

Republic of Belarus
Ozone Depleting Substances Phaseout Project

Project Document
April 1997



THE WORLD BANK



Republic of Belarus
Ozone Depleting Substances Phaseout Project

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April 1997

Natural Resources Management Division
Country Department IV
Europe and Central Asia Region

CURRENCY EQUIVALENTS

US\$ 1.00 = 0.72 Special Drawing Rights (SDR)
(February 25, 1997)

UNITS AND MEASURES

Ton = Metric Ton = 1000kg

ACRONYMS AND ABBREVIATIONS

CFC	Chlorofluorocarbons
CTC	Carbon tetrachloride
ECA	Europe and Central Asia Region
FA	Financial Agent
FSU	Former Soviet Union
GEF	Global Environment Facility
GET	Global Environment Trust Fund
HCFC	Hydrochlorofluorocarbons
ICB	International Competitive Bidding
IS	International Shopping
LIB	Limited International Bidding
MFMP	Multilateral Fund of the Montreal Protocol
MNREP	Ministry of Natural Resources and Environmental Protection
NGOs	Non-Governmental Organizations
NS	National Shopping
ODS	Ozone Depleting Substances
OECD	Organization for Economic Cooperation and Development
OORG	Ozone Operations Resource Group
PPA	Project Preparation Advance
SA	Special Account
SDR	Special Drawing Rights
TCA	Methyl chloroform
VAT	Value Added Tax

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**REPUBLIC OF BELARUS
GLOBAL ENVIRONMENTAL FACILITY OZONE DEPLETING SUBSTANCES
PHASEOUT PROJECT**

GRANT AND PROJECT SUMMARY

GRANTEE: Republic of Belarus

BENEFICIARY: Ministry of Natural Resources and Environmental Protection (MNREP) and enterprises using Ozone Depleting Substances (ODS)

AMOUNT: US \$6.9 Million equivalent

TERMS: Grant

PROJECT OBJECTIVES: The project's main objective is to assist Belarus with the rapid phaseout of ODS consumption in a manner consistent with international efforts and within internationally agreed timeframes. Assistance to high consumption enterprises in Belarus would enable them to make the transition to non-ODS materials before supplies diminish. The project would also provide needed technical assistance and institutional strengthening to an Ozone Office in the Ministry of Natural Resources and Environmental Protection.

FINANCING PLAN:

	<u>US \$ million</u>
GEF Grant	6.9
Equity/Commercial Loans	8.8
<u>Total</u>	<u>15.7</u>

ECONOMIC RATE
OF RETURN:

Not applicable

PEER REVIEW:

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GEF OORG
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PART I: Project Summary

REPUBLIC OF BELARUS

GLOBAL ENVIRONMENT FACILITY OZONE DEPLETING SUBSTANCES PHASEOUT PROJECT

I. BACKGROUND

1. General recognition of upper atmosphere ozone depletion has led to a substantial international effort to phaseout Ozone Depleting Substances (ODS). The ozone layer forms a thin shield in the stratosphere protecting biological systems from the sun's harmful rays. Ozone layer thinning can cause impacts such as increased skin cancer, eye cataracts, decreased plant productivity, and deterioration of the marine food chain. In the mid-1980's it was found that chlorofluorocarbons (CFCs) and other chemicals used in refrigeration, foams, aerosol sprays, fire protection, and solvent cleaning are destroying the ozone layer. ODS includes CFCs, halons, several halogenated solvents, the agricultural fumigant methyl bromide, and a class of transitional chemicals known as hydrochlorofluorocarbons (HCFCs).

2. International efforts to phase out ODS consumption are based on the 1987 Montreal Protocol, ratified by all developed and most developing countries. Belarus ratified the Montreal Protocol in October 1988, as a part of the Former Soviet Union (FSU). Based on its ratification status as a developed country under the Montreal Protocol, Belarus' obligations for ODS phaseout are in accordance with the developed country phaseout schedule. Belarus is also expected to assume obligations to contribute to the Multilateral Fund of the Montreal Protocol (MFMP). Since the 1987 Montreal Protocol, it has been further recognized that ozone depletion is occurring more rapidly than first anticipated. This has led to two protocol amendments which added materials and accelerated phaseout schedules. The first, in June, 1990 (London Amendment) added methyl chloroform (TCA) and carbon tetrachloride (CTC), as well as tightening the phaseout schedule. The Copenhagen Amendment, in November, 1992, added HCFCs and methyl bromide as regulated substances, as well as further accelerating phaseout. Belarus ratified the London Amendment in March, 1996, but has not ratified the Copenhagen Amendment. Due to the current economic situation, Belarus has not been able to meet the most accelerated phaseout dates under the Copenhagen Amendment. However, with the financial assistance of the Global Environment Facility (GEF), it would have the necessary resources to target phaseout under the London Amendment schedule (January, 2000).

3. No ODS material is produced in Belarus. It is dependent on supplies from major producers in Russia, currently scheduled to discontinue production by year 2000, under the terms of Russia's Phaseout Program as accepted by the Parties to the Montreal Protocol. GEF assistance to ODS-consuming enterprises in Belarus would allow them to make the transition to non-ODS materials in a gradual, planned manner and avoid a later crisis when supplies are cut off. Early reduction of ODS consumption would also reduce demand for ODS materials from black market suppliers. In 1994, Belarus consumed 1,043 tons of ODS, as compared with 2,773 tons in 1986. Earlier reductions during this period can be attributed to the conversion of aerosol manufacturers to hydrocarbon propellants, while more recent declines reflect difficult economic conditions and limited phaseout investments in the refrigeration sector. The refrigeration sector remains the dominant consumer of ODS, accounting for

approximately 80% of use. The solvent sector accounts for 13% of consumption, while fire protection accounts for 2%. Residual aerosol sector use, largely for medical applications, accounts for the remainder. Fifty four enterprises, service organizations, and agencies spanning all four sectors have been identified as ODS consumers in Belarus. Six consumers, dominant in their respective sectors, have proposed sub-projects for GEF assistance. The sub-projects have been developed to phase out ODS in the entire country in line with GEF Operational Strategy. The enterprise Atlant, as the largest beneficiary of grant funds under the project, is the only manufacturer of household refrigeration equipment in Belarus (750,000 units per year) and the largest single consumer of ODS (344 tons).

II. ODS PHASEOUT STRATEGY

4. Belarus' formal ODS Phaseout Country Program was completed in May, 1995, using bilateral assistance from the Danish government. The ODS Phaseout Country Program (Decree #115 of the Cabinet of Ministers of the Republic of Belarus), and the national phaseout strategy it recommends, have been formally adopted by the Government (Annex 3) and accepted by Parties to the Montreal Protocol as evidence of the country's commitment. To achieve the goals of the ODS Phaseout Country Program, substantial investment in replacement facilities and technology is required for conversion from ODS use. A series of investments to achieve this goal have been prepared using Danish bilateral assistance and resources from a GEF Project Preparation Advance (PPA). Because of its limited financial and technical capacity, Belarus has requested GEF assistance for a one-time project to implement the proposed investments within the framework of its ODS Phaseout Country Program and National Strategy¹.

5. The ODS Phaseout Country Program adopted by the Government calls for the complete phaseout of ODS consumption by the end of 1997, based on receiving international financial assistance in mid-1995. Assuming such financial assistance would now be committed by mid-1997, phaseout would still be achieved within the London Amendment schedule (January 2000), but slower than the Copenhagen Amendment schedule (January 1996). On this basis, realistic phaseout dates by principal consuming sectors are as follows: refrigeration manufacturing - July 1999; refrigeration servicing - December 1999; solvents - December 1998; and fire protection - December 1999.

III. PROJECT OBJECTIVES

6. The project's main objective is to assist Belarus with the rapid phaseout of ODS consumption in a manner consistent with international efforts and within internationally agreed timeframes. Assistance to high consumption enterprises in Belarus would enable them to make the transition to non-ODS materials before supplies diminish. The project would also provide needed technical assistance and institutional strengthening to an Ozone Office established on July 1, 1996 (Annex 3) in the Ministry of Natural Resources and Environmental Protection (MNREP).

¹ As a developed country signatory to the Montreal Protocol, Belarus is not eligible for assistance from the Montreal Protocol Multilateral Fund, but is eligible for Global Environment Facility (GEF) financial assistance through the Global Environmental Trust Fund (GET).

IV. PROJECT DESCRIPTION

7. The project targets priority consumption phaseout activities in the refrigeration and solvent sectors. It also provides modest technical assistance at both the institutional and enterprise levels to facilitate implementation of the ODS Phaseout Country Program, and technology transfer for phaseout in the fire protection sector. It is structured as a framework project consisting of a series of six enterprise-specific technology conversion investment sub-projects and two technical assistance sub-components.

Technology Conversion Investment Sub-projects

8. The technology conversion component consists of one sub-project in the household refrigeration manufacturing sector, one sub-project in the industrial/commercial refrigeration servicing sector, and four sub-projects in the solvent sector as follows:

- (a) Refrigeration Manufacturing (US \$4.3 million): This sub-project would complete the conversion of the enterprise Atlant (one of Eastern Europe's household refrigerator manufacturers) to non-ODS materials. The grant would finance Atlant's refrigeration foaming line conversion from CFC-11 to cyclopentane. In addition, infrastructure and training would be provided to Atlant's refrigeration servicing which handles most of the country's household refrigeration servicing requirements. The project would phase out an estimated 282 tons/year of ODS by the end of 1999 with an additional long-term phaseout of 62 tons/year in the service sector. This represents 100% of the ODS consumption in the foam insulating and household refrigeration sectors;
- (b) Refrigeration Servicing (US \$1.5 million): It is proposed to initiate training and infrastructure investments to recover, recycle, and reclaim refrigerants from the industrial, commercial and transportation refrigeration servicing sector, and to provide funds for handling and retrofitting requirements associated with the substitute materials. The sub-project would be undertaken by a local technical institute involved in ODS Phaseout Country Program implementation (BSRC "Ecology") and an industrial refrigeration servicing organization (Beltorgprogress). Support to this sub-project, which builds servicing capacity in each Oblast and all non-domestic refrigeration sectors, is essential to ensure country-wide phaseout of ODS in one step. The sub-project is expected to eliminate 256 tons/year of ODS consumption for commercial/industrial refrigeration servicing by 1999, or approximately 86% of the total consumption for this sector; and
- (c) Solvents (US \$0.7 million): Four sub-projects involving major solvent users in the electronics industry are proposed. Three sub-projects (Belvar, Minsk Computer, Kamerton) would replace CFC-113 solvent used for cleaning of electronic components, with various proven technologies including "no-clean" high purity water and acid-alkaline techniques. A fourth sub-project (Tsvetotron) and a subcomponent of the Minsk Computer subproject, would

replace TCA with an alkaline process for circuit board manufacturing. The four solvent sub-projects would eliminate 15 tons/year of CFC-113 (36% of the country's consumption), and 75 tons/year of TCA (86% of the country's consumption).

Technical Assistance and Training

9. The technical assistance component consists of two sub-components which address the transfer of technology and training for conversion in the fire protection sector and institutional strengthening as follows:

- (a) Fire Protection Technology Transfer (US \$30,000): This sub-component would provide a modest program of technology transfer and training using a sectoral workshop to describe alternatives to halon-based (an ODS substance) fire protection systems. The workshop would be delivered by BSRC "Ecology" with the assistance of a foreign expert, and is aimed at introducing the major users in the sector to current technical options as they undertake phaseout; and
- (b) Institutional Strengthening (US \$154,000): This sub-component would provide resources to MNREP for operation of the Ozone Office, established within the Ministry to administer the project and other aspects of the ODS Phaseout Country Program's implementation. It would provide computing and communications equipment, accounting support, staff training, and consulting support for key technical issues. Support for the Ozone Office, including its longer-term regulatory functions, is essential to ensure country-wide phaseout of ODS in one step.

10. The project, which received GEF Council endorsement in April, 1996, would be processed under a single grant. The Danish Government has provided resources to assist Belarus to prepare the project to a level acceptable for GEF approval. This has been supplemented by a GEF PPA to fund enterprise viability assessments, early establishment of the Ozone Office, and upstream procurement and project management training for the Ozone Office and beneficiary enterprises. Preparation to date includes detailed technology and institutional strengthening proposals, associated cost analyses, enterprise procurement and implementation plans, and financial viability assessments of the beneficiary enterprises. Sub-projects have been reviewed and approved by the Ozone Operations Resource Group (OORG), comprised of internationally-recognized experts in ODS technology and established to provide technical advice on Montreal Protocol projects. A new TCA component was added to the Minsk Computer subproject at appraisal, and has subsequently received, and been cleared by, an OORG review. Any disbursements under the Minsk Computer subproject would be subject to receipt of the final OORG clearance. All ODS-consuming enterprises in Belarus identified through the ODS Phaseout Country Program and by MNREP, were given the opportunity to prepare project proposals for consideration for funding under this project. The project includes all enterprise proposals which met Montreal Protocol eligibility criteria and which were approved by the OORG technical reviewers.

11. The continued participation of enterprises has been subject to their cooperation and to the satisfactory conclusions of enterprise viability assessments which considered income

statements, balance sheets, presence of markets, business plans, prospects for maintaining a positive cash flow, organizational structure, and technical capabilities. The ability of an enterprise to meet counterpart funding requirements was also addressed during the viability assessments. Viability assessments focused on a short-term horizon of five years. Prediction of enterprise viability in Belarus' rapidly changing and transitional economic environment is difficult at best. Given the objective of the project to phaseout ODS consumption by internationally agreed dates, the decision to support an enterprise ultimately relies on the question of whether it is expected to be operating within the targeted phaseout period. If an enterprise discontinues operations because of financial or other factors, then the project goals would be achieved without an investment of grant funds. All enterprises were retained based on the appraisal review of viability, however the transitional business environment in Belarus would require ongoing monitoring of the financial conditions of each enterprise. Detailed viability assessment reports already completed would provide the baseline for biannual reviews of financial performance during project supervision missions. In addition, a local consultant would periodically monitor developments in the business climate that may affect the beneficiary enterprises.

