carried out an inspection of the Ozone Center activities and other projects in order to control the target-oriented spending of international organization funds. After examination no remarks had been made.

On September 2005, an ad hoc office of Public Prosecutor of Kyrgyz Republic conducted a check-up of the implementation process of the State program on discontinuance of ODS application by Ministries and Agencies of the country. The check-up results had significantly helped the Ozone Center in coordinating the activities of the key participants of the State program.

The Ozone Center had established and supports ties with the following organizations:

- Ozone Secretariat;
- UNON, Nairobi;
- UNEP DTIE, Paris;
- UNOPS-New-York;
- Local UNDP Office;
- UNIDO.

Ozone Center carries out its activities within the frames of UNEP and the Ministry of Emergency Situations of Kyrgyz Republic, as well as the State Agency on Environment Protection and Forestry under the Government of Kyrgyz Republic (in accordance with restructured Government). Ozone Center reports on its activities to the Ministry of Emergency Situations on quarterly basis, to the Government of Kyrgyz Republic on annual basis and to the Ozone Secretariat each 5-6 months. The Ministry of Emergency Situations of Kyrgyz Republic coordinates the activity of Ozone Center.

Within the frames of the Country program implementation on ODS phase-out in Kyrgyz Republic Ozone Center actively cooperates with the members of interdepartmental steering committee on Ozone. Good ties with the representatives of Ministry of Industry, Trade and Tourism, the State Custom inspection under the Government of Kyrgyz Republic.

Besides it, Ozone Center having conducted a research of the ODS market in the country, is closely cooperating with the private entities, which have relation to ODS production and provision of ODS-related services, educational institutes, preparing cadre for refrigerant industry.

1.10 Information exchange

Contacts were established with similar projects offices in CIS countries:

- Uzbekistan: Main Division of Atmosphere Protection; The Committee for Nature Protection; Head of Division: Ms. Dotzenko N. – tel: 99871 1394823/1449116, Email: ozon@tkt.uz;
- Kazakhstan: Climate Change Coordination Center; Ms. V. Kryukova – tel: 3172 117170, Email: valentine@climate.kz;
- Armenia: Atmosphere and Soil protection division of the Ministry of Environment protection, Head of division, Mr. Asia Muradian, tel: (+374 10) 541182, Email: asozon@nature.am;
- Azerbaijan: Ozone and Climate Change Center of the Ministry of Ecology and Natural Resources, Head of Center: Mr. Maharram Mehtiev, tel: (+994)124388513, Email: aliyev@iglim.baku.az ;
- Byelorussia: the Ministry of Natural Resources and Environment Protection, Deputy Minister: Mr. ApatskiA., tel: (+375 17)2006691, Email: miproos@mail.belpak.by;
- Georgia: National Ozone Center: Head of office - Mr. Mikheil Tushishvili – tel/fax: (995 32) 333952, email: airdept@caucasus.net;

- Moldova: National Ozone Center; : Head of office - Mr. Amnatoly Tarita – tel: (+373 22) 226844, Email: environment@ozone.mldnet.com ;
- Tajikistan: National Ozone Center: : Head of office - Mr. Abdugarim Kurbanov – tel: (+992 372) 341204, Email: abdu_karim@rambler.ru ;
- Turkmenistan: National Ozone Center; : Head of office – Mr.Verveda V., tel: (+993 12) 357091, Email: vverveda@jonline.tm

For the purposes of strengthening of the national Ozone Offices capacities, the meetings of Regional Network of Art. 5 Countries of Eastern Europe and Central Asia are held regularly.

Representatives of the Ozone centre of Kyrgyzstan participated at:

- initial meeting of ECA network, October 9, 2003 Ohrid (Macedonia);
- ECA network meetings on Halons, November, 2004, Belgrade (Serbia);
- Contact group meeting Armenia-Georgia-Kyrgyzstan-UNEP-UNDP, Yerevan, Armenia;
- Tripartite meeting of representatives of Ozone offices and Customs services Kazakhstan-China-Kyrgyzstan-UNEP concerning illegal trade of ODS in the region, August 25-27, 2005, Cholpon-Ata, Kyrgyzstan;
- Contact group meeting Georgia-Moldova-Armenia-Turkmenistan, August 28-30, 2006, Bishkek, Kyrgyzstan;
- Annual ECA network meeting, February 26 – March 2, 2007, Ashgabat, Turkmenistan;
- International conference «Technologies of cooling on ammonia today and tomorrow», April, 19 - 21, 2007, Ohrid, Macedonia;
- Contact group meeting devoted to performance of TPMP, Armenia-Georgia-Kyrgyzstan-Moldova-Turkmenistan-UNIDO-UNDP-UNEP, June 27-28, 2007, Chisinau, Moldova;
- ECA network meeting on alternatives to MB, August 22-24, 2007, Ashgabat, Turkmenistan;
- 19th Meeting of the Parties to the Montreal Protocol, September 17-21, 2007, Montreal, Canada;
- 6th session RILO-Moscow-UNEP-NOUs representatives (Armenia, Kyrgyzstan, Turkmenistan), September 19-20, 2007, Yerevan, Armenia;
- ECA network meeting devoted to the 20th Anniversary of the Montreal Protocol, October, 10-12, 2007, Belgrade, Serbia.
- meeting of ECA Network, Albania, Tirana, March 25-28, 2008, devoted to:
 - (1) development of strategy of technology transfer in the field of MDIs, for countries that do not produce them;
 - (2) useful experience on development strategy for termination of HCFC use and criteria of selecting alternatives to HCFC;
 - (3) review of actions on licensing system for ODS import/export, concerning HCFC;
 - (4) status of ratification and reporting;
 - (5) program of the network for 2008/2009.
- meeting on strengthening law enforcement for prevention of illegal trade of ODS in Asia-Pacific region, Bangkok, Thailand, September 24-26, 2008.
- assistance to NOU of Armenia, in frames of the program “Country to country”, on implementation of MDIs, October 22-24, 2008.

- 20th MOP of the Montreal Protocol, Doha, Qatar, November 16-21, 2008.
- contact group meeting on TPMP implementation, Moldova, Chisinau, December 2-5, 2008.
- meeting of Ozone units and customs on the issue of preventing illegal trade in Central Asian region, Urumchi, China, 26-30 June 2009.
- conference on improvement of legislation, connected with HCFC phase out, Ashhabad, Turkmenistan, march, 2009
- contact meeting of the representatives of Armenia, Georgia, Kyrgyzstan, Moldova, Turkmenistan, UNIDO, UNDP, UNEP on certification of specialists within the TPMP framework and preparation of the projects on HPMP, 24-28 August, Bishkek, Kyrgyzstan
- Conference on strengthening the law enforcement for preventing the illegal trade of ODS in countries ECA and initiative of UNEP “Green customs”, Budapest, Hungary, 12-16 October 2009

1.11 Main problems and planned/implemented actions

During 2005 there were some problems in implementation Methyl Bromide project. They were caused by delay in purchase of necessary equipment through local UNDP office. Also UNDP CO caused delay in payment to the team working on normative legal acts in fumigation. The Ozone Center requested MPU UNDP New-York about necessity of changing implementing agency from UNDP CO to UNOPS. During the visit of representative of UNEP Mr. Yerzhan Aisabaev and representative of UNDP Mr. Jacque Van Engel, in March 2006, the ways for improvement of the situation were defined.

1.12 The need for Country Program Adjustments

Country Program on ODS phase-out with extended period till 2010 was prepared and approved (Resolution of Government # 374, dated 11.07.2008).

Mars Amanaliev,

Head of the Ozone Center