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**THE WORLD ENVIRONMENT CENTER
CENTRAL AND EASTERN EUROPE PROGRAM**

**An Evaluation of Cooperative Agreement
No. ANE-0004-A-00-0048'00**

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**THE WORLD ENVIROMENT CENTER
AND
THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT**

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ACRONYMS

AID	Agency for International Development
BAT	Best Available Technology
CA	Cooperative Agreement
CEE	Central and Eastern Europe
EBRD	European Bank for Reconstruction and Development
EC	European Community
EA	Environmental Assessment
ELI	Environmental Law Institute
EOPS	End of Project Status
EPA	Environmental Protection Agency
HC	Host Country
IEF	International Environment Forum
IHSPP	Industrial Health and Safety and Pollution Prevention
LOP	Life of Project
LTA	Long-Term Advisor
OMB	Office of Management and Budget
SP/AP	Strategic Planning and Action Plans
USAID	Offices of AID Representatives in CEE
WEC	World Environment Center
WM	Waste Management

I. EXECUTIVE SUMMARY

This evaluation covers the first 21 months of the 60 month Cooperative Agreement (CA) between the United States Agency for International Development (AID) and the World Environment Center (WEC). The CA supports WEC's programs in Central and Eastern Europe (CEE). The CA was designed and signed at a time when AID knew only the basics of the environmental calamity in CEE and little about what WEC would encounter "on-the-ground". As with other AID programs in CEE, flexibility and speed were emphasized and the activities were intended to be demand-driven and responsive.

As drafted, the CA did not lay out clear and consistent, goals, objectives and strategies, making implementation and evaluation difficult. This evaluation reviewed project documentation, reconstructed the implicit goals, purpose, outputs and indicators of the CA, undertook site visits to five CEE countries and interviewed 86 people. It evaluated progress and performance by project component, appraised the costs and benefits of those components, commented on future program directions and discussed a variety of managerial considerations. The most crucial conclusions and recommendations are found in Section VII. More detailed discussions and findings are presented at the end of each section.

This evaluation found that WEC has made good progress towards CA objectives, that the activities are having significant and substantial impact (improving industrial pollution control, realizing savings at the plant level, increasing environmental awareness and supporting preliminary efforts in legal and policy reforms) and that most project components are cost-effective. Nevertheless, maximum program impact is handicapped because of almost no follow-up and inadequate information and communications about the program activities.

This evaluation recommends that AID continue to support project elements (most particularly plant assessments and environmental audit workshops) but make a number of documentation, strategic and procedural changes to improve project management and results.

Today, WEC and this CA are part of a broader context of changing attitudes regarding environmental issues and rapidly evolving economic, political and social situations. Except for environmental improvements anticipated from production slowdowns and plant closings, industrial environmental problems are unlikely to significantly improve until investment is forthcoming. Such investment will not occur until laws are clear and regularized, plant-specific environmental liabilities are known and regulations regarding liability are finally worked out. Through its plant assessments, training workshops, legal and policy reform activities under this CA, WEC is making a valuable contribution to privatization and environmental improvement.

A complete draft of this evaluation was reviewed by AID and WEC and pertinent sections were reviewed by the Environmental Law Institute (ELI) and the World Bank. Where possible, their comments and/or corrections were incorporated into this final version.

The evaluators wish to thank the many individuals in the U.S. and CEE who offered their time and opinions to make this evaluation possible. Special thanks go to WEC staff in New York and coordinators in Europe for their cooperation, assistance and candor.

II. EVALUATION BACKGROUND, PURPOSE AND METHODOLOGY

AID and the WEC entered into a CA in September 1990 "to provide technical assistance, training and information dissemination services related to urban and industrial pollution control in Eastern Europe."

AID requested an evaluation of the CA to help determine direction, focus and funding levels of the WEC program in CEE for the next three years to help make impacts of the program more measurable and to assess the capability of WEC and its sub-grantees to manage that program. The scope of work (SOW) developed by AID and WEC called for an evaluation which focused on an assessment "of progress in project impacts, in accordance with the objectives of the Cooperative Agreement." This evaluation was to examine four of the five project elements: 1) industrial technical cooperation and training activities; 2) strategic planning; 3) long-term advisors; and 4) environmental law. The SOW specifically excluded an evaluation of the environmental economics activities included in the CA signed between WEC and the Harvard Institute for International Development in March 1992. For purposes of this evaluation, the first element was divided into two parts; industrial assessments, and training and information dissemination. Thus five elements of the CA were evaluated.

In July 1992 two independent consultants were hired by WEC to conduct the evaluation: one a specialist in industrial environmental management and the other a specialist in program/project design and evaluation. This team examined the 21-month period from the signing of the CA (September 1990) through June 1992 (see "Timeline for Important Actions," Appendix D). The team reviewed background information, the CA and other documents, reconstructed what it believes were the implicit objectives of the CA and conducted a series of interviews and site visits during July and September 1992. Those interviewed in the U.S. included representatives of WEC, the Environmental Protection Agency (EPA), the World Bank, the ELI, AID, and pro bono advisors or consultants who had worked with WEC under the CA. During visits to the Czech Republic, the Slovak Republic, Hungary, Poland and Bulgaria further interviews were conducted with host-country government officials, industry executives, WEC coordinators and long-term technical advisors and AID representatives in CEE. A complete list of the 86 people interviewed is found in Appendix C. To help assure consistency, completeness and impartiality, guidelines were developed and used for all interviews. A sample is found in Appendix E.

III. OVERALL PROGRESS UNDER THE COOPERATIVE AGREEMENT

A. Origin

CA No. ANE-0004-A-00-0048-00 with the WEC was signed on September 1, 1990. It extended for five years and contained planned life of project (LOP) funding of \$5,389,000 and an initial obligation of \$700,000. As a component of the Environmental Initiative Project (180-0004), it was one of AID's earliest environmental activities in CEE.

One of AID's primary interests at that time was to quickly show a presence in the region. WEC, already known to AID through its work in Asia and the Near East, was one of the few organizations with capability and experience in industrial pollution. In addition, as a registered Private Voluntary Organization, a CA could be negotiated and signed fairly rapidly.

