PD-ABQ 230

Environmental Policy and Technology Project

For the New Independent States of the former Soviet Union

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RUSSIA

FINAL REPORT
Delivery Order No. 1

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Prepared for:
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A USAID Project Consortium Led by CH2M HILL

Section 1
Introduction

The purpose of Delivery Order No. 1 was to provide initial assistance to USAID/Moscow under the Environmental Policy and Technology (EPT) Project. EPT activities address Russia's severe environmental problems, emphasizing practical, affordable field activities to achieve tangible results and provide models for the replication of similar improvements elsewhere.

The three goals of the EPT Project were to promote:

1. Environmentally sound, sustainable economic development during the transition to a market-based economy;

2. Reduction in pollution-related risks to health; and

3. Reduction of the threats to the global and regional environment.

These were to be accomplished through activities that:

1. Involved citizens, governmental, and non-governmental organizations, and provided information dissemination and outreach.

2. Included policy and legal elements to ensure that they would be institutionalized and sustainable.

3. Provided for institutional and human resource development.

4. Provided for technology transfer, investment, and trade opportunities.

5. Produced replicable and sustainable environmental improvements through demonstration projects.

6. Provided programs that would be self-sustaining in the post-demonstration phases.

Contents of this Report

This report summarizes the start-up activities undertaken with funding provided by DO 1. The completion of these activities was performed under DOs 10 and 11, which were issued after the start-up activities had provided a basis for defining a detailed scope of work for the regional demonstration projects. Therefore, the accomplishments and lessons learned from the Novokuznetsk (NVK), Khabarovsk (RFE), and Implementation Support (MRO) components of DO 1 are reported in the Final Reports for DOs 10 and 11.

The following section provides a summary of the original scope of work specified in DO 1. The next section provides an explanation of the modifications in the scope of work that evolved as the overall strategy for implementation of the EPT Project was formulated and became more focused. Finally, a summary is provided of the deliverables for each of the tasks in the modified scope of work.

Section 2
Scope of Work

The Scope of Work specified in DO 1 is summarized as follows:

1. **Promote environmentally sound, sustainable economic development during the transition to a market-based economy:**

    a. Review the existing Russian Environmental Action Plan and assist in preparing an action plan.

    b. Conduct a demonstration project in Khabarovsk for sustainable use of natural resources and protect biodiversity during economic development.

    c. Strengthen NGOs by promoting public awareness of and participation in EPT activities in activity planning and implementation.

    d. Provide legal support to regional projects in Novokuznetsk (NVK) and the Russian Far East (RFE).

    e. Support others in preparing a program of sustainable land-use planning for the Lake Baikal watershed.

    f. Support US EPA in demonstrating environmentally sound management approaches to solving problems associated with economic restructuring for the military-industrial city of Nizhnii Tagil.

    g. Support EPA in developing a planning and management system for electric utilities in Moscow and North Caucasus to increase system efficiency, lower costs, and reduce emissions, especially greenhouse gases (Integrated Resource Planning).

    h. Assist AID in a demonstration project to illustrate methods for environmentally sound development of oil and gas resources in Arkangelskaya Oblast.

    i. Review previous studies and develop alternative proposals to develop a national park and ecotourism in the Beringa area.

2. **Promote reduction in pollution-related risks to health:**

   a. Direct a demonstration project to target industrial air and water pollution problems in the Siberian city of Novokuznetsk. The project will focus on existing pollution sources to identify those presenting the most serious risks to public health, and implement some initial high priority prevention/remediation efforts.

   b. Assist EPA in a pilot project in Volgograd to demonstrate practical approaches for improving air quality management policies and practices in Russia.

   c. Assist EPA in demonstrating in Moscow new approaches to assess and reduce human health risks from drinking water; identify, prioritize, and control sources of water pollution; and manage watersheds on an integrated, resource-effective basis.

3. **Reduce threats to the global and regional environment:**

   a. Assist EPA in a program to encourage natural gas and methane recovery from Russia's gassy coal mines.

4. **Provide mission and activity support:**

   a. Assist in coordination for environmental training, and include training components in projects.

   b. Help to define equipment needs of the EPT Project and assist USAID in developing specifications for equipment needed to serve or implement EPT projects or to support related environmental efforts of the Russian government through the Commodity Import Program (CIP).

   c. Put in place the administrative and logistical support and communications systems necessary to implement the activities identified in the delivery order.

   d. Support USAID in the development and use of an instrument for screening, evaluating, and prioritizing projects, and reviewing unsolicited proposals.