V. PROJECT COSTS AND FINANCING

12. The estimated total cost of the project is US \$15.7 million which includes goods and services, technical assistance, training, physical and price contingencies, sub-grant processing charges for local implementation and financial intermediaries, and net present value of incremental operating cost increases. GEF funding has been reduced since GEF Council approval from US \$7.4 to US \$6.9 million in line with GEF ozone policies. The project would be financed by a US \$6.9 million GEF grant (44%) and US \$8.8 million in contributions from the beneficiary enterprises (56%). All costs were confirmed at appraisal, are incremental in nature, and are calculated in accordance with the "Indicative List of Eligible Incremental Costs" adopted by the parties to the Montreal Protocol. Also consistent with GEF guidelines, the grant amount limits eligible assistance for enterprises with export markets to Organization for Economic Cooperation and Development (OECD) countries. *Proceeds of the GEF grant would not be used for transfer payments such as duties and taxes (para. 35j).*

13. Cost-effectiveness ratios are at or below the thresholds recommended under the Montreal Protocol², with the exception of two solvent sector sub-projects. The GEF Operational Policy recommends using the Montreal Protocol unit phaseout costs as a benchmark for setting grant allocations, however, leaves flexibility for justification of higher unit costs. In particular, Montreal Protocol thresholds are not defined for country-wide programs designed to phase out ODS consumption in all relevant sectors in one step. Therefore, inclusion (and acceptance by GEF Council in April 1996) of two solvent sector sub-projects with higher cost-effectiveness ratios in this project represents Belarus' effort to comprehensively phaseout ODS consumption under a one-time project that covers most or all of the country's needs, consistent with the GEF Strategy of short-term interventions. The total grant allocations for the four solvent sub-projects are also relatively small (maximum \$260,000), consistent with achieving the maximum benefit at a low cost.

² Sector and Subsector Cost Effective thresholds approved by the Executive Committee of the Multilateral Fund of the Montreal Protocol.

14. The ability of enterprises to meet their counterpart funding requirement was evaluated as part of the viability assessment. The enterprise Atlant is the largest beneficiary of grant funds, with the largest counterpart funding requirement of US \$6.2 million. This privatized enterprise is competitively exporting goods to international markets. It operates at near full capacity, and has been profitable since 1993. Projections show that Atlant would generate adequate cash flow to meet its counterpart funding requirements. A similar analysis was conducted for each beneficiary enterprise, and no major concerns were identified. The project is structured so that weaker enterprises have low counterpart funding requirements. The addition of the TCA subcomponent for Minsk Computer has increased their counterpart funding requirement. All enterprises will be monitored closely by the Bank during project supervision as part of the ongoing review of enterprise financial viability. The cost of project feasibility and preparation studies, inclusive of preparation of the Country Program, has totalled US \$410,000, representing a US \$210,000 GEF PPA and US \$200,000 in bilateral assistance from the Government of Denmark.

VI. PROJECT IMPLEMENTATION ARRANGEMENTS

15. The Government has assigned MNREP as executing agency for the project and overall implementation of the ODS Phaseout Country Program. Within MNREP, project implementation responsibility has been assigned to the Ozone Office which was established in July, 1996. Financial support toward the establishment of the Ozone Office has been provided by MNREP and through a GEF PPA. The Ozone Office would receive subsequent support under the project grant. The Office is staffed by three full time staff recruited from and paid for by MNREP and BSRC "Ecology", and two independent full-time local staff specializing in accounting and procurement who would be funded under the project. The MNREP and Ecology staff have previously been involved with development of the Country Program. As a permanent structure within the Ministry, the Ozone Office has overall responsibility for ODS matters including: (a)-acting as secretariat to the Interagency Commission which oversees the ODS Phaseout Country Program; (b) coordinating implementation and updating the Country Program; (c) communicating with the Executive Committee of the Montreal Protocol; (d) collecting and reporting consumption, trade and recycling information to the Government and international bodies; and (e) preparing legislative and regulatory initiatives such as ODS import licensing, sector specific bans and sanctions for non-compliance with phaseout schedules. *Formal agreement on the maintenance of the office for the purposes of project implementation was reached at negotiations (para. 35j).*

16. *Project-specific responsibilities of the Ozone Office as a project implementation unit include: (a) appointment of, communication with, and supervision of, an international Financial Agent (FA) who would administer disbursements for the project; (b) set-up and management of a project accounting system; (c) appointment and supervision of an international procurement agent to provide procurement guidance to beneficiary enterprises in accordance with World Bank guidelines; (d) making arrangements for annual audits; (e) coordination of environmental approvals required for sub-project implementation; (f) monitoring of beneficiary enterprise financial performance on a quarterly basis; and (g) submission of progress reports (initially monthly and to become quarterly at the direction of the Bank) and a completion report to the Bank (para. 35d). An implementation plan for the project which was discussed at appraisal and agreed at negotiations is presented in Technical Annex 1 (para 34b).*

17. An international procurement consultant was hired using the PPA funds to help establish the Ozone Office and to provide training in procurement, disbursement, project

accounting, and administration. The consultant worked with both the beneficiary enterprises and Ozone Office staff to prepare procurement packages, update sub-project implementation plans, and initiate procurement activities to an advanced stage (ie. preparation of bidding documents and “no objection” requests). The consultant also participated in project appraisal and provided support for several weeks beyond appraisal to help address any outstanding issues. A final procurement plan was agreed at appraisal, and is presented in Schedule B (**para. 34a**).

18. *A financial agent (foreign bank) acceptable to the World Bank, would be appointed to handle the management and disbursement of funds including: (a) holding and managing a Special Account (SA) for project funds on behalf of the Ozone Office; (b) administering project disbursements through the World Bank and the SA, including payments under approved contracts, and funding allocation to technical assistance components; and (c) monitoring all sub-project expenditures. The Ozone Office would be responsible for paying any fees related to the financial agent's services from the sub-grant processing charges (para. 35c).*

19. The need for an international procurement agent during project implementation has been minimized through the use of an international procurement specialist during project preparation and by including the procurement specialist in project appraisal. *The Ozone Office would have a full time local procurement specialist to process procurement requests and to act as an intermediary between the Bank and beneficiary enterprises. A budget would be set aside to contract with an international procurement specialist as required throughout project implementation. The World Bank resident mission would also provide back-up procurement advice on request and inform project staff of any World Bank procurement training courses in the region (para. 35a).*

20. The project would be covered under a grant agreement between the Bank as GEF Implementing Agency and the Government, represented by MNREP, which defines the overall framework by which GEF grant funds can be disbursed to enterprise-specific sub-projects. *Individual sub-projects would be covered by Sub-grant Agreements between the MNREP and the participating enterprises (para. 35e).* Both the grant agreement and sub-grant agreements would be patterned after those utilized for the Ozone Project's Trust Fund. The draft grant agreement and guidelines for preparing sub-grant agreements were introduced at appraisal. Sub-projects have been approved in accordance with the Bank's trustee obligations to GEF.

VII. PROJECT SUSTAINABILITY

21. The project would help the Government of Belarus to phaseout ODS substances by compensating enterprises for incremental costs incurred during the process of technology conversion. Technology conversion would allow beneficiary enterprises to be competitive both in the domestic and export markets. Sustainability has been evaluated from an enterprise viability perspective. Enterprises have been informed from the outset of project preparation that support for project proposals would be dependent on positive results. Sustainability of specific sub-projects has been assured through the evaluation of proposed technologies and their cost effectiveness in relation to other alternatives, during the project preparation work and its review by OORG.

22. The Government has shown its commitment to the project by accepting the ODS Phaseout Country Program, committing funds for the operation of the Ozone Office under MNREP,

and issuing a parliamentary order for a VAT and tax exemption needed for GEF grant funds. MNREP has also recently drafted legislation to impose regulatory control on the import, export, and re-sale of ODS materials, and anticipates adoption of the program in early 1997. *The adoption of this regulatory program was made a condition of grant effectiveness at appraisal, based on the strong linkages of such a program to the success of the refrigeration servicing sub-project (paras. 35i and 36a).* Assistance under the project for the Ozone Office would enable the Government to provide a sound institutional and policy framework including finalizing and implementing ODS legislation. Atlant has already converted more than 50% of its production lines to use non-ODS materials to remain competitive internationally. International market pressures to convert to non-ODS technologies, coupled with diminishing supplies of ODS materials, provide a sustainable framework for the enterprise investments.

VIII. LESSONS FROM PREVIOUS BANK EXPERIENCE

23. Although the proposed project would be the seventh GEF-funded ODS phaseout project to be initiated in the transitional economies of Central and Eastern Europe (ECA), direct Bank experience and associated lessons are still limited because most have recently been initiated. Experience and lessons learned will be re-assessed and exchanged periodically during implementation through contact with other project teams. One lesson recently learned from an ECA project in a similar economic environment is the need to share the risk of supporting non-viable enterprises with the government. As one of the Multilateral Fund Implementing Agencies, the Bank is now implementing ODS phaseout projects in twenty six countries, from which a number of lessons have been learned, including: (a) the importance of a national phaseout policy or ODS Phaseout Country Program as a basis for assuring commitment and ownership by the client country; (b) the value of strong enterprise/government linkages to achieve phaseout objectives; and (c) the need for institutional strengthening and training for local implementation units and financial intermediaries. Additional lessons have been learned from World Bank and GEF projects in Belarus and other FSU countries, including the importance of: (a) identifying a consistent committed counterpart team with sufficient authority and implementation experience to move the project forward; (b) coordination among key interested parties at the federal, regional and enterprise levels; (c) early detailed attention to procurement and other implementation issues; and (d) involvement of local consultants and institutes in the process.

24. The design, preparation and structure of the project incorporates these lessons in a number of ways. *The project grant agreement seeks government responsibility for recovery of equipment allocated to an enterprise if the investment is lost through enterprise insolvency during the project implementation timeframe (para. 35k).* Also, *funds may be withdrawn from an enterprise sub-project at the Bank's discretion at any time during implementation. Withdrawn funds would be eligible for reallocation to an alternative Belarus ODS phaseout activity with the approval of the World Bank and GEF Council as necessary (para. 35l).* Project preparation work has involved the development of a well defined ODS Phaseout Country Program, identification of a range of key phaseout sub-projects, and provision of technical and procurement assistance to beneficiary enterprises during the preparation period. Technical assistance has been provided under the project to strengthen institutional capacity within the government implementing agency and the enterprises. Project processing procedures would parallel those used for Multilateral Fund projects, including the utilization of the technical review capability established for these projects.

IX. RATIONALE FOR BANK AND GEF INVOLVEMENT

25. Funding to Belarus for this project on stratospheric ozone protection has been allocated by the GEF on the basis that Belarus:

- (a) is eligible for GEF assistance;
- (b) is classified as a developed country and is not eligible for funding from the MFMP;
- (c) has accepted the FSU ratification of the Vienna Convention and Montreal Protocol;
- (d) has completed and is undertaking implementation of a Country Program;
- (e) has ratified the London Amendment; and
- (f) has regularly informed the Parties to the Montreal Protocol of progress toward achieving the phaseout schedule proposed in the ODS Phaseout Country Program.

26. The proposed project is consistent with the GEF Guidelines for ODS phaseout which have been carefully developed to reflect Montreal Protocol policies and procedures, thus ensuring consistency of approach between GEF and Montreal Protocol projects. These guidelines endorse working with a range of enterprise-specific sub-projects that offer substantive ODS phaseout gains, and for which the beneficiary enterprise would not be able to obtain sufficient financing from commercial sources. Within these sub-projects, grant funding is limited to eligible incremental investment costs, with the enterprises responsible for financing the balance from their own resources or loans. GEF support for ODS phaseout activities in the FSU is based on the recognition of a need to mitigate any additional economic burden which efforts to achieve phaseout would impose on economies in transition.

27. The project is consistent with the Bank's assistance to the environment sector and with its Country Assistance Strategy for Belarus. The project provides for the strengthening of much needed institutional capacity for environmental management and supports the development of a market-oriented economy by focusing financial assistance on enterprises requiring technological change to remain competitive under international environmental standards. Finally, it establishes a key role for the Bank in mobilizing multilateral grant funds in support of a key global environmental priority.

X. MONITORING AND EVALUATION

28. The completion date for the grant is February 29, 2000. *The Ozone Office would have overall responsibility for monitoring project progress (para. 35g). It would prepare monthly progress reports summarizing project implementation, procurement, and disbursement, and would highlight issues and follow-*

up actions to ensure that the project remains on schedule. The reporting requirement may be revised to a quarterly basis when significant progress has been made, at the discretion of the Bank. Ozone Office responsibilities would also include monitoring and enforcement of safety regulations and procedures as agreed prior to sub-project implementation. The Ozone Office would be responsible for arranging an annual financial audit (in accordance with the World Bank's Financial Reporting and Auditing Handbook, IBRD, January, 1995) and preparation of a Implementation Completion Report within six months of the end of project implementation (para. 35f). The Ozone Office would also be responsible for collecting financial data from beneficiary enterprises on a quarterly basis, by submitting updates of balance sheets and income statements with World Bank progress reports, and alerting the Bank to other factors that might relate to enterprise performance. Sub-grant agreements would require enterprises to submit annually audited financial statements, and to agree to periodic monitoring of financial performance (para. 35f). In the case of loss of financial viability of a beneficiary enterprise, the World Bank may determine, in agreement with the Government, to discontinue implementation of the subproject (para. 35l). Supervision by a Bank team would take place on a semi-annual basis following submission of the first progress report of the Ozone Office. Supervision missions would include the Bank team leader (or an authorized representative), and a financial or ODS technical specialist as needed. Proposed project performance monitoring indicators would be included in the progress reports, and are presented in Annex 1.

29. Monitoring ODS phaseout and consumption in Belarus as required for reporting to the Parties of the Montreal Protocol has in the past been, and would continue to be, carried out by the Institute Ecology, which is subordinate to MNREP. This would include data reporting to the Vienna Convention/Montreal Protocol Ozone Secretariat in line with requirements of the Convention and the Protocol. *The status of ODS consumption would be reported to the Bank and GEF when required (para. 35g). During negotiations it was agreed that a disposition plan for retiring ODS dedicated equipment would be included in the sub-grant agreement for each sub-project to help ensure that project objectives are met. It was also agreed that at least two sub-grant agreements, satisfactory to the Bank, would be prepared prior to grant effectiveness (paras. 35e,36b,37b).*

XI. PARTICIPATORY APPROACH

30. As part of the Country Program development, MNREP undertook consultations with a broad spectrum of enterprises and interested parties: other ministries (including Industry, Economics, and Finance), NGOs, industry associations and others. Enterprises were given the opportunity to participate in the project as long as they could provide the necessary data for project staff to evaluate their financial viability, technological capabilities and eligibility for financial assistance.

XII. PROJECT BENEFITS

31. The project would contribute to global efforts to reduce damage to health and to the environment from increasing exposure to ultraviolet radiation by eliminating the use of 641 tons/year of ODS. Phaseout of the consumption of ODS must be implemented in a timely and globally-comprehensive manner to achieve a reduction in the rate of thinning of the earth's atmosphere. Although it is difficult to measure the impact the project would have on the earth's ozone layer, and Belarus is just one of many consumers of ODS, its incremental

contribution to this global effort is essential to the protection of the earth's environment. The provision of a GEF grant allows Belarus to substantially meet its phaseout of ODS under the Montreal Protocol within a three year period, which would not be achievable in the absence of this grant. This effort would also serve to enhance the country's credibility within the international environmental community. In the longer term, it allows the country to avoid the economic disruption that would occur when imported ODS is no longer available for industrial, commercial and other consumer applications. The technology conversion provided under the project would contribute to the modernization of key industries and allow them to maintain domestic and export markets. Belarus' institutional capacity for monitoring and regulatory enforcement of ODS phaseout would also be strengthened under the project.