As of June 30, 1992, the CA had been amended three times: amendment No.1 of March 29, 1991 increased the cumulative obligations to \$4.7 million; amendment No.2 of September 21, 1991 increased the obligations to \$5.140 million; and amendment No.3, dated May 8, 1992, increased AID's LOP contribution to \$8,932,050. While there have been no other formal amendments to the CA, guidance and understanding concerning the CA have informally evolved over the LOP.

It is germane to note at the outset of this report the overall context within which the CA operated. It was signed at a time when the magnitude of the environmental calamity in CEE was beginning to be recognized but when there was still no clear or specific perception of the region's environmental problems, priorities, institutional capacities or commitment to environmental remediation. AID was in fact precluded from undertaking needs-assessments or other analyses upon which AID projects are traditionally designed. In addition, all programs in CEE were intended to be demand-driven and responsive. Moreover, while CEE money is technically "no-year" money, AID has tried to fully fund self-standing, one-year activities rather than comprehensive multi-year projects. Until recently, AID has not wanted to get locked into long-term planning in the region. And like other CEE programs, this project has been subject to political vagaries on both sides of the ocean. Finally, for the most part, the AID portfolio in CEE has stressed the "how to" approach rather than being "results" or "impact-oriented". All of this in practice meant no long-term strategy and argued for rapidly developed projects with looser documentation. Now that the CEE program is two years old, Congress and the Office of Management and Budget are calling for an assessment of impact.

B. The Cooperative Agreement

The original CA and associated documents and correspondence did not lay out clear and consistent goals, objectives and strategies for WEC's program in CEE. Given the context described above, particularly the prescription against pre-approval analyses, such clarity and consistency would have been nearly impossible. Nevertheless, this has made implementation more difficult and has contributed to misunderstandings and criticism. In addition, the lack of benchmarks and targets makes evaluation more troublesome and subjective. In an attempt to provide a baseline against which this activity could be evaluated, the evaluation team reconstructed the logical framework which appears in Appendix A. the "Skills Transfer Model".

The reconstructed goal of the CA is to help industries in CEE improve their environmental compliance and become more efficient. Indicators of progress towards that goal are:

- Environmental concerns are integrated into industrial restructuring plans.
- Management of solid, hazardous and toxic wastes is improved.
- Economic savings are realized at the plant level.
- Legal and economic reforms associated with the environment are enacted.

The purpose of the WEC component is to transfer U.S. environmental expertise and skills to industries and governments in CEE. The CA will be considered successful when:

- CEE governments, industries and the public are aware of and better understand the costs of industrial pollution and potential benefits of pollution control.
- The industrial pollution hazards with the most significant health impacts are identified.
- Legal and economic policy restructuring to improve the climate for environmental control is accelerated.
- Ongoing linkages are established with American industry and the environmental community.
- Additional demand is created for services like those provided through the CA.

From this reconstruction, it should be noted that the objectives implicit within the CA were more process-oriented (the transfer of skills and expertise) than they were product- or

impact-oriented and targets are not quantified. Except for reduced pollution at the goal level the CA is silent regarding specific environmental improvements or pollution reductions through changes in behavior. Objectives for real reductions in pollution were left at the goal level and assumed to be outside the direct responsibility or control of WEC. Again, this may have been due to the lack of information regarding conditions in CEE at the time.

FINDINGS

What this evaluation shows, however, is that in spite of a lack of deliberate effort at the goal level, specific, tangible and substantial impacts at that level have resulted directly from WEC program activities. At the same time, some of the "End of Project Status" (EOPS) conditions are difficult to quantify and have been only partially met at this point.

C. Progress Indicators

EOPS indicators such as those reconstructed above were not contained in the CA. There was a complete absence of interim targets or output indicators and implementation was marked by verbal instructions from AID and mutually agreed upon approaches to the overall objective. A quick response to getting a U.S. presence in CEE countries was the early priority. Maximizing the number of missions and the size of the accompanying pro bono contribution became the early measures of progress. The missions took the form of plant assessments, various environmental studies, training workshops and study tours, legal assistance visits and placement in-country of long-term advisors.

It is axiomatic that without specific objectives, implementation plans and targets, the most sophisticated progress targets are of little value. Again being explicit about the implicit, the evaluation team has reconstructed the project's output indicators as they might, but did not, appear in the CA.

OUTPUTS

INDICATORS

- | | |
|--|---|
| 1. Country assessments, strategies and action plans completed. | -- Number completed and identifiable (though perhaps qualitative) results.
-- Pollution hazards identified. |
| 2. Industrial pollution concerns addressed. | -- Number of enterprises reviewed.
-- Identifiable improvements made.
-- Industrial sector plans completed. |

III. OVERALL PROGRESS (continued)

OUTPUTS	INDICATORS
3. Legal constraints identified and addressed	-- Number of legal constraints identified. -- Number addressed. -- Number of laws/regulations enacted.
4. People trained.	-- Number of people participating in workshops, study tours, short-term training, conferences or internships.
5. Information disseminated.	-- Reference libraries and centers established or improved. -- Documents, reports, materials purchased and/or adapted. -- Public awareness programs held.

D. Progress and Performance

While the current CA talks of only two program elements (Strategic Planning and Assessment and Regional Environmental Management and Control), the activities have been regrouped into five categories for this evaluation, conforming to the CA's implementing arrangements as well as to the major project outputs identified above. These elements are: Industrial Assessments; Training and Information Dissemination; Country Assessments, Strategies and Action Plans; Long-Term Environmental Advisors; and Legal Activities. The first two of these are the WEC core activities for which WEC alone is primarily responsible. The last three elements are being carried out by other individuals or organizations using the WEC CA as the contractual and financial vehicle.

1. Industrial Assessments

One of the few sections of the CA which did set qualitative and quantitative targets was the short-term advisory services element of the "Regional Environmental Management and Control" component. It listed the explicit objectives of this component as: reducing air and water pollution from industrial processing; recovering hazardous materials in processing; improving hazardous waste management and disposal in several key regions; improving industrial health and safety practices; improving capabilities to make environmental improvements in industrial processing; improving energy conservation and management; increasing community awareness in environmental and energy related areas; and identifying key individuals and beginning a "Train-the-Trainer" program. That section also called for WEC, inter alia, to conduct five to ten "detailed industrial reviews per year" and ten to fifteen "diagnostic industrial sector reviews."