Modifications to the Scope of Work

Soon after the Delivery Order was signed, USAID/Moscow decided to make major revisions to the Scope of Work. As a result of strategic and work planning discussions, the Scope was modified to expand the Novokuznetsk (NVK) and Khabarovsk (RFE) activities to regional projects led by the CH2M HILL Consortium. Several other items in the Scope of Work were eliminated, and the role of the CH2M HILL Consortium was substantially reduced for others. Specifically:

1. Lead responsibility for Environmental Action Planning was assigned to the Harvard

Institute for International Development (HIID). In addition to identifying policy issues for analysis by HIID projects, CH2M Hill was responsible for preparing a report on the institutional and financial capabilities of the Ministry of Environment.

2. The Khabarovsk project was expanded into a major regional project, including setting up site offices in Khabarovsk and Vladivostok.

3. With the shift of focus to regional projects, NGO strengthening activities were concentrated in NVK and RFE. Databases were developed for these two regions, and NGO support and strengthening were included in the NVK and RFE workplans.

4. In addition to providing legal support to regional projects, logistical and legal support was provided to the Legal Task Force led by EPA.

5. The support role at Lake Baikal was eliminated from the Scope.

6. CH2M HILL's support role in the Nizhnii Tagil project was reduced to reviewing the work plan; making a conference presentation; participating in field trips to Nizhnii Tagil; and producing trip reports including audit notes.

7. The Integrated Resource Planning task was eliminated by USAID/Moscow.

8. Following review of an interim report submitted by Legacy International, this task was eliminated by USAID/Moscow.

9. The Beringa National Park task was eliminated by USAID/Moscow.

10. The NVK project was expanded into a major regional project and support to the Novokuznetsk site office and Business Center were provided.

11. CH2M HILL's support in the Volgograd Project was confined to a trip for 3 Russian team members to the US, and subcontracts/grants for 3 Russian organizations.

12. All work in the Natural Gas and Methane Program task was done by EPA.

13. USAID decided that the EPT project would focus on relatively large regional demonstration projects and, therefore, a formal prioritization tool was not needed.

Section 3
Deliverables

The final deliverables for each task undertaken under Delivery Order No. 1 are summarized below.

Task 1.1 Environmental Action Planning. A Russian environmental economist was hired to

begin the review of the Russia National Environmental Action Plan and to provide support to the Government of the Russian Federation in preparing a strategic, prioritized, phased action plan. Shortly after this activity began, USAID/Moscow decided the review was not necessary and assigned the lead responsibility for environmental policy support at the national level to the Harvard Institute for International Development (HIID). The Russian environmental economist was transferred to HIID. The final deliverables under DO 1 included (1) provisions in the work plans for the Novokuznetsk and Russian Far East demonstration Subprojects for policy issues to be identified at the local level for analysis by HIID, (2) a report to USAID/Moscow on the institutional and financial capabilities of the Ministry of the Environment, and (3) a database of Russian organizations with capabilities to participate in the implementation of the EPT Project.

Task 1.2 Natural Resource Environmental Management (Khabarovsk). The Russian Far East (RFE) Subproject was designed to demonstrate environmental management for sustainable use of natural resources and the protection of biodiverse areas during economic development. As the lead contractor CH2M HILL organized and sent teams to the RFE to design the demonstration project. The deliverables included (1) a Sustainable Development Project Report (17 May 1994), (2) Appendices to the Sustainable Development Project Report, (3) a project review mission completed in May 1994, (4) a detailed workplan completed in January 1995 and updated 24 April 1995, and (5) the establishment of site offices in Khabarovsk and Vladivostok. The scope was expanded to a large regional program including Primorskii as well as Khabarovskii Krai.

Task 1.3 Nongovernmental Organization Strengthening. A local-hire expatriate Institutional/Public Participation Advisor was hired as part of the Moscow Office staff through a subcontractor, IRG. Outreach to the NGO communities in Moscow and at the Subproject sites was a key duty of this Advisor. Deliverables included (1) a database of individuals, institutes, and NGOs relevant to the support of the Novokuznetsk and Russian Far East Subprojects, (2) initial workplans for NGO activities in each of the subprojects, (3) assistance in developing public participation programs and organizing NGO networks, and (4) a series of NGO and public participation reports.