XIII. PROJECT RISKS AND MITIGATION MEASURES

32. Risks of the project can be categorized as follows: (a) implementation risks; (b) risks associated with the six enterprise sub-projects; and (c) risks associated with the two technical assistance sub-projects.

IDENTIFIED RISKS	MEASURES TO MINIMIZE RISK
PROJECT IMPLEMENTATION	
A. Risk of inadequate capacity in MNREP for project implementation and management	Project implementation arrangements were reviewed in detail during appraisal. Key staff of the Ozone Office have already been hired or appointed by MNREP and participated in appraisal activities. Project management training for staff has been part of project preparation.
B. MNREP's lack of familiarity with Bank procedures, and project management.	The Ozone Office staff and beneficiary enterprises have received training in Bank procurement procedures prior to appraisal. Ozone Office staff have also received training in disbursement, and project accounting. Ongoing support would be provided through the resident mission, EDI training courses, and during project implementation.
ENTERPRISE SUB-PROJECTS	
A. Risk of supporting a potentially non-viable enterprise. This includes macroeconomic policies that may impact enterprise viability, such as government intervention in setting foreign exchange rates.	A financial viability assessment has been completed for each beneficiary enterprise and would be used as a baseline for monitoring enterprise performance. Where financial viability is a concern, enterprises would be monitored closely to obtain early warning of difficulties prior to disbursement of grant funds. This risk would be shared with the government by seeking government responsibility for recovery of equipment if an enterprise becomes insolvent during the implementation period. Viability assessments incorporate sensitivity to macroeconomic factors such as foreign exchange rates for each enterprise and will be used to monitor the impact of the government policies.
B. Risk of an enterprise not meeting its counterpart funding.	Ability to meet counterpart funding requirements has been part of the enterprise viability analysis. The grant generally meets costs the enterprise would eventually incur to remain competitive and retain markets, and therefore provides a strong incentive for cooperation. Disbursements would be withheld if an enterprise could not meet its local financing.
C. Potential for supporting a technically unsound project proposal.	The OORG review required by the GEF project cycle focuses specifically on technical issues to minimize this risk.
TECHNICAL ASSISTANCE SUB-PROJECTS	
A. Risk of the Government not meeting its counterpart commitments.	<i>Agreement on government counterpart commitments was reached at appraisal and confirmed during negotiations (para. 35j).</i> The Prime Minister has issued a customs duty and VAT exemption for the project, effective June, 1996.
B. Fragmented decision-making on environmental and investment matters at the national and regional levels.	An inter-agency commission for the fulfillment of the Montreal Protocol, formally established in 1993, would be used as a mechanism for better coordination. The Cabinet of Ministers has accepted the ODS Phaseout Country Program and designated responsibility for its implementation to MNREP (2/96). All ozone activities would be centrally coordinated by the Ozone Office in MNREP.

XIV. ENVIRONMENTAL ASPECTS

33. The project would provide significant global environmental benefits through the reduction in ODS consumption. There are no major environmental concerns and the project has been assigned a "B" rating under World Bank O.D. 4.01. The limited environmental risks associated with the project pertain to the conversion to cyclopentane in the refrigeration foam blowing sub-project, and a potential increase in wastewater generation where aqueous cleaning technologies are used in the solvent sector sub-projects. The inclusion of wastewater treatment and recirculation capability where applicable in the solvent sub-projects mitigates this potential impact. All sub-projects would follow the industrial safety guidelines recommended by suppliers, and the safety equipment proposed for the handling of cyclopentane has been approved by the OORG review process. In addition, an environmental review would be completed for each subproject. The review would include health and safety plans for each sub-project with potential industrial safety concerns such as those proposing the use of cyclopentane. *Specific guidelines for environmental reviews consistent with the World Bank's O.D. 4.01 were agreed at appraisal. The Bank and MNREP would approve all environmental review documents prior to sub-project implementation. MNREP would monitor and enforce regulations on industrial safety and the environment during project implementation. It was agreed at appraisal that the Ozone Office would conduct routine inspections to address any environmental or safety concerns (paras. 35h and 37a).*

XV. AGREEMENTS REACHED PRIOR TO NEGOTIATIONS

34. Agreements reached prior to negotiations were:
- (a) Finalization of detailed procurement plans (**Schedule B and para. 17**).
 - (b) Finalization of detailed project implementation plan (**Annex I and para. 16**).

XVI. AGREEMENTS REACHED AT NEGOTIATIONS

35. Agreements reached at negotiations were:
- (a) All procurement activities under the project would follow the procedures outlined in **Schedule B and para. 19**.
 - (b) Disbursement arrangements will follow the procedures described in **Schedule B**.
 - (c) Establishment of a special account will follow the procedure described in **Schedule B and para. 18**.
 - (d) The functions of the Ozone Office and its management of the project activities would be as described in **para. 16**.
 - (e) Subgrant agreements with beneficiary enterprises would be established, including an agreed disposition plan for retiring ODS dedicated equipment. Two draft sub-

grant agreements would be prepared to the satisfaction of the Bank prior to grant effectiveness (**paras. 20 and 29**).

- (f) All project accounts would be audited as described in **para. 28**.
- (g) Reporting and evaluation of project activities would be as described in **paras. 28 and 29**.
- (h) Environmental review for investment subprojects will be completed to the satisfaction of MNREP and the Bank prior to sub-project disbursement, as described in **para. 33**.
- (i) The Government's proposed ODS licensing program would be adopted prior to grant effectiveness, as described in **para. 22**.
- (j) Confirm government commitments to the project including on-going financial support of the Ozone Office and its government staff (**paras. 12, 15 and 32**)
- (k) In the case of enterprise insolvency, the government would be responsible for recovering non-ODS equipment purchased under the project and ensuring it is used for purposes consistent with the project, as described in **para 24**.
- (l) The Government and the Bank may agree on the discontinuation of the implementation of any subproject due to loss of financial viability of the enterprise, and to the substitution with another subproject as accepted by the GEF as described in **para. 28**.

XVII. CONDITIONS OF GRANT EFFECTIVENESS

36. Conditions of Grant Effectiveness are:

- (a) Adoption of the Government's proposed ODS licensing program (**para. 22**).
- (b) Preparation of two draft sub-grant agreements satisfactory to the Bank (**para. 29**).

XVIII. CONDITIONS OF DISBURSEMENT

37. For sub-project disbursement, the following conditions would apply:

- (a) Finalization of sub-project environmental reviews and health and safety plans (**para. 33**).
- (b) Finalization of sub-grant agreements, including an agreed disposition plan for retiring ODS dedicated equipment (**para. 29**).

BELARUS OZONE DEPLETING SUBSTANCE PHASEOUT PROJECT

SCHEDULE A

SCHEDULE A: SUMMARY OF SUB-PROJECT DATA AND COSTS

SUB-PROJECT/ ENTERPRISE	SECTOR	SUB-PROJECT DESCRIPTION	ANNUAL ODS USE (MT/YR.) (Note 1)	COST EFFECTIVENESS (US\$/kg/YR.)	INCREMENTAL INVESTMENT COST (US\$)	INCREMENTAL OPERATING COST (SAVINGS) (US\$) (Note 2)	TOTAL SUB-PROJECT COST (US\$)	Contingency -10% on remaining expenses (not on op. costs)	Total Subproject Cost with Contingency	ENTERPRISE FINANCING REQUIREMENT (US\$)	PROPOSED GEF SUB-GRANT (US\$)
Atlant Ltd. (Minsk)	Household Refrigeration	Replace CFC-11 Foam blowing agent with cyclopentane and provide recovery and recycling capability for CFC-12 refrigerants in servicing operations	344	(US\$9.60/kg ODP) ⁴	9,750,790	0	9,750,790	552,993	10,303,783	5,979,537	4,324,246
Belteorgprogress (Minsk)	Refrigeration Servicing	Training and recovery facilities for commercial/industrial sector	256 (Note 3)	(US\$6.25/kg ODP)	1,491,315	115,740	1,607,055	149,132	1,756,187	277,990	1,478,197
Belvar (Minsk)	Solvent	Aqueous cleaning technology conversion from CFC-113 solvents	6	(US\$ 53.25/kg ODP)	265,540	17,018	282,558	16,554	309,112	53,472	255,640
Minsk Computer (Minsk)	Solvent	Aqueous cleaning and "no-clean" technology conversion from CFC-113 & alkaline process technology conversion from Methylchloroform solvent	6 (CFC-113) 43 (TCA)	(US\$ 20.8/kg ODP) CFC-113 (US\$ 37.17/kg ODP) TCA	795,000	15,123	810,123	79,500	889,623	629,623	260,000
Tsvetotron (Brest)	Solvent	Alkaline process technology conversion from Methylchloroform solvent	32	(US\$ 38.5/kg ODP)	1,735,000	0	1,735,000	158,500	1,893,500	1,770,300	123,200
Kamerton (Pinsk)	Solvent	Acid-alkaline/High purity water technology conversion from CFC-113	3	(US\$ 27.95/kg ODP)	123,460	56,696	180,156	10,526	190,682	123,582	67,100
Sub-Grant Processing Charge							200,771	0	200,771		200,771
BSRC "Ecology"	Halon	Halon user sector workshop and technical support			27,273		27,273	2,727	30,000		30,000
Ministry of Environment	Institutional Technical Assistance	Country Program Implementation			140,000		140,000	14,000	154,000		154,000
PROJECT TOTALS			641		14,328,378	204,577	14,733,726	993,932	15,727,658	8,834,504	6,893,154

Notes:

1. ODS consumption is the greater of average 1993,1994 and 1995 consumption or 1994 consumption (for Atlant, ODS consumption value uses years 1992,1993,1994 because conversion began in 1995).
2. NPV of annual operating costs over 4 years at 10% discount rate
3. Estimated ODP phased out is usage reduction in commercial and industrial sector at point of self sufficiency (1998)
4. Excludes safety costs

**REPUBLIC OF BELARUS
GLOBAL ENVIRONMENTAL FACILITY OZONE DEPLETING SUBSTANCES
PHASEOUT PROJECT**

PROCUREMENT AND DISBURSEMENT ARRANGEMENTS

Procurement

1. *Procurement of goods and services would be made in accordance with "Guidelines for Procurement under IBRD Loans and IDA Credits" (January, 1995, as amended January and August, 1996) (para. 35a).* As part of project preparation, the enterprises, and MNREP received procurement training to assist them in implementing the Bank's procurement procedures. The beneficiary enterprises, with the assistance of a full-time local procurement specialist in the Ozone Office, would have overall responsibility for procurement. An international procurement specialist would be contracted on an as-needed basis to provide further assistance as and when necessary. To meet the Montreal Protocol requirement of ODS phaseout, enterprises would have to purchase and install equipment financed under the project as soon as possible. Thus, the procurement procedures have been designed with special attention to ensure expediency during project implementation. A summary of procurement arrangements are provided in Tables B1 - B3.

TABLE B-1
Belarus ODS Phaseout Project
Procurement Information

Section 1: Procurement Review						
Element	LIB	ICB	IS	NS	Consultants	Other methods
1. Procurement method thresholds	One specialized package	>\$USD400,000	>\$USD50,000 (aggregate USD\$2,200,000)	<\$USD50,000 (aggregate USD\$25,000)	-	Operating costs \$USD103,000 and \$USD200,000 overhead fee
2. Prior Review	All	All	First three	None	>\$USD100,000 - firm > \$USD50,000 - indiv.	Based on approved schedule
3. Ex-post Review	Explain briefly the ex-post review mechanism: 21% ex-post review with assistance of a consultant during supervision.					
Section 2. Capacity of the Implementing Agency in Procurement and Technical Assistance requirements						
4. Brief statement	The Ozone Office hired Crown Agents during project preparation to provide procurement training for Ozone Office staff and enterprise representatives. A full-time procurement staff position has been filled since November 1996 and will continue through the grant implementation period. Procurement training occurred prior to, during and after project appraisal to maximize opportunities for hands-on learning.					
5. Country Procurement Assessment Report or Country Procurement Strategy Paper status: Country Procurement Assessment Report planned for FY98			6. Are the bidding documents for the procurement actions of the first year ready by negotiations? <p align="center">Yes</p>			
Section 3. Training, Information and Development on Procurement						
7. Estimated date of Project Launch Workshop	8. Estimated date of publication of General Procurement Notice	9. Indicate if contracts are subject to mandatory SPN in Development Business		10. Domestic Preference for Goods	11. Domestic Preference for Work, if applicable	
5/15/97	2/20/97	Yes, for ICB		Yes, for ICB	N/A	
12. Retroactive financing		No	13. Advanced Procurement		No	
14. <i>Explain briefly the Procurement Monitoring System and Information System:</i> The Ozone Office has been equipped with computers and software developed by Crown Agents, to track and record procurement implementation. All procurement requests will be channeled through the Ozone Office for centralized recordkeeping. Monthly progress reports to Bank will regularly update procurement implementation progress.						
Section 4. Procurement Staffing						
15. <i>Indicate name of Procurement Staff as part of Project Team:</i> Appraisal/Supervision - Ms. Snezana Mitrovic			Division: EC4NR		Ext. 32182	
16. <i>Explain briefly the expected role of the Field Office in Procurement:</i> A field-based deputy team leader would act as the Ozone Office's primary liaison to review procurement documents for completeness and submit them for transmittal to headquarters through the Bank's pouch service. This staff would also participate in all supervision missions, and alert the project team to any procurement training opportunities in the region, and conduct prior review of the second and third IS packages.						