Few details of what was expected were spelled out, but this section did provide at least one specific benchmark against which to compare CA performance to date. While this section also could be interpreted as mandating a "results" orientation, that interpretation was never emphasized or clarified elsewhere.

As demonstrated over the past ten years in other geographic areas, one of WEC's fundamental strengths is its ability to conduct industrial assessments. This evaluation confirmed the strength of this element and produced evidence of the significant contributions that industrial assessments have already made towards achieving the goal and purpose level objectives of the CA.

Approximately 32 industrial assessments were carried out during the period covered by this evaluation. Five of those were of municipal sanitation departments, the remaining 27 were of manufacturing facilities. All plants visited were at the recommendation of the host-government or AID and undertaken at the written invitation of the plant. By intent, WEC treated every request as valid and made no independent assessments of their suitability, relevance to other AID or host-country environmental priorities. During the evaluation, nine or 28 percent of these assessed industries were reviewed. Of the nine evaluated, seven produced definable positive results by carrying out recommendations of the U.S. experts who conducted the assessments. Four of the nine facilities evaluated had positive results that were quantifiable as well as definable.

This is a rather remarkable achievement in itself, but in addition the commendations given by representatives of all seven industries evaluated reflect significant credit on WEC, AID and the U.S. In each interview, the host-country industry executives emphasized the fact that hands-on experts visited their facilities and could talk in common industrial language to their peers. Several interviewees noted that, in comparison to experts from other organizations or countries who had visited the facility, WEC experts were "superior" or "the best."

Specific achievements resulting from the industrial assessment component include:

- Following an assessment of a battery manufacturer in Hungary in February 1992, the WEC expert developed conclusions and recommendations to strengthen the worker's health and safety program with the principal goal of lowering the risk of blood poisoning among the plant's 600 workers and indirectly their families. He also made recommendations with regard to exhaust stacks, water conservation and treatment. The facility has already adopted the expert's recommendations concerning the blood lead reduction program (largely consisting of no- low-cost worker hygiene actions). The results are outstanding. Prior to adopting the recommended measures, 50 to 60 employees had blood lead ratios higher than the Hungarian standard. Since adopting the recommendations, that number has been reduce to zero. Samples of blood are taken regularly and the results are computed for each department and for the factory

III. OVERALL PROGRESS (continued)

as a whole. Because the worker is now going home with less lead on his body and clothes, the program reduces the health risk not only of the workers, but also of the workers' families. Since workers with above standard blood lead levels are relocated to non-lead environments, this improvement also reduces the costs, inefficiencies and frustrations of training new workers and avoids worker discontent with pay rate changes that accompany relocation.

The plant was so impressed with their results that the environmental manager has prepared a paper which he will present at a Hungarian metallurgical industry conference on worker safety. With the adoption of other recommendations concerning new hires, filtering and stack design, plant executives feel that the blood lead ratios will improve even further and hope to approach the more stringent U.S. standard.

The result of this one industrial assessment is exciting. For an investment of approximately \$7,000 including other direct and indirect expenses, the health and welfare of hundreds of employees and their families has been positively affected, the plant is saving money, and this information is being passed on to others.

- Two WEC experts assessed a coal mine in Poland in December 1991. The fully burdened cost of that visit was also approximately \$7,000. As a result of recommendations by the two experts:
 - The mine has decided to insert a filter to remove solid particulates prior to injecting saline mine waste water into shallow sand filter wells. The pre-filtering will extend the life of the receiving sands three-fold, providing a longer-term solution for the discharge of the waste water as well as significantly reducing capital investments and penalties for pollution.
 - The mine is investigating a coal fine recovery process, previously unknown in Poland, that could increase productivity by 20-30 percent and reduce solid wastes by the same amount. Following several contacts in the U.S. made possible by the WEC experts, the mine is seeking to have the University of Kentucky conduct a feasibility study and the AID Representative in Warsaw is investigating possible financial support for the study.
 - Higher powered machinery was recommended by the WEC experts. The mine requested and received information concerning such equipment from the experts, examined alternatives, selected the machine which they felt was most suitable to their needs and have

initiated discussions with the U.S. based manufacturer. The mine believes that the \$1.8 million cost of the machine is more than justified since it will increase production three-fold. It plans to complete the purchase shortly.

- As an added accolade, the coal agency representative said, "We receive 30 to 40 missions a year from outside Poland, experts from all over the world. Most of these experts come and tell us what is wrong with the Polish mines. The WEC experts came as partners to give assistance."

Interviews from the other plants visited during the evaluation revealed that, on the basis of information transferred and recommendations offered during their plant assessments:

- A hazardous waste enterprise in Hungary is aggressively pursuing recommendations to: change the geometry of the receiving vault, resulting in a 25 percent volume increase without higher costs; eliminate waste containers in favor of solidification; increase processing capacity; upgrade employee skills; and request accountability for use of the local environment fund. Recommendations will increase capacity, lower costs, improve site monitoring and improve community relations.
- The Budapest Municipal Public Service Enterprise translated and distributed the expert's report throughout the company. It has already initiated low-cost changes concerning leachate monitoring, pilot recycling and a pilot transfer station. It expects to initiate other recommendations including developing a fee structure and upgrading its compacting, pending funding and government approval.
- One steel mill in Bulgaria is investigating replacing an electrostatic precipitator with a bag system. The change would increase productivity by returning materials to process and reduce waste. Other recommendations are integrated into the long-range environmental strategy being prepared by the plant's Environmental Department at the WEC expert's suggestion.
- Another steel plant in Bulgaria was able to use the WEC expert's favorable report to finally obtain local approval for a modernization program that had been stuck in the local review process for four years.
- Following the favorable assessment of a WEC expert, the Ministry of Industry in Hungary, recommended that construction of a secondary lead smelter be completed and put into operation.
- Other results of the plant assessments include:

III. OVERALL PROGRESS (continued)

- One expert is establishing a joint venture in Hungary to recover valuable metals from the sludge produced during electroplating.
 - Another expert is setting up a company to sell safety equipment.
 - Several experts/companies have received follow-up consulting assignments or are continuing discussions on possible cooperative ventures.
- Two chemical plants in Poland, which the WEC experts had visited shortly before the evaluation, had so far taken no action on the reports. One report recommended a series of management changes including the critical need for an explicit expression of commitment by top management to environmental improvements. Those responsible for the environmental programs support the recommendation, but have not yet determined how to best pursue it. At the other plant, the report is just being translated and distributed.