Task 1.4 Legal Support for Environmental Management. A local-hire expatriate Environmental Law Advisor was hired as part of the Moscow Office staff through a subcontractor, the Center for International Environmental Law (CIEL). The services of Russian counterparts were provided through a subcontract with Ecojuris, a Russian environmental law organization. Deliverables included (1) logistical support provided to the Legal Task Force led by EPA, as authorized by USAID, (2) the preparation of a legal component for the workplans for the Novokuznetsk and Russian Far East Subprojects and (3) provision of environmental law and policy advisory services to the EPT demonstration subprojects.

Task 1.5 Lake Baikal. Support in preparing the program of sustainable land-use planning for the Lake Baikal watershed was eliminated from the scope of work by USAID.

Task 1.6 Industrial Environmental Management (Nizhnii Tagil). Assistance was provided to EPA, the lead implementor for this activity, as requested. Comments were provided on the

Activity Implementation Plan dated 21 March 1994. A draft work plan was prepared for the CH2M HILL portion of the scope of work. However, the scope was substantially reduced with most of the work transferred to EPA contractors. CH2M HILL consortium members participated in EPA teams providing services in waste minimization, environmental audits, and an assessment of office equipment needs. Final deliverables included trip reports and audit recommendations for an electroplating company and the Nizhnii Tagil drinking water system. Team members participated in meetings and made presentations at conferences as directed by EPA.

Task 1.7 Integrated Resource Planning. CH2M HILL reviewed the statement of work prepared by EPA and participated in a meeting to review progress in implementing the task. USAID decided to cancel the activity, largely because the Russian counterparts already had an adequate level of skills in integrated resource planning, and the funding could be used to greater benefit on other tasks.

Task 1.8 Oil and Gas Demonstration. Legacy International submitted a proposal in July 1993 to USAID for "Environmentally Sound Development and Management: Model Oil and Gas Project in Russian North." An Interim Report entitled "Environmentally Sound Development and Management: Model Oil and Gas Project in Russian North," dated March 1994, was prepared by Legacy International with seed funding provided by US donors. USAID subsequently decided not to fund the Legacy International proposal and eliminated EPT support to the Oil and Gas Demonstration program from the scope of DO 1.

Task 1.9 Beringa National Park and Ecotourism. Support in development of Beringa National Park and Ecotourism was eliminated from the scope of work by USAID.

Task 2.1 Multiple Pollution Sources Management (Novokuznetsk). The Novokuznetsk (NVK) Subproject was designed to (1) promote reduction in pollution-related risks to health, and (2) promote environmentally sound, sustainable economic development. The five objectives were to (1) reduce air pollution, particularly particulates emitted by boiler houses; (2) improve drinking water, particularly by reducing pathogens; (3) diversify the economy by helping to create new small- and medium-sized businesses; (4) assist the city to prepare and implement a development strategy; and (5) sustain and replicate the EPT innovations by helping to establish businesses to carry out the work. These objectives were accomplished by providing the tools, training, and plans needed to (1) reduce the city's dependency on heavy industry on the brink of economic failure, and (2) develop a more diversified and sustainable economy, along with a more healthy environment.

As lead contractor, CH2M HILL sent teams to Novokuznetsk to design the demonstration subproject. After DO 1 was issued, USAID decided to expand the scope to a large, regional subproject, including the establishment of a site office in Novokuznetsk. The most significant deliverables funded from DO 1 included (1) a draft work plan completed and approved in May 1994, (2) a final work plan approved in the summer of 1995, (3) US drinking water training conducted in July 1994, (4) training in data management and water treatment process monitoring provided throughout the task, (5) public education program designed and implemented and a report prepared, (6) environmental audits of two major steel mills performed in September and

October 1994, and reports on these audits, (7) environmental audit program set up as a training program, with American experts provided as trainers and coaches, (8) a report on Air Pollution in Novokuznetsk submitted in November 1994, (9) an air quality database developed in August/September 1994, (10) boiler and fuel assessment completed in August/September 1994, (11) air quality regulatory assessment completed in August/September 1994, (12) goals for a regional planning process called "Novokuznetsk 2010" established in January 1995, (13) Novokuznetsk EPT site office established in August 1995, (14) the design of business courses and techniques for screening business ideas established, (15) a risk assessment report completed in March 1995, and (16) a modification to the DO through a no-cost extension to provide support to Novokuznetsk activities, including an expatriate Site Manager and Business Center Manager.