Table B-2
Belarus ODS Phaseout Project
Procurement Plan

1	2	3	4		5	6. Estimated Schedule			
Description ¹	Type ²	No. slices/items/ subpackages ³	Estimated Cost ⁴	Procurement Method ⁵	Prequalification	Document Preparation	Invitation to Bid	Contract Signing	Contract Completion
REFRIGERATION SECTOR									
Atlant Ltd.									
Door Foaming Lines (2 and 3)	G	1	\$4,658,775	LIB	Not required	March '97	April '97	Sept '97	Dec '98
Door Foaming Lines (2 and 3)			\$902,220	NBF	Not required				
Servicing Equipment	G	1	\$383,938	IS	Not required	March '97	April '97	July '97	Sept '97
Servicing Equipment			\$181,170	NBF	Not required				
Door Foaming Line 1 Prod. Equip.			\$1,863,680	NBF	Not required				
Safety Audit	CI	1	\$22,000	SSI	Not required	June '98	-	July '98	Aug '98
Cabinet/Door Foaming Production Equipment/Support Infrastructure			\$2,292,000	NBF	Not required				
Beltorg progress									
Leak Detectors, Charging Units, Tools	G	1	\$463,155	ICB	Not required	April '97	May '97	July '97	Oct '97
Recovery and Soldering Units	G	1	\$368,335	IS	Not required	April '97	May '97	July '97	Nov '97
CFC Containers	G	1	\$212,080	IS	Not required	Feb '97	March '97	June '97	Aug '97
Pneumatic Pump	G	1	\$16,500	NS	Not required	March '97	April '97	July '97	Sept '97
Recovery and Recharging Equipment	G	1	\$142,890	IS	Not required	April '97	May '97	July '97	Jan '98
Computers and Classroom furnishings	G	1	\$8,140	NS	Not required	March '97	April '97	July '97	Sept '97
Recovery Vehicles	G	1	\$132,000	IS	Not required	March '97	April '97	July '97	Sept '97
Study Tour	CF	1	\$32,423	SSF	Not required	Dec '96	Jan '97	Feb '97	May '97
Operating Costs	Other	1	\$102,674	OTHER	Not required	-	-	-	-
Operating Costs			\$25,850	NBF	Not required				
Facility Installation/Upgrading			\$136,400	NBF	Not required				
Incremental Operating Costs			\$115,740	NBF	Not required				
SOLVENT SECTOR									
Kamerton									
Cleaning Machine	G	1	\$39,600	IS	Not required	Feb '97	March '97	June '97	Oct '97
DI water treatment system	G	1	\$27,500	IS	Not required	Feb '97	March '97	June '97	Oct '97
Mastic Application Equipment			\$4,136	NBF	Not required				
Chemical Cleaning Machines-TCA Washing			\$16,200	NBF	Not required				
Equipment Upgrading			\$18,150	NBF	Not required				
Engineering/Env. Ass.			\$28,400	NBF	Not required				
Incremental Operating Costs			\$56,696	NBF	Not required				
Tsvetrotron									
ADF Developing Machine	G	1	\$159,500	IS	Not required	Feb '97	March '97	June '97	Sept '97
Surface Preparation Unit			\$126,500	NBF	Not required				
Photoresist Removal Unit			\$110,000	NBF	Not required				
Equipment Dismantling			\$165,000	NBF	Not required				
VVWTP Upgrade			\$1,198,000	NBF	Not required				
Training/P. Mgmt/Env. Ass.			\$134,500	NBF	Not required				

Table B-2
Belarus ODS Phaseout Project
Procurement Plan

1	2	3	4	5	6. Estimated Schedule				
Description ¹	Type ²	No. slices/items/ subpackages ³	Estimated Cost ⁴	Procurement Method ⁵	Prequalification	Document Preparation	Invitation to Bid	Contract Signing	Contract Completion
Belvar									
Cleaning Equipment	G	1	\$244,640	IS	Not required	April '97	May '97	July '97	Dec '97
Technical Assistance	CI	1	\$11,000	SSI	Not required	Dec '96	Jan '97	March '97	May '97
Instal./P. Mgmt./Env. Ass./Commissioning			\$36,454	NBF	Not required				
Incremental Operating Costs			\$17,018	NBF	Not required				
Minsk Computer									
Aqueous cleaning system	G	1	\$245,739	IS	Not required	Feb '97	March '97	June '97	Dec '97
ADF developing machine	G	1	\$159,842	IS	Not required	Feb '97	March '97	June '97	Dec '97
Surface Preparation (etching) Equip.			\$124,465	NBF	Not required				
Photoresist Removal			\$180,554	NBF	Not required				
WWTP Upgrade/Equip. Dismantling			\$47,600	NBF	Not required				
P. Mgmt./Equip./Env. Ass./Commissioning			\$116,300	NBF	Not required				
Incremental Operating Costs			\$15,123	NBF	Not required				
TECHNICAL ASSISTANCE									
Halon Subproject									
Workshop training	CF	1	\$30,000	SSF	Not required	Dec '96	Jan '97	April '97	July '97
Ozone Office									
Vehicle	G	1	\$27,500	IS	Not required	Feb '97	April '97	June '97	Aug '97
Misc. Office Supplies	G	1	\$11,000	IS	Not required	Feb '97	April '97	June '97	Aug '97
Ozone Monitoring Equipment	G	1	\$11,000	IS	Not required	April '97	June '97	Aug '97	Oct '97
Procurement advisory services	CI	1	\$55,000	SLI	Not required	March '97	April '97	May '97	Nov. '99
Local Contract Staff (accounting)	CI	1	\$13,200	SSI	Not required	March '97	April '97	May '97	Nov. '99
Local Contract Staff (procurement)	CI	1	\$13,200	SSI	Not required	March '97	April '97	May '97	Nov. '99
Regulatory Program Support	CI	1	\$23,100	SLI	Not required	April '97	June '97	Aug '97	Oct '99
Sub-Grant Processing Charge (3%)	Other		\$200,771	OTHER	Not required	-	-	-	-
TOTAL PROJECT COST			\$15,727,658						

NOTES:

¹Name of Package

²Indicate CW (for civil works); S&I (for supply and install); TK (for turnkey); CF (for consultant firms); CI (for individual consultants); TR (for training).
The type is related to the use of the relevant standard bidding documents.

³If known, indicate number of slices, major items or subpackages in the package

⁴Expressed in US\$

⁵Indicate ICB, LIB, NCB, IS, NS, DC (for direct contracting), FA (for Force Account), MW (for Minor works), SLF (for short-listing of consultant firms);
SLI (for short-listing of individual consultants); SSF (for Sole sourcing of consultant firms); SSI (for sole sourcing of individual consultants).
Other (for recurrent costs procured on the basis of administrative procedures based on a schedule and budget acceptable to the Bank);

TABLE B-3

BELARUS ODS PHASEOUT PROJECT

Summary of Proposed Procurement Arrangements (US\$ million equivalent)

Project	Procurement Methods				Total Cost	
	LIB	ICB	Other	Not Financed by GEF		
1	Works					
	1.1	Rehabilitation and Maintenance	-	-	0.3	0.3
			-	-	(0.0)	(0.0)
2	Goods					
	2.1	Equipment and Machinery	4.7	0.4	2.3	7.0
			(4.0)	(0.4)	(2.0)	(0.0)
3	Consultancies					
	3.1	Technical Assistance	-	0.1	0.3	0.4
			-	(0.1)	(0.0)	(0.1)
	3.2	Training		0.1	-	0.1
				(0.1)	-	(0.1)
4	Miscellaneous					
	4.1	Sub-grant Processing Charge		0.2	-	0.2
				(0.2)	-	(0.2)
	4.2	Recurrent Costs		0.1	0.2	0.3
				(0.1)	(0.0)	(0.1)
Total			4.7	0.4	3.2	7.8
			(4.0)	(0.4)	(2.9)	(6.9)

Note: Figures in parenthesis are respective amounts financed by GEF.

Other includes: US\$ 2.2 million for International Shopping

US\$ 25 thousand for National Shopping

US\$ 200 thousand for consultant services

US\$ 300 thousand for operating costs and sub-grant processing fee

Disbursement

2. The project is expected to be disbursed in less than three years, and the funds would be channelled through a special account (SA) established in a Bank-approved financial institution (Financial Agent), or paid directly to a supplier by the World Bank. *Funds would be disbursed against: (a) 100% cost of foreign expenditure, ex-factory cost of domestically-manufactured goods, technical assistance including service associated with supply of goods, and consulting services; and (b) 75% of expenditures on goods procured locally. Disbursements to the Ozone Office for sub-grant processing would be limited to 3% of eligible disbursements for each invoice (para. 35b).* Allocations of funds to disbursement categories and an estimated schedule are provided in Tables B4 and B5.

Category	Amount	Percent of Expenditure Eligible for Financing
Goods	6.7	100% of foreign expenditure 100% of local expenditure (ex-factory costs) 75% of goods procured locally 100% of consultant services
Sub-grant processing fee	0.2	100%
Total	6.9	

	FY 97	FY 98	FY 99
Fiscal Year	0.0	5.0	1.9
Cumulative	0.0	5.0	6.9

3. *Establishment of the SA would be under the terms and conditions satisfactory to the Bank (para. 35c).* After effectiveness and upon the recipient's request, the Bank would make an initial deposit of US \$400 thousand which would be increased up to US \$690 thousand when disbursements reach US \$1.5 million (SDR equivalent 1.1 million). Requests for replenishment of the SA would be made on a quarterly basis, or when the balance of the SA is at one half of the deposit, whichever occurs first. In addition to the evidence of payments, each replenishment application would be supported by monthly statements of the SA which would be reconciled by the Ozone Office. Project expenditures would be monitored by the FA, which would provide monthly statements to the Ozone Office. Payments would be made by the FA following the submission of requests for payment by the Ozone Office on behalf of the beneficiary enterprises.

4. Except for contracts requiring prior review, disbursement would be made against certified statements of expenditure for which detailed documentation would be available for the required audits, and also for review by Bank supervision missions. The Bank would accept requests for direct payment to the supplier of goods or services for an amount not less than 20% of the SA Deposit.

**REPUBLIC OF BELARUS
GLOBAL ENVIRONMENTAL FACILITY OZONE DEPLETING SUBSTANCES
PHASEOUT PROJECT**

TIMETABLE OF KEY PROJECT PROCESSING EVENTS

- | | | |
|-----|------------------------------------|---|
| 1. | Time to prepare: | 24 months |
| 2. | Prepared by: | Karin Shepardson (EC4NR), team leader
Kathleen Stephenson (EC4NR), task manager (prior to 1/96)
Jennifer Allen (consultant), deputy team leader
Rick Cooke (consultant), technical specialist
COWI Consult (Danish EPA Consultants) |
| 3. | First Presentation to Bank (IPID): | February, 1996 |
| 4. | Pre-Appraisal Mission Departure: | June 1996 |
| 5. | Final EPS to GEF Council: | March 1996 |
| 6. | GEF Council Approval: | April 1996 |
| 7. | Appraisal Mission Departure: | December 1996 |
| 8. | Negotiations: | February, 1997 |
| 9. | Board Approval: | March, 1997 |
| 10. | Planned Date of Effectiveness: | April, 1997 |
| 11. | Expected Date of Completion: | February 29, 2000 |
| 12. | Project Identification Number: | BY-GE-44729 |

SCHEDULE D

REPUBLIC OF BELARUS
 GLOBAL ENVIRONMENTAL FACILITY OZONE DEPLETING SUBSTANCES
 PHASEOUT PROJECT

STATUS OF BANK GROUP OPERATIONS IN BELARUS					
A. STATEMENT OF IBRD LOANS					
(as of February 28, 1997)					
				Amount in US \$ million	
Loan No.	Fiscal Year	Borrower	Purpose	Bank	Undisbursed
2 loans closed				125.16	0.80
3741-BY	1994	Republic of Belarus	Forestry Development	41.9	39.83
Total Number of loans = 1				41.9	39.83
Total				167.06	
of which repaid				0.0	
Total held by the Bank				167.06	
Amount sold		0.0			
of which repaid		0.0			
Total undisbursed					40.64

PART II
TECHNICAL ANNEXES

ANNEX I
PROJECT IMPLEMENTATION PLAN

Project Implementation Plan

The Project

1. The project's main objective is to assist Belarus with the rapid phaseout of ODS consumption in a manner consistent with international efforts and within internationally agreed timeframes. The project targets priority consumption phaseout activities in the refrigeration and solvent sectors. It also provides modest technical assistance at both the institutional and enterprise levels to facilitate implementation of the ODS Phaseout Country Program, and technology transfer for phaseout in the fire protection sector. It is structured as a framework project consisting of a series of six enterprise-specific technology conversion investment sub-projects and two technical assistance sub-components. The technology conversion component consists of one sub-project in the refrigeration manufacturing sector, one sub-project in the industrial/commercial refrigeration servicing sector, and four sub-projects in the solvent sector. The technical assistance component consists of two sub-components which address the transfer of technology and training for conversion in the fire protection sector and institutional strengthening.

Implementation Arrangements

2. The Government has assigned the Ministry of Natural Resources and Environmental Protection (MNREP) as executing agency for the project and overall implementation of the ODS Phaseout Country Program. Within MNREP, project implementation responsibility has been assigned to the Ozone Office. Financial support towards its establishment has been given through a GEF Project Preparation Advance (PPA), and the Ozone Office would receive subsequent support through the project grant. The Office is staffed by three full time personnel recruited from and paid for by MNREP and BSRC "Ecology", and two independent full-time local staff specializing in accounting and procurement who would to be funded under the project. As a permanent structure within the Ministry, the Ozone Office has overall responsibility for ODS matters including: (a) acting as secretariat to the Interagency Commission which oversees the ODS Phaseout Country Program; (b) coordinating implementation and updating the Country Program; (c) communicating with the Executive Committee of the Montreal Protocol; (d) collecting and reporting consumption, trade and recycling information to the Government and international bodies; and (e) preparing legislative and regulatory initiatives such as ODS import licensing, sector specific bans and sanctions for non-compliance with phaseout schedules.

3. Project-specific responsibilities of the Ozone Office as a project implementation unit include: (a) appointment, communication with, and supervision of an international Financial Agent who would administer disbursements for the project; (b) set-up and management of a project accounting system; (c) appointment and supervision of an international procurement agent to provide procurement guidance to beneficiary enterprises in accordance with World Bank guidelines; (d) making arrangements for annual audits; (e) coordination of environmental approvals required for sub-project implementation; (f) monitoring of beneficiary enterprise financial performance on a quarterly basis; (g) managing all communications with the World Bank, including obtaining all permissions and no-objections required on the project; and (h) submission of progress reports (initially monthly and to become quarterly at the direction of the

Bank) and a completion report to the Bank. An overall implementation schedule for the project is attached.

4. A financial agent (foreign bank) acceptable to the World Bank, would be appointed to handle the management and disbursement of funds including: (a) holding and managing a Special Account (SA) for project funds on behalf of the Ozone Office; (b) administering project disbursements through the World Bank and the SA, including payments under approved contracts, and funding allocation to technical assistance components; and (c) monitoring all sub-project expenditures.

5. The need for an international procurement agent during project implementation has been minimized through the use of an international procurement specialist during project preparation and by including the procurement specialist in project appraisal. The Ozone Office would have a full time local procurement specialist to process procurement requests and to act as an intermediary between the Bank and beneficiary enterprises. A budget would be set aside to contract with an international procurement specialist as required throughout project implementation. The World Bank resident mission would also provide back-up procurement advice on request and inform project staff of any World Bank procurement training courses in the region.

6. The responsibilities of each enterprise include: (a) acting as Purchaser under the procurement contracts; (b) preparing project implementation and procurement plans and specifications; (c) finalizing bidding documents; (d) undertaking tender evaluation; (e) placing contracts; (f) monitoring delivery and installation of equipment and inspection of goods; (g) maintaining contract and payment documentation; and (h) providing information on the status of project implementation to the Ozone Office on a regular basis.