No regional hazardous waste plans were developed and no industrial sector reviews were undertaken under this element. It should be noted, however, that some components of hazardous waste plans are found in the environmental studies and action plans and that the World Bank is now revisiting the work done by WEC's industrial specialists for those studies and incorporating much of their work into regional industrial-specific studies. In addition, the WEC/AID decision to give first priority to the chemical industry led to heavy emphasis on those facilities. An analysis and synthesis of all chemical visits might prove informative.

FINDINGS

While there were 23 industrial assessments not evaluated by this report, the high percentage of outstanding results produced from the sampling suggests that comparable results have been experienced at other locations. Definable progress has been made on all of the objectives the CA set for this element.

At the goal level, this component is helping to integrate environmental concerns into industrial restructuring and privatization plans, both by demonstrating the value of addressing those concerns and by dealing with specific environmental issues at the plant level; stimulating and/or encouraging visible and measurable improvements in the management of solid, hazardous and toxic wastes in specific plants; and delivering measurable economic savings at the plant level.

At the purpose level, this component is making specific companies and governments more aware and understanding of the costs of industrial pollution and potential benefits of pollution control; supporting economic restructuring through a better understanding of environmental

liabilities and responsibilities; establishing a modest number of ongoing linkages with American industry and networks with CEE colleagues and the environmental community; and creating additional demand for services like those provided through the CA.

At the output level, this component is exceeding its targets for plants assessed, stimulating identifiable improvements in an impressive percentage of those plant visited, but addressing industrial sectors only through its decision to give first priority to the chemical industry.

- No one in the WEC program loop: WEC project leaders or executives, USAID representatives, host-country officials, long-term advisors nor AID were sufficiently curious about implementation of the hundreds of recommendations made by the WEC experts to initiate systemic or formal follow-up. Only a few of the plants assessed had been recontacted during the period under evaluation. Because of a lack of follow-up, this CA element has been inappropriately discounted and even disregarded.
- WEC assumed that plants assessed directly translated into skills transferred. This was found to be very true in some cases and less true in others. That transfer is too critical to project success to leave to chance.
- Most plant assessments had extensive and enthusiastic participation by the plant management and environmental directors. What results have been achieved since the assessments have been entirely due to their efforts.
- Recommendations requiring little or no financial investment have generally been pursued. Those requiring substantial investment, like electrostatic precipitators, baghouses, etc. have, for the most part, not been carried out. Though they may have been willing to pursue the recommendations, insufficient capital made that impossible.
- The impact on visited plants and the multiplier effect might have been substantially greater if WEC had a system in place to follow-up, monitor, analyze and disseminate the results of those visits.

2. Training and Information Dissemination

The CA anticipated that training in the areas of industrial pollution management and control and legal reforms for environmental management would be implemented through a variety of in-country and regional workshops, in-plant seminars, conferences, study tours and internships. Ambiguous language in the CA suggests that WEC was to train approximately 100 people the first year. The two principal forms of training actually employed were environmental assessment (EA) workshops and study tours.

III. OVERALL PROGRESS (continued)

a. Workshops

The first EA workshop, held in the Czech Republic, lasted for eight days. Subsequent workshops in the Slovak Republic, Hungary and Poland lasted for five days. The workshops directly trained approximately 108 environmental directors and managers, primarily from chemical industries (purportedly responsible for generating 70 percent of the hazardous wastes in the region). The two major objectives of these workshops were to teach participants: a) how to develop and implement internationally acceptable EAs of their enterprises; and b) provide an orientation to the free-market system and to the obstacles to privatization (including environmental liability).

Host-country governments, usually through the Ministry of Environment and/or the Ministry of Industry, were responsible for identifying and inviting plants and individual participants. They were asked to invite high-level, process-oriented people on the presumption that they would train others. In some cases, the organizing CEE government entity charged participants a fee of approximately \$400 per person plus expenses on the premise that such a fee brought with it commitment.

On the basis of interviews held with nine of the workshop trainees¹:

- The workshops were generally regarded as intensive, professional, practical and immediately useful. The mechanics of hands-on plant assessments, the role playing and the manuals were frequently cited as most valuable. Several interviewees stated that the WEC training was the best training they had ever received. That comment was particularly impressive in light of the abundance of workshops available (during one week in September, four separate environment workshops were scheduled for Budapest alone).
- Among the criticisms offered (few in comparison to the praise): the instructors need to be better informed about distinctive country conditions and about the participants' qualifications and specific interests; local ministries sometimes did not choose plants

¹ At WEC's request, the Ministry of Environment in the Czech Republic was the only entity which had attempted any follow-up on the results of their workshop. Their questionnaire found that, of the 16 different companies attending the workshop:

- All claimed that the workshop improved their understanding of EA systems and methods;
- Seven have done audits in their own companies since the workshop;
- Four have designed their own programs of waste processing or minimization;
- Seven participants have helped other firms do audits;
- Six are using the audits to advance the process of "privatization;" and
- Six have trained others to do the audits.

wisely; and program elements aimed at the general directors of firms should be offered in separate workshops.

- Training is building local capacity and most attendees believe that their own personal capacities to conduct EAs have been greatly strengthened; some have begun training others in their departments to conduct them. In at least two instances private sector environmental consulting firms have been spun off to focus on EA.
- The training is very relevant, of immediate and direct use at the plant level, essential to the privatization process and in high demand. At least six trainees have undertaken specific assessments of their facilities and plan to continue the process. On the basis of their own assessments, several have undertaken specific remedial action.
- Communications have been stimulated and strengthened between and among colleagues in like industries and government officials from different ministries. For most attendees the workshops were the first time they had the opportunity to meet and discuss common problems with their peers. In some countries the training has directly inspired environmental management networks. In Poland, an informal network of environmental directors from the chemical industry has decided to meet periodically for practically-oriented discussions on specific topics. The October 1992 meeting is to focus on waste water treatment. The WEC translation of the EA questionnaire, provided to workshop participants in Slovakia has been improved by one participant who may distribute it within his industry.