Task 2.2 Air Quality Management (Volgograd). The U.S. Environmental Protection Agency (EPA) was lead implementor for the Volgograd Subproject, which was designed to demonstrate and evaluate approaches for improving air quality management policies and practices in Russia. Assistance was provided by CH2M HILL, as requested by EPA and approved by USAID. Deliverables included (1) a trip to the U.S. by Svetlana Kosenkova, Deputy Mayor and Chairman of the City of Volgograd Environmental Committee, and two colleagues, and (2) subcontracts/grants to three Russian organizations to prepare a series of workplans for their participation in the Volgograd Subproject.

Task 2.3 Water Quality and Small Watershed Management (Moscow Water). The EPA was lead implementor for the Moscow Water Subproject, which was designed to demonstrate new approaches to small watershed management in the Moscow Region and microbial risk characterization for the Moscow city drinking water supply. Assistance was provided by the CH2M HILL consortium as requested by EPA and approved by USAID. Deliverables included logistical support for EPA teams making site visits during 1994, and a risk assessment conducted by the Harvard Institute for International Development (HIID) as a subcontractor in the consortium.

Task 3.1 Natural Gas and Methane Program. Assistance to USAID in monitoring this program was eliminated from the scope of work by USAID.

Task 4.1 Training. A local-hire expatriate Training Advisor was hired as part of the Moscow Office staff through a subcontractor, IRG. A Russian counterpart also was hired and trained to assume the responsibilities of the expatriate Training Advisor as soon as practical. A detailed training strategy was prepared as part of the RFE and NVK workplans. Training opportunities were organized under two programs: NIS Exchanges and Training (NET) and EPT-sponsored training. The Academy for Educational Development (AED) was the lead implementor for NET.

The EPT Training Advisor worked with the Project and Site Managers to recommend participants for NET courses open to and relevant to the EPT Project. The Training Advisor and Russian counterpart provided logistical support for Russians sent to the U.S. for EPT sponsored training. They also participated in the design and teaching of courses provided in Russia for counterparts and EPT staff.

Task 4.2 Commodity Import Program (CIP). Assistance was provided to USAID as

requested to help define equipment needs within the context of the EPT Project. Potential end-users and applicants were identified for equipment to be provided by the CIP program at each Subproject site. Assistance was provided in preparing application forms in the Russian Far East and Novokuznetsk.

Task 4.3 Implementation Support and Limited Start-up. A local hire expatriate Logistical Manager was hired as part of the Moscow Office staff through a subcontractor, Hughes Technical Services. A Russian counterpart also was hired. Deliverables included establishing the administrative, logistical, and communications systems necessary in the field to implement the activities identified in the delivery order. Field offices were established in Moscow, Novokuznetsk, Khabarovsk and Vladivostok. General administrative and logistical support were provided to these offices. A series of databases of institutions were established to serve as a network of contacts for implementation of the EPT Project. Two months of administrative support was provided by assigning EPT staff to work at USAID/Moscow in April 1994 and June 1994.

Task 4.4 Program Activities. The purpose of this task was to provide support to USAID in evaluating proposed activities by assisting in the development of a prioritization tool and assessing potential future activities using this tool. Discussions were held with USAID/Moscow representatives regarding criteria for establishing priorities and the relative importance of subprojects previously identified as part of the EPT Project. The subprojects were a mixture of site-specific demonstration projects and "cross-cutting" issues including training, environmental economics and policy advice, integrated resource planning, environmental plans, environmental law, and NGO strengthening. During a series of meetings that culminated in the Gore-Chernomyrdin (GCC) meetings in mid-1994, it was decided to focus the program on relatively large regional demonstration subprojects and to integrate the cross-cutting issues into the work plans for these regional projects. Two cross-cutting issues were eliminated (i.e., integrated resource planning and environmental plans), as well as the Oil and Gas Demonstration Subproject and the Natural Gas and Methane Program. USAID decided that a formal prioritization tool was not needed. CH2M HILL's role was reduced to providing input to the USAID program development and budgeting process as needed.