7. An umbrella grant agreement between the Bank as GEF Implementing Agency and MNREP defines the overall framework by which GEF grant funds can be disbursed to enterprise specific sub-projects. Individual sub-projects would be covered by sub-grant agreements between MNREP and the participating enterprises. Both the grant agreement and sub-grant agreements would be patterned after those utilized for the Ozone Project's Trust Fund. Sub-projects have been approved in accordance with the Bank's trustee obligations to GEF and revisions to individual sub-projects may require prior approval by GEF.

8. The project grant agreement establishes government responsibility for recovery of equipment allocated to an enterprise if the investment is lost through enterprise insolvency during the project implementation timeframe. Also, funds may be withdrawn from an enterprise sub-project at the Bank's discretion at any time during implementation. Withdrawn funds would be eligible for reallocation to an alternative Belarus ODS phaseout activity under the approval of the World Bank and GEF Council as necessary. Project processing procedures would parallel those used for Multilateral Fund projects, including the utilization of the technical review capability established for these projects.

9. As part of the development of the Country Program for ODS Phaseout, MNREP undertook consultations with a broad spectrum of enterprises and interested parties: other ministries (including Industry, Economics, and Finance), NGOs, industry associations and others. Enterprises were given the opportunity to participate in the project as long as they could provide the necessary data for project staff to evaluate their financial viability, technological capabilities and eligibility for financial assistance.

Procurement

10. Procurement of goods and services would be made in accordance with "Guidelines for Procurement under IBRD Loans and IDA Credits" (January 1995, as amended January and August, 1996). The beneficiary enterprises, with the assistance of a full time local procurement specialist in the Ozone Office, would have overall responsibility for procurement. An international procurement specialist would be contracted on an as-needed basis to provide further assistance as and when necessary. To meet the Montreal Protocol requirement of ODS phaseout, enterprises would have to purchase and install equipment financed under the project as soon as possible. Thus, the procurement procedures have been designed with special attention to ensure expediency during project implementation. A summary of goods to be procured is shown in Table A1.1. The proposed procurement procedures were reviewed with the government during appraisal.

Table A1.1 Summary of Procurement Arrangements [in US mln \$'s]					
Project Element	Procurement Method				Total
	LIB	ICB	Other	Not Financed by GEF	
Goods and Works	4.7 (4.0)	0.4 (0.4)	2.3 (2.0)	7.3 (0.0)	14.7 (6.4)
Technical Assistance and Training	- (-)	- (-)	0.2 (0.2)	0.3 (0.0)	0.5 (0.2)
Operating Costs/Processing Fee	- (-)	- (-)	0.3 (0.3)	0.2 (0.0)	0.5 (0.3)
TOTAL	4.7 (4.0)	0.4 (0.4)	3.2 (2.5)	7.8 (0.0)	15.7 (6.9)
Other includes: US \$2.2 million for International Shopping US \$25 thousand for National Shopping US \$200 thousand for consultant services US \$300 thousand for operating costs and sub-grant processing fee					
Figures in parenthesis are respective amounts financed by GEF					

11. Goods. To the extent possible, contracts for goods have been grouped to allow for the procurement of larger packages. Each enterprise would procure its own equipment with assistance and supervision from the Ozone Office and an international procurement specialist as necessary. The equipment is expected to be for: (a) foaming machines and associated ancillary equipment; (b) aqueous cleaning systems; (c) refrigerant extraction, storage, and charging

equipment; (d) up-grading safety systems and testing laboratories; (e) replacement of in-line circuitboard developing processes; (f) limited office equipment; and (g) training by suppliers to the workers in beneficiary enterprises acquiring new equipment.

12. Contracts larger than US \$400,000 with an aggregate amount of US \$0.4 million would be procured on the basis of the Bank's International Competitive Bidding (ICB). An exception is one Limited International Bidding (LIB) package (US\$ 4.6 million) for foaming equipment where a limited number of suppliers able to meet safety standards were identified. This LIB package is consistent with what has been recommended for similar ODS Phaseout Projects in the Region. Contracts between US \$50,000 and US \$400,000, with an aggregate amount of US \$2.2 million would be procured through International Shopping (IS) based on comparing price quotations from at least three suppliers from two countries. Such an arrangement would allow enterprises to procure the goods in a timely manner and maintain the ODS phase-out schedule required under international commitments (by January, 2000). National Shopping (NS) could be applied for contracts less than US \$50,000 up to an aggregate of about US \$25,000 based on at least three price quotations from local suppliers. No direct contracting would be required. Operating costs and sub-grant processing fees for a total of US \$300,000 would be reimbursed through a direct payment to the beneficiary enterprise and the Ozone office.

13. Consultant Services. The project involves consultant services for: (a) engineering support for equipment investments (training, installation, environmental permitting); and (b) technical assistance to the Ozone Office. The total value of services is estimated to be US \$200 thousand. Engineering and technical support for sub-projects would require contracts of less than US \$50,000 each, for a total of US \$100,000. Technical assistance provided to the Ozone office (US \$100,000) would involve consultant services in such areas as procurement, accounting, regulatory program development, and legal services. The hiring of consultant services, both for individuals and consulting firms, would be in accordance with the "Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency" (August, 1981).

14. Review by the Bank. All ICB and LIB contracts, and the first three international shopping contracts, regardless of their value, and all contracts for consulting services valued in excess of US \$100,000 for firms and US \$50,000 for individual consultants, would be subject to prior review and approval by the Bank. Contracts of a lesser amount would be subject to ex-post review by the Bank. Terms of Reference for all consultant contracts would be reviewed in advance by the Bank. Procurement information would be included in the project progress reports to be prepared by the Ozone Office.

Disbursement

15. The project is expected to be disbursed in less than three years, and the funds would be channelled through an SA established in a Bank-approved financial institution (Financial Agent), or paid directly to a supplier by the World Bank. Funds would be disbursed against: (a) 100% cost of foreign expenditure, ex-factory cost of domestically-manufactured goods, technical assistance including service associated with supply of goods, and consulting services; and (b) 75% of expenditures on goods procured locally. Disbursements to the Ozone Office for sub-grant processing would be limited to 3% of eligible disbursements for each invoice.

Allocations of funds to disbursement categories and an estimated schedule are provided in Table A1.2 and A1.3 (reproduced below).

Table A1.2 Disbursement Categories (in US million \$)		
Category	Amount	Percent of Expenditure Eligible for Financing
Goods and services under subprojects	6.7	100% of foreign expenditure 100% of local expenditure (ex-factory costs) 75% of goods procured locally 100% of consultant services
Sub-grant processing fee	0.2	100%
Total	6.9	-----

Table A1.3 Estimated Disbursement Schedule (in US \$ million)			
	FY 97	FY 98	FY 99
Fiscal Year	0.0	5.0	1.9
Cumulative	0.0	5.0	6.9

16. Establishment of the SA would be under the terms and conditions satisfactory to the Bank. After effectiveness and upon the recipient's request, the Bank would make an initial deposit of US \$400,000 which would be increased up to US \$690,000 when disbursements reach US \$1.5 million (SDR equivalent \$1.1 million). Requests for replenishment of the SA would be made on a quarterly basis, or when the balance of the SA is at one half of the deposit, whichever occurs first. In addition to the evidence of payments, each replenishment application would be supported by monthly statements of the SA which would be reconciled by the Ozone Office. Project expenditures would be monitored by the Financial Agent, which would provide monthly statements to the Ozone Office. Payments would be made by the Financial Agent following the submission of requests for payment by the Ozone Office on behalf of the beneficiary enterprises.

17. Except for contracts requiring prior review, disbursement would be made against certified statements of expenditure for which detailed documentation would be available for the required audit, and also for review by Bank supervision missions. The Bank would accept requests for direct payment to the supplier of goods or services for an amount not less than 20% of the SA Deposit.

Monitoring and evaluation

18. The completion date for the grant is February 29, 2000. The Ozone Office would have overall responsibility for monitoring project progress. It would prepare monthly progress reports summarizing project implementation, procurement, and disbursement, and would highlight issues and follow-up actions to ensure that the project remains on schedule. The reporting requirement may be revised to a quarterly basis as significant progress has been made, at the discretion of the Bank. Ozone Office responsibilities would also include monitoring and enforcement of safety regulations and procedures as agreed prior to sub-project implementation.

19. The Ozone Office would be responsible for arranging for an annual financial audit (in accordance with the Financial Reporting and Auditing Handbook, January, 1995) and preparation of a Implementation Completion Report within six months of the end of project implementation. The Ozone Office would also be responsible for monitoring the financial performance of beneficiary enterprises on a quarterly basis, including updates of balance sheets and income statements, and other factors relating to enterprise performance in World Bank progress reports. Sub-grant agreements would require enterprises to submit annually audited financial statements, and agree to periodic monitoring of financial performance. The World Bank would maintain the right to stop disbursements or drop any enterprise sub-project during project implementation if viability becomes uncertain. Supervision by a Bank team would take place on a semi-annual basis following submission of the first progress report of the Ozone Office. Supervision missions would include the Bank team leader (or an authorized representative), and a financial or ODS technical specialist as needed. Proposed project performance monitoring indicators for the project would be included in the progress reports, and are presented in Table A1.4.

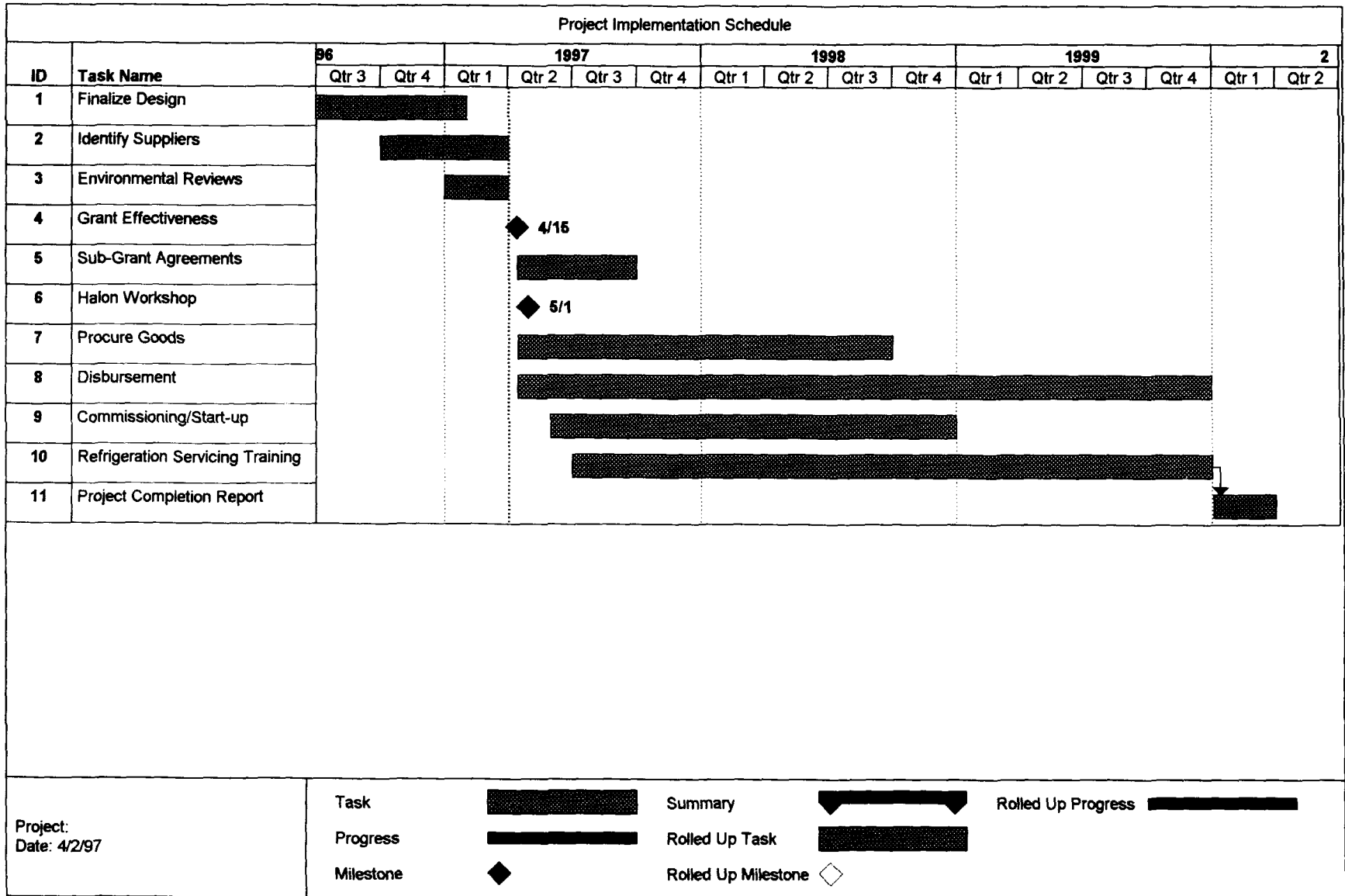
20. Monitoring ODS phaseout and consumption in Belarus as required for reporting to the Parties of the Montreal Protocol, has in the past, and would continue to be carried out by the Institute Ecology, which is subordinate to MNREP. The status of ODS consumption would be reported to the Bank and GEF when required. A disposition plan for retiring ODS dedicated equipment will be included in each sub-project subgrant agreement to help ensure that project objectives are met.

Performance Indicators

21. Table A1.4 provides performance indicators for the project.

**Table A1.4
Belarus ODS Phaseout Project
Environmental Performance Indicators**

Objectives	Input (Resources Provided for the Project Activities)	Output (Goods & Services produced by project)	Outcome (Direct Outcome)	Risks (The outcome is dependent on)	Development Impact
To reduce the consumption of Ozone Depleting Substances.	GEF Grant (\$US 6.9 million) Beneficiary enterprises (\$US 8.8million) Government staff resources (MNREP) and office accommodations.	Training/ policy support for implementation of the ODS Phaseout Country Program. Retrofitting/ substitution of technologies that consume ODS. Training refrigerant servicing technicians in recycling and materials handling. (Number of people trained)	Reduced ODS consumption in various sectors (from 1994 levels.) (a) Refrigeration : 600 tons (b) Solvent: 90 tons (c) Halon: 18.6 tons (extends beyond project timeframe)	Adequate long-term support for new technologies. Low increase in incremental operating costs.	Reduce the rate of thinning of the atmosphere's ozone layer. Reduce health impacts from exposure to ultraviolet radiation.
To reduce the economic impact to enterprises dependent on ozone depleting substances, when an international phaseout of production occurs.		Training for fire protection sector in use of non-ODS technologies.	Conversion of industry to the use of non-ODS materials.	Investing in enterprises operating in a transitional economy with a higher risk of insolvency.	Increase international Competitiveness of beneficiary enterprises.
To assist the Government of Belarus in meeting its international obligations.			Fulfill International obligations to phaseout consumption of ODS materials.	Continued support of international agreements by the Government of Belarus.	Increased cooperation on achieving international environmental objectives.