NOTE: A fifth EA workshop was scheduled for Bulgaria and Romania in September 1992 but was canceled in late August at AID's request, despite the preliminary work completed, contacts made and commitments given by 23 companies in Bulgaria. This contributed to some embarrassment and resentment at the Ministry of Industry and forced them to identify an alternative training program to meet their needs.

b. Study Tours

Thirty-one people participated in 15 study tours to the United States. Of these, ten participated in a municipal waste study tour to New York City and three attended 3M's "Pollution Prevention Pays (3P) workshop in Minneapolis. Several of the study tours were requested by AID. The fact that three countries (Czechoslovakia, Hungary and Poland) provided the lion's share of the tour participants reflects the heavy emphasis placed on those countries during the early stages of the CA. This evaluation, which included interviews with six study tour participants, found:

III. OVERALL PROGRESS (continued)

- With one exception, the study tours were considered to have been very well prepared, organized, practical and well targeted for the participants. In one case, the participant thought that the tours tried to satisfy too many divergent interests.
- During the tours, participants frequently identified techniques and solutions that were better and simpler than those currently in use. Much of the information and techniques acquired during the tour has already been put to use:
 - In Hungary, an EPA hazardous waste operations manual and New York City's strategic plan for solid wastes are both being used on a daily basis in hazardous waste and municipal solid waste programs.
 - A Budapest enterprise discovered a practical use for composted material which reduces the need for landfill sites and for alternative cover material, reducing waste and saving money. The same solution may be useful to Hungary's 3,000 other landfills.
 - A Ministry of Environment official was impressed that environmental education in schools is cost-effective and can be started immediately. She hopes to initiate programs this year.
 - A hazardous waste site now employs a visitors book, has changed its labeling process, and uses protective clothing for its employees. They have also determined that solidification disposal of hazardous wastes would allow them to reduce costs and reduce risk. The proposal to use that method is now awaiting government approval.
- Communications with professional colleagues in their own country, other countries in CEE and in the U.S. have been strengthened and are an ongoing source of information and materials. The most impressive example of this is the Czech Environment Management Center (CEMC) established in March 1992 as a non-profit organization supported by its industry members. It will promote environmental communications, offer training in EA and other related topics, serve as an information clearinghouse and facilitate environmental matters related to privatization. The CEMC currently has about 60 members. Patterned after the International Environmental Forum (IEF), it is the first organization of this kind in CEE.²
- The training at 3M probably could not have been accessible to participants who had not been working through WEC.

² It should also be noted that many of the people active in the CEMC also participated in the EIA workshops.

- The tours are affecting the way people think and make decisions. Participants are finding that they are more open and collaborative and make more use of long-range plans and strategies.
- The study tours involving the members of the private sector produced more tangible results than those involving government officials. The private sector individuals came back with specific information which was adopted upon their return. Study tours to other European countries were perceived as morale and confidence builders with few specific results.

c. Other Training

- One long-term advisor, using some of the material developed for the EA workshops, conducted a one-day environmental audit workshop for 25 participants focused on environmental service firms.
- The CA also sent 18 speakers or participants from CEE to regional or international conferences, provided three U.S. speakers for a conference on coal in Poland and cosponsored a conference on EA and Conflict Resolution in Estonia.
- In only one instance did this evaluation identify any formal, in-plant training associated with industry assessments. No internship training was identified.

d. Information Dissemination

This aspect has been given lower priority by WEC and AID during CA implementation. As compared to the outputs anticipated in the CA no environmental reference libraries have been established; AID agreed that WEC would not undertake programs to heighten public awareness; few plant visit reports have been disseminated in deference to confidentiality; only limited technical materials were provided at the time of the plant visits (left to the discretion of the expert) and follow-up materials were sent in perhaps only ten percent of the cases; besides the workshop materials, few training materials were specially procured, produced or adopted; and except for material regarding the CEE program and WEC capabilities no system has been established for the routine dissemination of information. WEC said that they do not generally provide specific technical information or information of sources of technical services, unless explicitly requested. Such requests could be referred to publications or associations, however, there was little evidence of this.

FINDINGS

The training under this component of the CA has been well conducted, well received, useful and effective.

III. OVERALL PROGRESS (continued)

At the goal level this component is demonstrating that environmental concerns are essential to improved industrial management and privatization; providing environmental managers and other technicians with the information and tools needed to undertake EAs at their own plants; and helping them to develop and undertake solid, hazardous and toxic waste improvement programs.

At the purpose level this component is increasing awareness and understanding of the costs of industrial pollution and potential benefits of pollution control; helping participants to identify high priority pollution hazards; fostering communication and networks with others in the CEE dealing with similar pollution issues; and creating additional demand for comparable training.

At the output level this component has provided formal training to approximately 182 people. Many others have received informal on-the-job training by serving as counterparts to WEC experts during plant visits.

- The networks being formed are an unplanned benefit of this component. That benefit might be enhanced if the training could include a final brief session on maintaining contacts, building networks and sharing experience.
- There is substantial unmet demand for similar training.
- Information dissemination, a potentially effective way to multiply the impact of WEC's program, was given lower priority.

3. Country Strategies, Assessments and Action Plans

One of the two program components of the original CA (Strategic Planning and Assessment) noted several related objectives for that component. They included: identifying priority policy, legal and regulatory constraints; formulating government environmental strategies; developing action plans for medium-term environmental assistance; and establishing priorities and policies to improve environmental conditions and to strengthen environmental management. Strategic planning was to begin in one country the first year and expand as funds allowed.

At the time the CA was drafted, the apparent expectation was that the long-term "Senior Environmental Experts," in collaboration with the host-country ministries of environment, would be the major directing, coordinating and contributing force in this endeavor. Efforts have been made towards all of the above objectives and progress, to varying degrees, has been made on most. As this component has been played out, however, the World Bank, AID and the EPA formed a unique and cooperative partnership to jointly pursue many of

these objectives. For reasons of political sensitivity and expediency, the World Bank has been the most visible partner.