ANNEX II
SUBPROJECT DESCRIPTIONS

SUB-PROJECT SUMMARY

COUNTRY:	Republic of Belarus		
SUB-PROJECT TITLE:	Atlant: Phaseout of CFC-11 usage and development of CFC-12 recovery and recycling capacity for domestic refrigeration servicing system		
LOCATION:	Minsk		
SECTOR:	Domestic Refrigeration		
ODS USE IN SECTOR:	Foam Insulation: 282 MT CFC-11 Domestic Refrigeration Servicing: 62 MT CFC-12 Total: 344 MT (Based on Average 1992, 1993, 1994 Consumption)		
PROJECT IMPACT:	344 MT (Based on Average 1992, 1993, 1994 Consumption)		
PROJECT DURATION:	2.5 Years: Foam Conversion:	June 1997 to January 1998	
	Refrigeration Servicing:	June 1997 to June 1998	
PROJECT ECONOMIC LIFE:	10 Years		
SUB-PROJECT COSTS:	Incremental Capital Costs	US\$ 9,750,790	
	Contingency (10%) on remaining capital expenditures	US\$ 552,993	
	NPV Incremental Operating Cost (Savings)	0	
	Total Project Cost (Net of Savings)	US\$ 10,303,783	
FINANCING:	Global Environment Facility	US\$ 4,324,246	
	Atlant	US\$ 5,979,537	
COST EFFECTIVENESS:	US\$ 9.06/kg ODP		
IMPLEMENTING ENTERPRISE:	Atlant		
GEF IMPLEMENTING AGENCY:	The World Bank		
COORDINATING NATIONAL BODY:	Ministry of Natural Resources and Environmental Protection (MNREP)		
STAP/OORG REVIEW:	The foam insulation portion of the sub-project was reviewed by Mr. G.M.F. Jeffs and approved in revised form. The refrigeration servicing portion of the sub-project was reviewed by Mr. L.J. M. Kuijpers and approved subject to justification of some servicing equipment, which was subsequently withdrawn.		

Enterprise background

Atlant, a closed joint stock company, is the only manufacturer of domestic refrigerators in Belarus. The enterprise was founded in 1993 with the merger of the Minsk Refrigerator Factory and the Baranovitchi Machine Construction Plant. In 1996, Atlant employed a total of 10,000 workers, 6500 of which work at its refrigerator and freezer production plant in Minsk, and 3500 at its

compressor plant in Baranovitchi. Currently, the enterprise produces seven models of refrigerators and freezers and nine models of hermetic compressors.

Project Description

This sub-project would complete the phaseout of ODS in Atlant's operations, replacing CFC-11 with cyclopentane and developing recovery and recycling capacity for domestic refrigeration servicing. The CFC-11 phaseout component would involve the installation of new foam insulation blowing lines and the provision of supporting storage, production, testing and safety infrastructure. The enterprise will provide a letter of assurance that all safety measures have been addressed in the conversion process. The servicing component will provide necessary equipment and training within Atlant's internal and contracted service organization for the recovery and recycling of CFC-12 refrigerants within the national domestic refrigeration sector. Servicing capacity for HFC-134a refrigerants has been excluded from the sub-project. The project would phase out a total of 263.5 tons of ODS.

The sub-project would be implemented in two phases as follows:

Phase I

- product engineering and development (already implemented by Atlant -- no funding requested)
- installation of foaming line for cabinets (already implemented -- no funding requested)
- installation of 3 foaming lines for doors and smaller parts (funding requested for lines 2 and 3)
- supervision by supplier of installation/commissioning and operation

Phase II

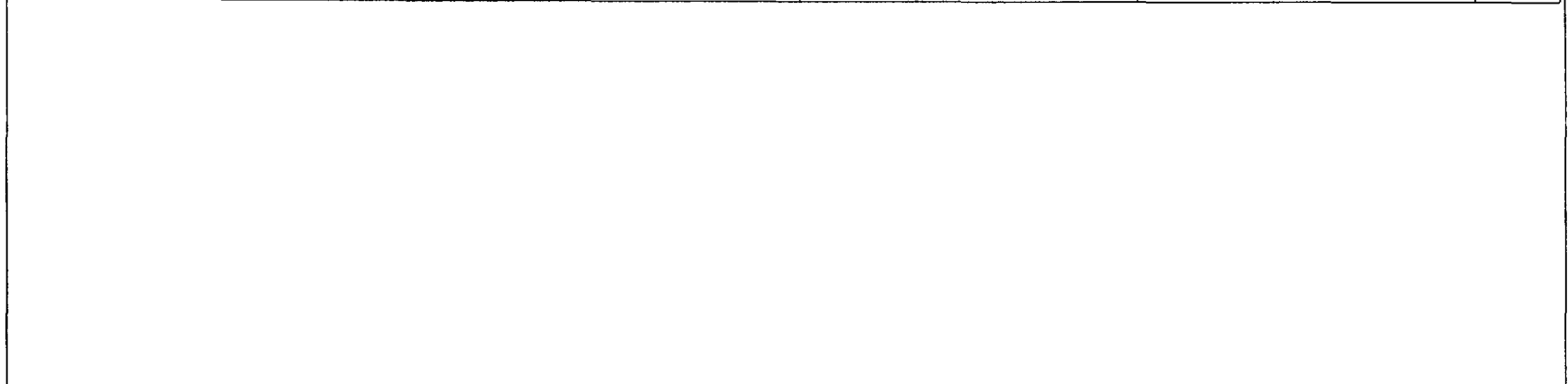
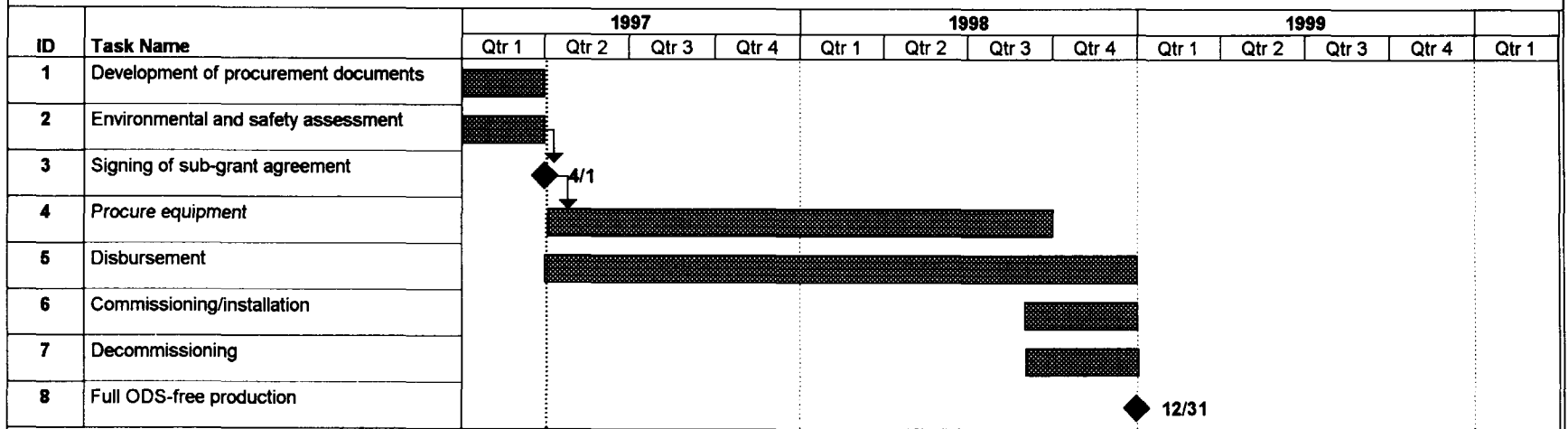
- full production with cyclopentane -- (no funding requested for incremental operating costs)

As indicated in the attached implementation schedule, the conversion activities are expected to be completed by the end of 1998.

Financing Plan

The total sub-project cost is US\$ 10,303,783. A GEF grant of US\$ 4,324,246 has been allocated to this sub-project, with the remaining US\$ 5,979,537 to be financed by the enterprise.

**Figure A2.1
Belarus ODS Phaseout Project
Atlant Sub-project Schedule**



Date: 4/2/97	Task	█	Summary	▾	Rolled Up Progress	█
	Progress	█	Rolled Up Task	█		
	Milestone	◆	Rolled Up Milestone	◇		

SUB-PROJECT SUMMARY

COUNTRY:	Republic of Belarus	
SUB-PROJECT TITLE:	Refrigeration Servicing: Phaseout of ODS in commercial, industrial, and transportation refrigeration servicing	
LOCATION:	Minsk and regional servicing locations	
SECTOR:	Servicing of refrigeration appliances	
ODS USE IN SECTOR:	297 MT CFC-12 (1994)	
PROJECT IMPACT:	256 MT CFC-12 (1999)	
PROJECT DURATION:	3 years	
PROJECT ECONOMIC LIFE:	10 years	
SUB-PROJECT COSTS:	Incremental Capital Costs	US\$ 1,491,315
	Contingency (10%) on remaining capital expenditures	US\$ 149,132
	NPV Incremental Operating Cost (Savings)	US\$ 115,740
	Total Project Cost (Net of Savings)	US\$ 1,756,187
FINANCING:	Global Environment Facility	US\$ 1,478,197
	Beltorgprogress and Ecology	US\$ 277,990
COST EFFECTIVENESS:	US\$ 6.25 kg ODP	
IMPLEMENTING ENTERPRISE:	BSRC Ecology, Beltorgprogress	
GEF IMPLEMENTING AGENCY:	The World Bank	
COORDINATING NATIONAL BODY:	Ministry of Natural Resources and Environmental Protection (MNREP)	
STAP/OORG REVIEW:	This subproject was reviewed by Mr. L.J.M. Kuijpers and approved subject to modification in project scope. These modifications have been made. Several implementation modifications were proposed at appraisal, and therefore a supplementary technical review is anticipated prior to sub-project effectiveness.	

Sector Background

In 1994, the refrigeration servicing sector in Belarus consumed 341.7 MT CFC-12, encompassing the domestic, commercial, industrial, and transport refrigeration sub-sectors.

Servicing of commercial refrigerating appliances is carried out by two organizations, Beltorgprogress in the urban areas and Belcorpsajuz in the rural areas. Beltorgprogress has seven regional service centers with approximately 500 refrigeration technicians, and Belcorpsajuz is

approximately 20% of the size of Beltorgprogress. Servicing is either performed on site or, if necessary, the compressor or condensing unit is taken to a service center for overhaul.

The servicing of industrial refrigeration appliances is carried out by the organization Selhoztehnika, by local servicing companies, and by consumers. Servicing of refrigerated trucks is done by three service companies located in Minsk, Brest, and Mogilev, and is overseen by the organization ATEP-5. Railcar refrigeration is serviced by two companies, one located in Brest and one in Molodechno.

Servicing of domestic refrigerators and freezers is implemented by Atlant's service department and 120 other service enterprises, all of which have a service contract with Atlant. All training for domestic servicing of non-ODS appliances will be implemented by Atlant and is included under their sub-project.

Enterprise Background

The enterprise Beltorgprogress is proposed as the primary implementing enterprise for this sub-project. Beltorgprogress is a state-owned enterprise reporting to the Ministry of Trade. Beltorgprogress has six subsidiary enterprises, including Torgtehnika in Minsk, four regional integrated plants in Brest, Gomel, Mogilev, and Vitebsk, and a pilot plant in Gomel. Beltorgprogress would be responsible for the investment component of the sub-project.

The Belarusian Research Centre Ecology (BSRC Ecology), an arm of the Ministry of Natural Resources and Environmental Protection, would be the second implementing agency of this sub-project, with primary responsibility for coordination of the training component. BSRC Ecology conducts a variety of environmental monitoring activities and was actively involved in the development of the Belarus Country Program for Phaseout of Ozone Depleting Substances.

Project Description

This sub-project addresses the development of servicing capability for commercial, industrial, and transport refrigeration equipment in Belarus. It involves training of service technicians in leak detection and repair, handling of non-ODS refrigerants, retrofitting existing appliances, and methods of recovery, recycling, and reclamation of CFC-12. Industrial service organizations would be supplied with necessary equipment, such as leak detectors, recovery units, acid testing kits and resources to develop centralized recycling and storage of recovered refrigerants. Charging equipment for replacement substances has been excluded from the grant.

The project comprises two main components:

Component I: Re-education of service technicians

Approximately 1000 service technicians would be trained in servicing of ODS-free appliances. Investments related to this component would be for the establishment of training facilities and for the development of a compendium for service technicians.

Component II: Equipment Distribution and Establishment of Recycling and Storage Facilities

Service technicians would be provided with the necessary equipment to service ODS-free appliances, such as recovery units and containers, acid testing kits, portable leak detectors, portable soldering units, and other tools. Testing facilities would be retrofitted, a refrigerant recycling scheme would be developed, and a central storage facility for heavy contaminated refrigerants would be established.

As indicated in the attached implementation schedule, these activities are expected to be completed by 2000.

Financing Plan

The total sub-project cost is US\$ 1,756,187. A GEF grant of US\$ 1,478,197 has been allocated for this sub-project, with the remaining US\$ 277,990 to be covered by Beltorgprogress and BSRC Ecology.

service.sum

**Table A2.2
Belarus ODS Phaseout Project
Refrigeration Servicing Sub-project Schedule**

ID	Task Name	1997				1998				1999				Qtr 1
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	
1	Information collection		■											
2	Sub-grant agreement			◆ 7/1										
3	Disbursement													
4	Establishment of training facilities			■										
5	Procurement of equipment													
6	Establishment of recycling centers													
7	Establishment of storage facility													
8	Re-education of technicians													

Date: 4/2/97

Task



Summary



Rolled Up Progress



Progress



Rolled Up Task



Milestone



Rolled Up Milestone



SUB-PROJECT SUMMARY

COUNTRY:	Republic of Belarus	
SUB-PROJECT TITLE:	Belvar: Phaseout of CFC-113 usage	
LOCATION:	Minsk	
SECTOR:	Solvent	
ODS USE IN SECTOR:	42 MT CFC-113, 87 MT methylchloroform (TCA), 2 MT CTC (1994)	
PROJECT IMPACT:	6.2 MT CFC-113 (1994)	
PROJECT DURATION:	9 months	
PROJECT ECONOMIC LIFE:	10 years	
SUB-PROJECT COSTS:	Incremental Capital Costs	US\$ 265,540
	Contingency (10%) on remaining capital expenditures	US\$ 26,554
	NPV Incremental Operating Cost (Savings)	US\$ 17,018
	Total Project Cost (Net of Savings)	US\$ 309,112
FINANCING:	Global Environment Facility	US\$ 255,640
	Belvar	US\$ 53,472
COST EFFECTIVENESS:	US\$ 53.25 kg/ODP	
IMPLEMENTING ENTERPRISE:	Belvar	
GEF IMPLEMENTING AGENCY:	The World Bank	
COORDINATING NATIONAL BODY:	Ministry of Natural Resources and Environmental Protection (MNREP)	
STAP/OORG REVIEW:	This subproject was reviewed by Mr. B.H. Baxter, and approved in its present form	

Enterprise Background

Belvar is a state owned enterprise, manufacturing radio devices, dosimeter equipment, and related systems. In 1996, Belvar employed 4920 people in its Minsk plant, down from 7000 in 1994.

Project description

This sub-project would eliminate the enterprise's use of CFC-113 in de-preservation, cleaning and degreasing of printed circuit board assemblies. Currently, CFC-113 is used to remove grease, wax, resin, micro-resin particles, and polishing slurry from the circuit boards. This system would be replaced by a high volume aqueous cleaning process and low solid content fluxes. This conversion requires the

installation of a new wave soldering line, a high volume aqueous cleaning line, a deionization system, wastewater pretreatment improvements, and drying equipment. Upgrading of plant ventilation-systems and training are also included under the sub-project. A total of 6.2 tons of CFC-113 would be phased out.

Implementation Schedule

The project would be implemented in three phases:

Phase I

- evaluation of alternative technologies and cleaning solutions
- selection and placement of equipment and materials

Phase II

- dismantling and removal of equipment
- delivery and installation of new equipment
- testing of new equipment
- training

Phase III

- initiation of new cleaning procedures
- monitoring of performance for new equipment

As indicated in the attached implementation schedule, the conversion activities are expected to be completed by October 1997.

Financing Plan

Total sub-project cost is US\$ 309,112. A GEF grant of US\$ 255,640 has been allocated to this sub-project, with the remaining US\$ 53,472 to be financed by the enterprise.

**Table A2.3
Belarus ODS Phaseout Project
Belvar Sub-project Schedule**

ID	Task Name	1997				1998				1999				2000			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1	Development of procurement documents		█														
2	Environmental and safety assessment		█														
3	Signing of sub-grant agreement			◆ 7/1													
4	Procure equipment				█												
5	Disbursement				█												
6	Commissioning/installation					█											
7	Decommissioning					█											
8	Full ODS-free production																◆ 1/1

Date: 4/2/97

Task		Summary		Rolled Up Progress	
Progress		Rolled Up Task			
Milestone	◆	Rolled Up Milestone	◇		

SUB-PROJECT SUMMARY

COUNTRY:	Republic of Belarus	
SUB-PROJECT TITLE:	Kamerton: Phaseout of CFC-113 usage	
LOCATION:	Pinsk	
SECTOR:	Solvents	
ODS USE IN SECTOR:	42 MT CFC-113, 87 MT methylchloroform (TCA), 2 MT CTC (1994)	
PROJECT IMPACT:	3 MT CFC-113 (1994)	
PROJECT DURATION:	9 months	
PROJECT ECONOMIC LIFE:	4 years	
SUB-PROJECT COSTS:	Incremental Capital Costs	US\$ 123,460
	Contingency (10%) on remaining capital expenditures	US\$ 10,530
	NPV Incremental Operating Cost (Savings)	US\$ 56,696
	Total Project Cost (Net of Savings)	US\$ 190,682
FINANCING:	Global Environment Facility	US\$ 67,100
	Kamerton	US\$ 123,582
COST EFFECTIVENESS:	US\$ 27.95/kg ODP	
IMPLEMENTING ENTERPRISE:	Kamerton	
GEF IMPLEMENTING AGENCY:	The World Bank	
COORDINATING NATIONAL BODY:	The Ministry of Natural Resources and Environmental Protection (MNREP)	
STAP/OORG REVIEW:	This subproject was reviewed by Mr. B.H. Baxter, and approved in its present form	

Enterprise Background

Kamerton, a subsidiary of the Integral research and production corporation, produces wafers for the manufacture of semiconductors, and electronic products such as watches, electronic games, and medical devices (blood pressure meters). The enterprise is state-owned, with a staff of 1800 (1996).

CFC-113 is used as a cleaning agent to remove synthetic resin-based wax, polishing slurry, and finger prints after the final polishing of the silicon wafers. Kamerton obtains its supply of CFC-113 from the Krion plant Kirovo-Cheptsk in Russia; the enterprise consumed 3.2 tons of CFC-113 in 1994.

Project Description

This sub-project would eliminate the use of CFC-113 for removing grease, wax, resin, micropowder particles, and polishing slurry from monocrystal silicon wafers after the chemical-mechanical polishing process. This cleaning process would be replaced by a multi-stage acid-alkaline technology using ammonia-peroxide, nitric acid, and deionized water.

The proposed process to clean the wafers includes the following steps:

- double sided water cleaning with ammonia peroxide
- water treatment in nitric acid
- ammonia peroxide cleaning
- hydro mechanical cleaning
- drying

To implement this process, alternative resin free waxes would be introduced, requiring the installation of a new wax application machine. Water treatment equipment will also be installed to ensure sufficient water quality for the cleaning process as well as ensuring adequate processing of wastewater. The ventilation system will also be modified to ensure worker safety.

Implementation Schedule

Phase I

- preparation of the specifications for the alternative equipment and materials
- evaluation of the need for changes in the existing processes
- evaluation of material specifications and consumption
- environmental impact assessment
- assessment of requirements for waste management

Phase II

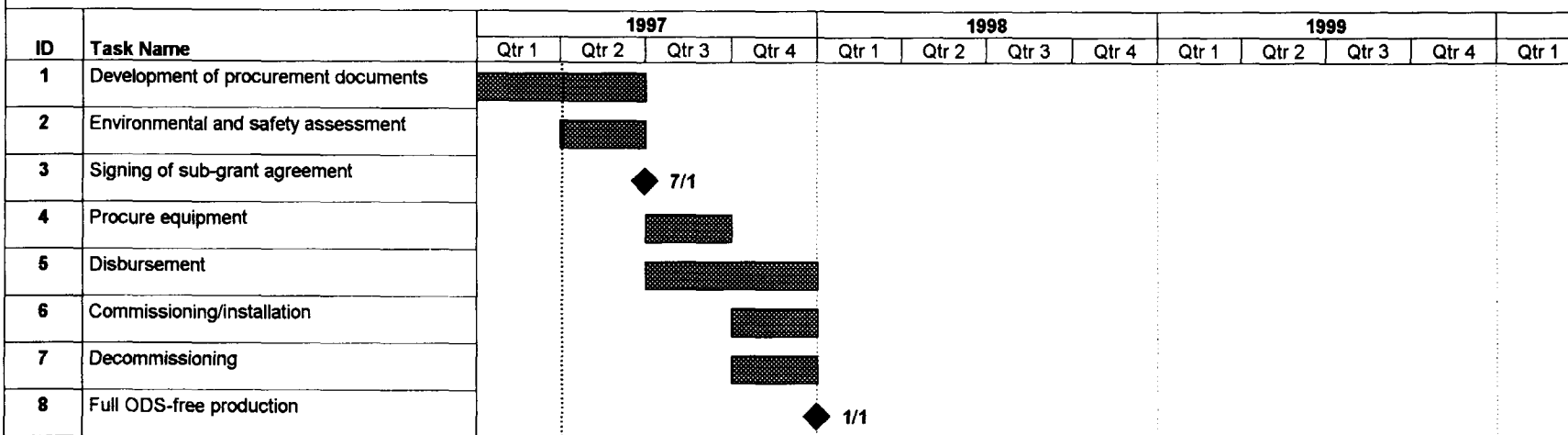
- purchase and installation of new equipment and materials
- modification of existing processes to be compatible to the new materials
- modification of waste water management systems
- training of workers to operate the new processes
- evaluation of the performance and reliability of the new processes

As indicated in the attached implementation schedule, the conversion activities are expected to be completed by the end of 1997.

Financing Plan

Total sub-project cost is US\$ 190,682. A GEF grant of US\$ 67,100 has been allocated to this sub-project, with the remaining US\$ 123,582 to be financed by the enterprise.

**Table A2.4
Belarus ODS Phaseout Project
Kamerton Sub-project Schedule**



Date: 4/2/97



SUB-PROJECT SUMMARY

COUNTRY: Republic of Belarus

SUB-PROJECT TITLE: Minsk Computer: Phaseout of CFC-113 and methylchloroform (TCA) usage

LOCATION: Minsk

SECTOR: Solvents

ODS USE IN SECTOR: 42 MT CFC-113, 87 MT methylchloroform (TCA), 2 MT CTC (1994)

PROJECT IMPACT: 6 MT CFC-113 (1994), 43 MT TCA (1995)

PROJECT DURATION: 9 months

PROJECT ECONOMIC LIFE: 10 years

SUB-PROJECT COSTS:

Incremental Capital Costs	US\$ 795,000
Contingency	US\$ 79,500
NPV Incremental Operating Cost (Savings)	US\$ 15,123
Total Project Cost (Net of Savings)	US\$ 889,623

FINANCING:

Global Environment Facility	US\$ 260,000
Minsk Computer	US\$ 629,623

COST EFFECTIVENESS:

US\$ 20.80/kg ODP (CFC-113)
US\$ 37.17/kg ODP (TCA)

IMPLEMENTING ENTERPRISE: Minsk Computer

GEF IMPLEMENTING AGENCY: The World Bank

COORDINATING NATIONAL BODY: Ministry of Natural Resources and Environmental Protection

STAP/OORG REVIEW: The CFC-113 part of this subproject was reviewed by Mr. B.H. Baxter, and approved in its revised form. The TCA component was incorporated into the subproject at appraisal, and has received final OORG approval from Mr. Joe Felty.

Enterprise Background

Minsk Computer is a state-owned manufacturer of electronic equipment, including computers, personal computers, telephone exchanges, and consumer light appliances. The company employed approximately 8000 staff in 1996. The company currently uses CFC-113 vapor deflusing in two facilities to clean printed circuit board assemblies. Consumption of CFC-113 was approximately 6

metric tonnes in 1994. The enterprise also uses 43 tons of methylchloroform (TCA) annually in photoresist development in the process of producing printed circuit boards for electronic products.

Project Description

CFC-113 Phaseout

The sub-project would eliminate the use of CFC-113 in the cleaning of assembled printed circuit boards used in the manufacture of computers, personal computers, telephone exchanges, and light appliances. Minsk Computer would eliminate its usage of CFC-113 by replacing the existing CFC-113 vapor defluxers with two different technologies. No-clean technology would be used for the majority of products, and the high solid content, aggressive flux soldering process would be replaced with a low solid content, non-aggressive flux requiring a new wave soldering machine. For products requiring cleaning, an aqueous in-line cleaning machine, with a deionized water production unit and waste water treatment unit, would be used. Soldering of products requiring cleaning would use a water-soluble flux.

The component would be implemented in three phases:

Phase I

- evaluation of alternative technologies and cleaning solutions
- selection and placement of equipment and materials

Phase II

- dismantling and removal of equipment
- delivery and installation of new equipment
- testing of new equipment
- training

Phase III

- initiation of new cleaning procedures
- monitoring of performance for new equipment

TCA Phaseout

This component would eliminate Minsk Computer's use of methylchloroform (TCA) in photoresist development. The enterprise will replace the current process with a water/alkaline process, dismantling the developing and stripping machine in existing circuit board manufacturing lines and replacing it with two new lines, one for double-sided board production, the other for multi-layer board production. All existing developing and stripping lines will be dismantled except for one surface preparation etching unit considered suitable for the new process. Investments would be made in process design, developer equipment, retrofitting the existing wastewater treatment systems with filters and reverse osmosis water recycling systems, upgrading of ventilation systems, and training.

The component would be implemented in five stages as follows:

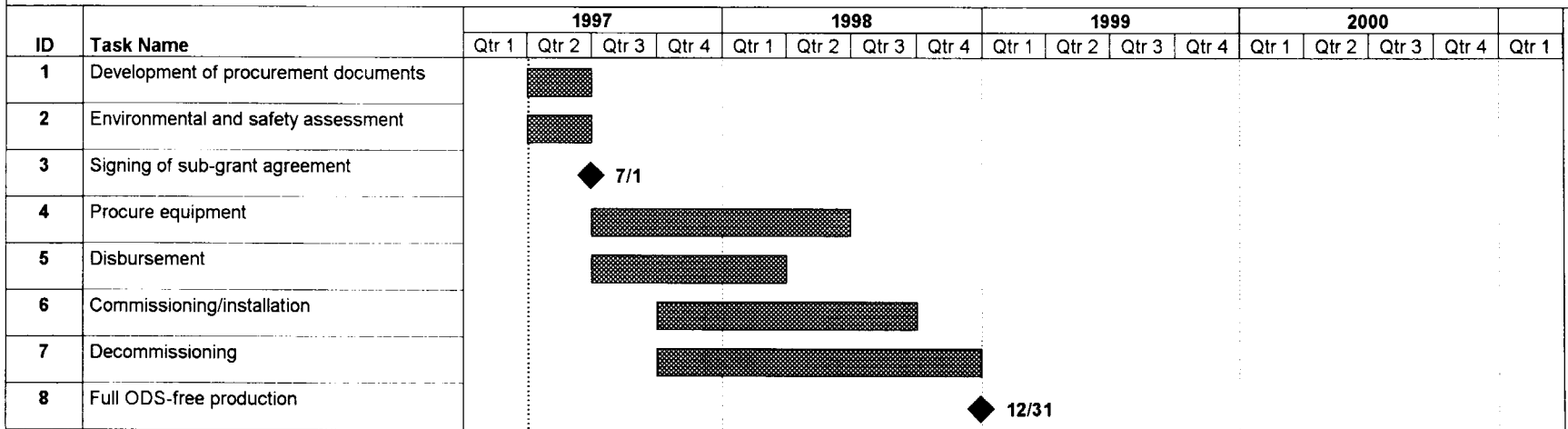
- process design
- equipment purchase
- dismantling of existing equipment
- installation of new equipment and plant infrastructure upgrading
- commissioning

As indicated in the attached implementation schedule, the conversion activities are expected to be completed by April 1998.

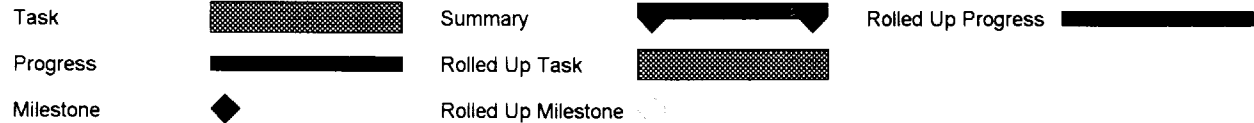
Financing Plan

Total sub-project cost is US\$ 889,623. A GEF grant of US\$ 260,000 has been requested for this sub-project. The remaining US\$ 629,623 will be financed by the enterprise.