Other activities have been undertaken at AID's behest to, among other things, conduct a review of energy in CEE, review the costs and benefits of motor vehicle emission controls in Hungary, and examine environmental implications of alternative programs of U.S. support to the agricultural sector in Bulgaria. WEC's role was primarily that of locating and fielding specialist consultants to participate in the efforts, making contacts and providing logistical support to the teams in the field. One of the consultants who participated in several of the environmental studies did later become a long-term Regional Environmental Advisor under this CA. The work of both long-term advisors (discussed in Section III.E.4.) has built upon and also contributed to many of those objectives.

Within this element, which is now over, WEC provided a total of 23 different experts working on 31 projects in nine countries. Of these 31 projects, approximately 18, or 58 percent, were joint efforts for Joint Environmental Studies (JES), Environmental Action Plans or Danube Basin/Black Sea related assessments. Because most of the consultants provided through WEC worked within a team context and produced a joint product, few of the officials interviewed in the CEE were able to assess their individual performances or contributions. The work of most of the experts, however, became distinct chapters and annexes of those documents. The more significant achievements towards which the CA financed consultants contributed include the following:

CZECH AND SLOVAK REPUBLICS: A two volume JES was produced using eight consultants provided through WEC. The JES is generally regarded as a comprehensive, impressive and professional product which has increased awareness of environmental issues. Its approach and format has been used as a model for similar studies in other countries.

While it has been a slow and difficult process reaching consensus on priorities (i.e. to focus on hot-spots) the Czech Ministry of Environment uses the JES as a resource document for drafting legislation and reports, and proposals for the Environmental Fund were adopted directly from the JES.

The JES was decisive in: incorporating environmental conditions into the World Bank's structural adjustment loan package; the approval of a biodiversity grant through the Global Environment Fund; the design of the recent \$246 million Energy and Environment Loan; and supporting AID's \$15 million sector grant to Czechoslovakia.

In the Slovak Republic, there is much less enthusiasm about the JES. According to the Slovak Ministry of Environment, one of the JES' greatest contributions is that its existence

III. OVERALL PROGRESS (continued)

and packaging allows donors to understand the issues. Donor funding of JES priorities is expected to remain low until the country's political situation is resolved.

POLAND: Through a separate and direct agreement between the World Bank and WEC, most of the work for the Environmental Strategy was done in 1989 (before this CA). That Strategy led to an \$18 million Environmental Management Loan in 1990. One additional month of assistance from an economist has been provided through WEC under this CA. Because AID and the World Bank found that analysis to be overly academic, there have been no impact-oriented results to date.

HUNGARY: The WEC was involved (in a direct contract with the World Bank) in initial data collection in 1990 prior to this CA. While the World Bank has been unable to reach agreement with Hungary regarding environmental priorities, the initial study has provided a database and has generally increased environmental awareness. A strategy using that database is now being developed by the World Bank.

ROMANIA: Four consultants contributed critical technical analyses to the recently published environmental action plan for Romania. Though broad in scope, the action plan emphasized programs for the Danube and the Black Sea.

BALTICS: Three WEC consultants provided key analyses of the major environmental issues. The document also serves as a working action document. Some recommendations have already been adopted. For instance, the Ministry of Environment in Estonia is now following management recommendations made by a WEC consultant.

BULGARIA: A joint Environment Strategy Study was prepared using three WEC consultants and a WEC staffer. Government of Bulgaria officials see the document as supporting existing government conclusions. It is highly regarded, widely used and is referred to as "the Bible" in the environment area. A revised strategy and more implementable action plan is now being prepared with World Bank and European Community (EC) assistance. The study has led to the establishment of a nature protection agency and the development of a proposal for a biodiversity grant from the Global Environment Fund. While the World Bank is now designing a significant loan for Bulgaria, further environmental impact of the Strategy Study has been limited by the fact that virtually all its priority activities require funding which has, until now, not been forthcoming.

FINDINGS

The country strategies, environmental studies, action plans and other documents prepared with the assistance of WEC selected experts are generally well regarded and used. They are dynamic, long-term, evolving documents which provide an essential informational base and a

multi-year framework influencing how the World Bank, AID and other donors invest their money.

At the goal level this component is explicitly integrating environmental concerns and requests into industrial restructuring and privatization plans and associated legal and economic reforms are being enacted. Many factors come into play and it is not suggested that the activities supported by this CA have caused all these changes. Nevertheless, there is some movement on environmental policies, priorities and management. Consistent with the recommendations of the studies and plans, the evaluation noted a modest shift in priority concerns from compliance, increasingly to impact. It also noted that all countries are increasing environment related tariffs, fees and fines and starting to enforce them.

At the purpose level this component is increasing awareness of the environment, helping identify the most significant pollution hazards and accelerate legal and economic restructuring. The documents themselves stress the interdependence between environment, economics and health. While cause and effect is very difficult to prove, most people interviewed believe that the assessments, strategies and action plans funded under this component have been a factor, contributing towards:

- Acceptance in all countries of the need for site specific EAs.
- Broad recognition of the value of proper operation and maintenance in controlling pollution.
- Improved awareness of and coordination between different organizations and entities in each country.

At the output level this component is completing assessments, strategies and/or action plans advanced in nine countries well ahead of the targets set in the CA. Of particular note, the joint reports are reducing overload on governments from having numerous investment teams in the country.

Regarding the specific contribution of this CA, for both the World Bank managed and the AID initiated activities, few host-country and AID project personnel had any awareness of or opinion about WEC individuals as separate from other study members. Nevertheless, people interviewed at the World Bank, as well as the few comments obtained from field interviews, recognized the WEC-obtained consultants as very competent and substantive professionals with hands-on experience who bring an industrial perspective not available through other organizations.

4. Long-Term Advisors

Under the CA, WEC was to provide long-term advisory services (Senior Environmental Experts) to an unspecified number of CEE countries. These advisors were to provide comprehensive assistance to Ministries of Environment in such areas as: identification and mitigation of critical environmental problems and risks; ongoing assistance in setting priorities and refining environmental strategies and policies; identifying and managing short-term advisory services; country coordination and reporting; and day-to-day assistance to the counterpart ministry.

As WEC has implemented the CA, and in complete coordination with AID and EPA, two long-term advisors to host-country ministries of environment were provided to three countries. Each of these advisors was to serve for approximately two years. The advisor to the Czech Republic completes his tour in early 1993 while the advisor who splits his time between the Slovak Republic and Hungary is scheduled to depart in late 1993.