**Table A2.5
Belarus ODS Phaseout Project
Minsk Computer Sub-Project Schedule**



Date: 4/2/97



SUB-PROJECT SUMMARY

COUNTRY:	Republic of Belarus	
SUB-PROJECT TITLE:	Tsvetotron: Phaseout of methylchloroform (TCA) usage	
LOCATION:	Brest	
SECTOR:	Solvents	
ODS USE IN SECTOR:	42 MT CFC-113, 87 MT methylchloroform (TCA), 2 MT CTC (1994)	
PROJECT IMPACT:	32 MT methylchloroform (TCA) (average of usage 1993, 1994, 1995)	
PROJECT DURATION:	12 months	
PROJECT ECONOMIC LIFE:	4 years	
SUB-PROJECT COSTS:	Incremental Capital Costs	US\$ 1,735,000
	Contingency (10%) of remaining capital expenditures	US\$ 158,500
	NPV Incremental Operating Cost (Savings)	0
	Total Project Cost (Net of Savings)	US\$ 1,893,500
FINANCING:	Global Environment Facility	US\$ 123,200
	Tsvetotron	US\$ 1,770,300
COST EFFECTIVENESS:	US\$ 38.50/kg ODP	
IMPLEMENTING ENTERPRISE:	Tsvetotron	
GEF IMPLEMENTING AGENCY:	The World Bank	
COORDINATING NATIONAL BODY:	Ministry of Natural Resources and Environmental Protection (MNREP)	
STAP/OORG REVIEW:	This subproject was reviewed by Mr. B.H. Baxter and approved in its revised form	

Enterprise Background

Tsvetotron manufactures printed circuit boards, diodes, electronic control units, electronic watches, crystals, and liquid crystal display (LCD) panels. The number of payroll employees in 1996 was 4159.

Project description

This sub-project would eliminate Tsvetotron's use of methylchloroform (TCA) in photoresist development in the process of producing printed circuit boards for electronic products. An alkaline development of photoresist will replace the methylchloroform processes, involving investment in process design, developer equipment, retrofitting the existing wastewater treatment systems with filters

and reverse osmosis water recycling systems, upgrading of ventilation systems, and training. The project would phase out 32 MT of TCA.

Tsvetotron will replace TCA with a water alkaline process, dismantling the developing and stripping machine in the existing in-line circuit board manufacturing line and installing alkaline equipment in its place. In addition, Tsvetotron will install water purification equipment to ensure proper treatment of the wastewater generated in this process. The capacity of the new equipment configuration will be approximately equal to that of the existing equipment. The project consists of the following elements:

Implementation Schedule

The project would be implemented in three phases:

Phase I

- evaluation of alternative technologies and developing solutions.
- selection and placement of equipment and materials to be purchased.

Phase II

- dismantling and removal of equipment which is to be replaced.
- receive and install new equipment.
- test new equipment prior to operating equipment.
- optimize developing and water cleaning processes and train workers

Phase III

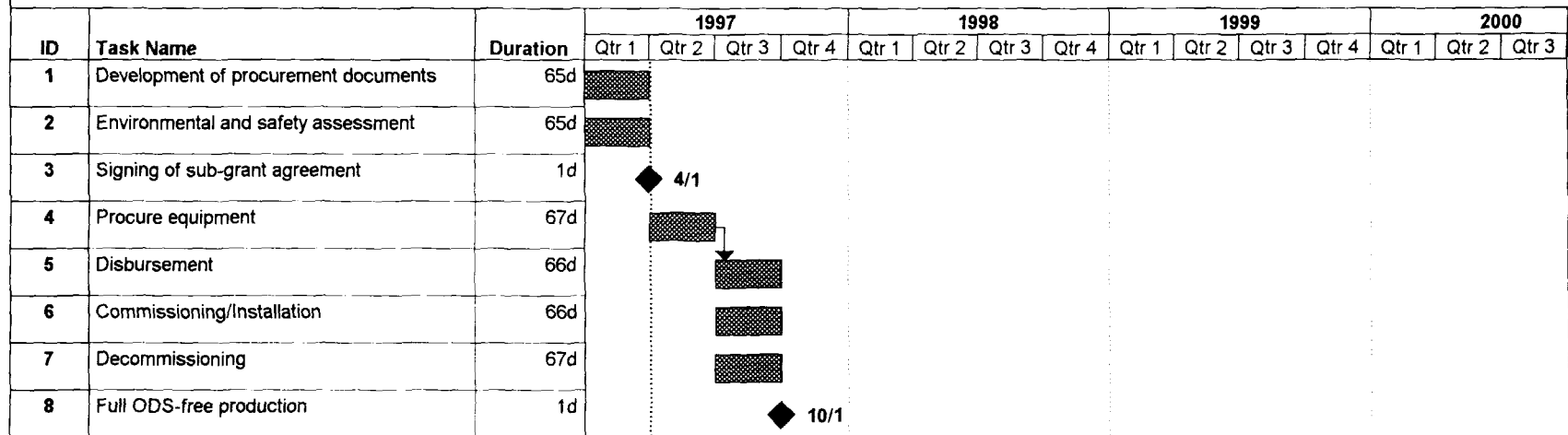
- initiate use of new procedures
- monitor performance of new equipment and adjust as necessary.

As indicated in the attached implementation schedule, the conversion activities are expected to be completed by October 1997.








Financing Plan

The total project cost is US\$ 1,893,500. A GEF grant of US\$ 123,200 has been allocated to this sub-project, with the remaining US\$ 1,770,300 to be financed by the enterprise.

**Table A2.6
Belarus ODS Phaseout Project
Tsvetotron Sub-Project Schedule**



Date: 4/2/97

Task		Summary		Rolled Up Progress	
Progress		Rolled Up Task			
Milestone		Rolled Up Milestone			

ANNEX III
BELARUS EXECUTIVE ORDERS FOR THE PROJECT

МІНІСТЭРСТВА
ПРЫРОДНЫХ РЭСУРСАУ
І АХОВЫ НАВАКОЛЬНАГА
АСЯРОДДЗЯ
РЭСПУБЛІКІ БЕЛАРУСЬ



МИНИСТЕРСТВО
ПРИРОДНЫХ РЕСУРСОВ
И ОХРАНЫ ОКРУЖАЮЩЕЙ
СРЕДЫ
РЕСПУБЛИКИ БЕЛАРУСЬ

220048, г. Мінск, Коллектарная, 10

220048, г. Мінск, Коллектарная, 10

тэл. (0172) 206-691

факс (0172) 205-583

375

12 July 1991 № 12-55/400

На № _____

от _____

Mr Carsten Glenting,
Economist
COWIconsult
Denmark, DK-2800, Lyngby

Fax : +45 45 97 22 12

Dear Ms Söderström,

I would like to inform you that the Republic of Belarus, being a part of the USSR, adopted the Adjustments and the Amendments to the Montreal Protocol on Substances that Deplete the Ozone Layer (June 1990, London) in accordance with the Decree № 198 of the Council of Ministers of the USSR of 23 April 1991.

To confirm the implementation of its obligations under the Montreal Protocol, the Government of the Republic of Belarus accepted the Resolution № 115 of 19 February 1996 " On Additional Measures for Phase-Out of Ozone Depleting Substances in Belarus ", which adopted the Country Programme for Phase-Out of Ozone Depleting Substances in Belarus as well as approved the Amendments to the Montreal Protocol on Substances that Deplete the Ozone Layer.

I express the hope that you will find it possible to provide the financial assistance for the Republic of Belarus to enable its compliance with international agreements in the field of the ozone layer protection.

I look forward to our further fruitful co-operation

Yours sincerely

Mikhail Rusy,
Minister

Кабинет Міністраў
Рэспублікі Беларусь



Кабинет Міністраў
Рэспублікі Беларусь

РАСПАРАДЖЭННЕ
РАСПОРЯЖЕНИЕ

12 жніўня 1998 г. № 5209

Г. Мінск
Г. Мінск

Об освобождении от обложения таможенной пошлиной и налогом на добавленную стоимость машин, оборудования и материалов, ввозимых из территории Республики Беларусь для снижения издержек в производстве общепромышленных веществ

1

Освободить от обложения таможенной пошлиной и налогом на добавленную стоимость машины, оборудование и материалы, ввозимые на территорию Республики Беларусь для промышленного производства и Минпромбюро по контрактам за счет безвозмездной финансовой помощи Всемирной организации по охране окружающей среды в соответствии с проектами по снижению вредных общепромышленных веществ при производстве продукции, предусмотренными Республиканской программой переработки использованных общепромышленных веществ в Беларусь.

В случае использования машин, оборудования и материалов не по назначению казначейство удерживает платежи возмещаются в соответствии с действующим законодательством.

Президент-Министр
Республики Беларусь

М. Чигирь



06

13 06 143 1998



МІНІСТЭРСТВА ПРЫРОДНЫХ РЭСУРСАУ
І АХОВЫ НАВАКОЛЬНАГА АСЯРОДДЗЯ РЭСПУБЛІКІ БЕЛАРУСЬ

220048. г. Мінск. Калектарныя, 10 тэл. (0172) 206-691, факс (0172) 203-583

ЗАГАД №53

28 ІЮНЯ 1996г

г.Мінск

По личному составу

МИНЧЕНЮ Владимира Григорьевича, ведущего специалиста отдела по контролю за выбросами от передвижных источников назначить в порядке перевода с 1 июля 1996 года на должность начальника ~~Б~~Урса Государственного контроля по сокращению озоноразрушающих веществ в Республике Беларусь.

Установить Минчени В.Г. должностной месячный оклад на уровне начальника Управления министерства,

Основание: представление начальника специнспекции Госконтроля за использованием и охраной атмосферного воздуха от 27.06.96г., заявление Минчени В.Г.

Министр

М.И.Русый

**MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT PROTECTION
OF THE REPUBLIC OF BELARUS**

Order # 53

JUNE 28, 1996

Minsk

Staff

Minchenya Vladimir Grigoryevich, leading expert, mobile sources emission monitoring division, shall be reassigned, effective July 1, 1996, to take charge of the Office of State Control of reducing ozone-depleting substances in the Republic of Belarus.

Minchenya's monthly salary shall be equivalent to that of the Ministry's department head.

**Grounds: presentation of the head of the special inspection of state control of ambient air use and protection dated June 26, 1996,
Minchenya's application**

**M. I. Rusyl
Minister**



МИНИСТЕРСТВА ПРИРОДНЫХ РЕСУРСОВ
И ОХОВЫ НАВАКОЛЬНАГА АСЯРОДЗІЯ РЭСПУБЛІКІ БЕЛАРУСЬ

220048. г. Мінск. Калектарная. 10 тэл. (0172) 206-691. факс (0172) 205-583

ЗА Г А Д № 149

22 ИЮНЯ 1996г.

г.Мінск

О создании Офиса по Государственному контролю сокращения, потребления озоноразрушающих веществ при Министерстве

В соответствии с Постановлением Кабинета Министров Республики Беларусь от 19 февраля 1996 года № 115 "О дополнительных мерах по прекращению использования в Республике Беларусь веществ, разрушающих озоновый слой" и утвержденной Республиканской Программой по прекращению использования озоноразрушающих веществ в Беларуси,

П Р И К А З Ы В А Ю:

1. Создать при Министерстве природных ресурсов и охраны окружающей среды Офис Государственного контроля по сокращению потребления озоноразрушающих веществ в республике с 1 июля 1996 года, на период выполнения программы, финансируемой ГЭФ, по выводу веществ, разрушающих озоновый слой.

2. Начальнику специализированной инспекции Госконтроля за использованием и охраной атмосферного воздуха Корбуту В.И. в срок до 28 июня 1996 года подобрать кандидатуру на должность руководителя Офиса по Госконтролю сокращения озоноразрушающих веществ в Республике Беларусь, разработать проект Положения об Офисе, штатное расписание и его состав.

3. Начальнику учетно-финансового Управления Лозакович Т.К. рассмотреть вопросы, связанные с финансированием работников Офиса и источниках его финансирования в срок до 28.06.1996 года.

4. Управляющему делами Дядецкому А.Ф. решить вопросы, связанные с размещением работников Офиса, обеспечив их рабочими местами и оборудованием.

5. Контроль за выполнением настоящего приказа возложить на заместителя Министра Апацко А.Н.

Министр

М.И.Русый

MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT PROTECTION
OF THE REPUBLIC OF BELARUS

Order # 149

JUNE 27, 1996

Minsk

Respecting establishment of the Office of State Control
of reducing consumption of ozone-depleting substances
under the Ministry

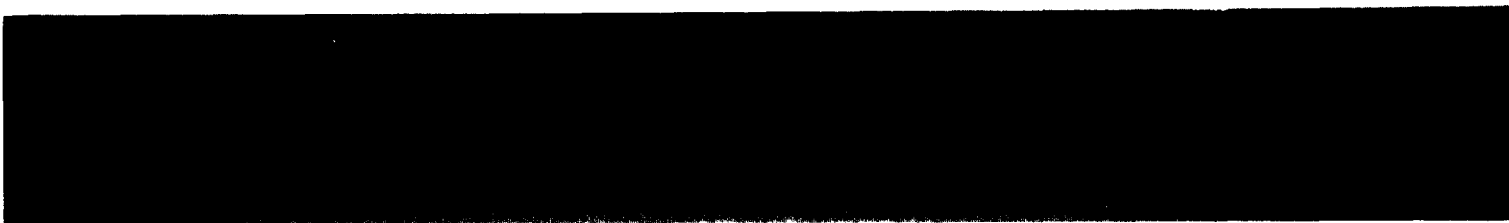
Subject to Decree # 115 of the Cabinet of Ministers of the Republic of Belarus dated February 19, 1996 "Respecting additional measures to cease the use in the Republic of Belarus of substances depleting the ozone layer" and the approved republican Program to cease the use of ozone-depleting substances in Belarus,

I hereby O R D E R :

1. To establish under the Ministry of natural resources and environment protection, effective July 1, 1996, the Office of State Control of reducing consumption of ozone-depleting substances for the period of GEF-financed program to remove ozone-depleting substances.
2. V.I. Kortut, head of special inspection of the State Control of ambient air use and protection, shall, before June 28, 1996, select a person to take charge of the Office of State Control of reducing ozone-depleting substances in the Republic of Belarus and draft the Regulation respecting the Office, its manning table and staff.
3. T.K. Lozakovich, head of accounting and finance department, shall, before June 26, 1996, consider the issues relating to financing of Office staff and sources of such financing.
4. A.F. Lyadetsky, officer in charge of administrative affairs, shall resolve the issues relating to accommodation of Office staff providing them with workplaces and equipment.
5. A.N. Apatsky, deputy minister, shall exercise control of compliance with this order.

Rusyi
Minister





IMAGING



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