The two advisors have broad and nearly identical scopes of work and both respond to perceived priorities but, in neither case, do they play the overarching supervisory and managing role anticipated in the CA. The role that these two advisors play in their respective countries is extremely different, reflecting not just individual approaches but, more importantly, the relationships and interaction with host-country officials and AID representatives.

The advisor to the Ministry of Environment in the Czech Republic has concentrated on and gotten deeply involved in a relatively small number of major issues. In the Slovak Republic, the advisor has taken a more demand-driven profile and gets less involved in detail but is engaged on a broader and more diverse range of programs. He is used extensively to coordinate all of the AID (and even other donor) environmental programs and in some respects, he acts as an ad-hoc staff member of the AID representative. In Hungary he is more focused on economic incentives and analysis and capacity building within the Ministry.

The senior officials at the ministries and USAIDs all praised the work and day-to-day contributions of the advisors. It is difficult to say that some of the accomplishments would not have been made if these advisors had not been there, but it is fair to say that some of the accomplishments would not have been as fully realized or in as timely a fashion.

In the CZECH REPUBLIC, the long-term advisor:

- Has been instrumental in bringing into focus the government's policy on past environmental liabilities. If the proposed legislation passes, the privatization process will continue and more comprehensive privatization agreements will be negotiated.

- Brought the Ministry of Environment together with the parties to a privatization joint venture and resolved the liability issue, saving the deal from falling apart.
- Has been influential in establishing a regulation that "second wave" privatizations must include an environmental impact assessment.
- Has identified and managed several successful short-term technical assistance efforts. His connections with the EPA have led to very productive assistance being provided by EPA personnel.
- Helped program the AID sector grant and helped coordinate the start-up of other AID funded environmental activities.
- Assisted in the formation of the CEMC.

In the SLOVAK REPUBLIC, the long-term advisor:

- Provided specific support to the Ministry of Environment in strategic planning and environmental economics. This has included formation of a Project Implementation Unit.
- Has been thoroughly involved in the programming of the AID sector grant and in the start-up of AID funded projects including Local Environmental Services and Environmental Training.
- Helped restructure the Slovak Environment Fund.
- Provided technical support enabling the Ministry of Environment to reverse an imprudent Slovakian investment proposal and initiate competitive procurement on a co-generation plant which should save the government approximately \$20 million.

In HUNGARY, the long-term advisor:

- Initiated and coordinated substantial research and short-term assistance on environmental and economic issues including economic incentives for pollution control. The initiative resulted in a better appreciation of the relationship between economics and the environment and passage of a new fuel tax.
- Helped draft regulations to strengthen the Environmental Protection Fund in an effort to increase reliance on market based loans/guarantees, increase transparency and accountability.

III. OVERALL PROGRESS (continued)

- Trained ministry personnel and strengthened their capacity to use economic analysis for more effective decision making. Such analysis has already saved approximately \$100 million on a proposed chemical plant.

In ALL THREE COUNTRIES, the long-term advisors:

- Are regarded as highly professional, hard working, effective and influential.
- Provide a very visible (and appreciated) U.S. presence in the sector, improve coordination and help set priorities of U.S. environmental assistance in the countries.
- View their roles as substantially distinct from WEC's core mandate of plant assessments and training workshops and take their signals as much (or more) from AID as from WEC. This has meant that the various components under this CA have not been as integrated and mutually reinforcing as they might otherwise be.
- Have made substantial contributions towards improved communications and cooperation within the ministries of environment; between the ministries of environment and the ministries of industry, privatization and finance; and between/among government, parliament, industry, non-governmental organizations (NGOs), AID and other donors.
- Have initiated modest but significant management improvements within the ministries of environment including more open communications and decision making and personnel management.
- Have helped to instill the importance of environmental audits in the privatization process.
- Are frustrated by the ambiguity regarding their roles in the ministries and by difficult access to their respective Ministers. Senior officials of each of the three countries acknowledge that they have not used the long-term advisors to their full capability. In the instance of the Czech and Slovak Republics, steps have been made to rectify this by scheduling meetings with the new Ministers.
- All USAID and host-country officials interviewed would like the long-term advisory assistance to continue.

FINDINGS

At the goal level the advisors are deeply involved in industrial restructuring, privatization and economic reform and have been vital to the actual enactment of some laws, regulations and policies.

At the purpose level the advisors have effectively increased awareness and understanding, particularly among government officials, and transferred a variety of valuable skills and greatly improved communications among all parties engaged in environmental issues.

At the output level the advisors have participated in and improved coordination of AID funded environmental activities.

5. Legal Activities

Under an informal letter agreement between WEC and the ELI (ELI) signed in September 1990, the ELI component of the CA has supported Law Drafting Assistance in Poland, Hungary and Czechoslovakia. This assistance is part of ELI's broader Environmental Program for CEE which is also substantially financed by private foundations and the U.S. Information Agency.

No section of the CA mentions ELI, describes or quantifies the activities which would later be incorporated into the WEC/ELI agreement. The CA does, however, contain several references to identifying legal, regulatory and policy constraints; conducting a legal reform workshop; and offering legal policy services. The CA further stated that "WEC may elect to provide sub-grants in selected areas that expertise is not available from the IEDS network." Implicit, but unstated, within the CA was the assumption that legal assistance was required to help transform a wide range of empty and unenforced regulations and standards regarding pollution in CEE into effective and enforceable environmental protection laws and policies.

Like WEC, ELI's implied approach was intended to be broad and reactive, in accordance with host-country priorities and schedules. The most specific articulation of ELI's objectives (contained in the September 1990 letter agreement) is "to offer timely, seasoned insights on the draft laws being developed in Hungary, Poland and Czechoslovakia". Other stated objectives, contained in subsequent work plans, were task oriented (conducting workshops, study tours and drafting visits) rather than impact or product oriented.

III. OVERALL PROGRESS (continued)

The evaluation team found the following achievements to be results of ELI activities supported under the CA:

POLAND

- Concepts of public participation, particularly as it applies to preparation of regulations and granting permits, have been incorporated into the recently enacted Nature Conservation Law as well as into three proposed laws now in parliament (Water Law, Hunting Law and Waste Law). Similar provisions inserted in the draft laws on the National Inspectorate for Environmental Protection and the Act on Forests were rejected before the laws were enacted.
- The Research Group on Environmental Law summarized and translated ELI's working paper on "Best Available Technology," and distributed it to the departments of environment in Poland's 49 geographic regions. Translation of other working papers is expected shortly. The BAT paper was given top priority because technology-based standard-setting is an unfamiliar concept in Polish law.
- The Research Group on Environmental Law has written papers in response to the Public Participation and Environmental Impact Assessment working papers.

HUNGARY

- Forty participants, including representatives from parliament, industry and NGOs, engaged in an intensive three day workshop on environmental law.
- ELI reviewed, prepared detailed comments and memoranda on and testified before Parliament's Environment Committee regarding environmental impact assessment and civil liability sections of the draft environmental law.
- Substantial sections of the latest draft environmental law, particularly elements dealing with public participation, permits and financing, are directly attributable to ELI involvement.
- Initial drafts were revised to address and resolve objections from the Ministry of Environment and Ministry support was forthcoming.
- The revised law has been translated and sent to relevant ministries in Croatia, Slovenia and Poland.
- ELI's principal colleague has successfully involved diverse constituencies from ministries, NGOs and most recently industry.

CZECH REPUBLIC

- Specific weaknesses to the draft environmental impact assessment law were identified and alternative language suggested.
- All working papers have been translated into Czech, published by the Ministry of Environment and distributed to ministries, universities and local authorities.
- Memoranda concerning issues in hazardous and solid waste law have been translated and distributed throughout the country.
- The whole concepts of public participation and rights of citizens, previously unknown in the Republic, are being discussed widely and rapidly gaining acceptance.

SLOVAK REPUBLIC

- Several draft laws or regulations currently being reviewed by government ministries contain provisions recommended by ELI. These include laws concerning: water quality management and regulation; environmental impact assessments; waste regulations reducing the risk from importing hazardous wastes through sham recycling; and semi-annual reporting on the use of funds in the Environment Fund.
- All working papers have been translated and distributed to the environmental law working group.

NOTE: Due to the separation of the Czech and Slovak Republics, the considerable amount of comparable assistance also provided at the Federal level may appear unproductive, though the individual participants are expected to remain involved in environmental issues in their respective republics.

REGIONAL AND OVERALL

- Responding to a set of common inquiries from environmental officials and NGO representatives, ELI has prepared and distributed four working papers on Environmental Impact Assessment, Public Participation in Environmental Regulation, "Best Available Technology," and the Role of the Citizen in Environmental Enforcement. These papers have provided guidance to lawyers and other officials drafting new environmental law. The EIA paper in particular has received wide and positive feedback.
- Four additional working papers are now in progress on Effective Environmental Enforcement, Practical Approaches to Implementing Environmental Laws, Public

III. OVERALL PROGRESS (continued)

"Right to Know" and other Information Access Measures, and Economic and Regulatory Incentives for Environmental Protection.

- Thirty representatives from government, industry and NGOs in the target CEE countries, Western Europe and North America were brought together for a focused Roundtable Discussion on EIA and public participation in environmental decisionmaking.
- ELI maintains contact with representatives from other European countries in the Regional Environmental Center's Legislative Task Force and chairs the Task Force's subcommittee on Public Participation.
- Informal ongoing linkages have been established between and among ELI and 20-25 English speaking environmental lawyers, NGO activists, academics and government officials in CEE. They share information, concerns and ideas.

FINDINGS

At the goal level the ELI component has had an identifiable influence on specific environmental laws in the target countries. Though not attributable to ELI, all interviewees agree that clear and stable laws as well as predictability are essential for environmental improvement and investment and that openness will help increase competition in the marketplace. Public involvement in environmental decisionmaking is an integral element of AID's environmental strategy and of the strategies set forth in the JES. ELI is the element of the CA which most directly contributes to that objective.

At the purpose level the ELI component has supported and accelerated legal restructuring and reform, increased environmental awareness and strengthened CEE linkages to American environmental law experts. Of particular note:

- ELI has helped to integrate successful U.S. concepts, philosophies and ways of thinking into local and other European laws and standards. Their work is beginning to demonstrate to decisionmakers the value of an inclusive process. Most particularly, ELI has presented alternatives to the closed administrative procedures that have long prevailed in CEE.
- ELI has been an effective vehicle for dispersing information and broadening the policy debate. It has helped to increase contact and exchange between ministries of environment and between government entities and environmental NGOs.
- In the four target countries the greatest concentration of inputs have already been provided, the people with whom ELI can most effectively work have already been

reached and the most cost-effective impacts have already been made. While all local interviewees would like to have continued access to ELI for advice and assistance regarding drafting of future environmental laws, the extent to and speed with which those inputs are used is now dependent upon host-country people and conditions. In many countries, this progress may be slow.

At the output level the ELI never systematically looked at priority constraints as a focus of its activities, unlike the problem identification, analysis and resolution approach suggested in the CA. Therefore, it is impossible to identify or quantify constraints identified and addressed. Its "working papers," however, have substituted as a proxy for common themes it believes need emphasizing. Other items of note at this level are:

- ELI has accomplished most of the tasks it set out for itself in its first two work plans.
- While ELI is not the only organization providing legal assistance in the environmental field in CEE, they were the first, they are on-site and hands-on, they are competent and their involvement has been useful. Moreover, ELI is unique in offering a non-advocacy, American perspective and in emphasizing public participation.
- ELI's responses to requests for information or assistance have been timely, flexible to changing conditions and, from the standpoint of their primary clients, wholly satisfactory.

IV. COSTS AND BENEFITS

While this evaluation was not formally charged with a financial review of the CA, the evaluators believed that any assessment of impact had to consider the question, "In relation to what?" The original CA contained a summary five year budget of \$8.37 million of which \$5.39 million was to be provided by AID and \$2.98 million or 36 percent by WEC. It was anticipated that approximately two-thirds of the WEC contributions would be in the form of short-term pro bono technical services being provided from industry participants in WEC's IEF, public and other private sector professionals, academics and officials from NGOs. Amendment No.3 to the CA, dated May 8, 1992 increased AID's LOP contribution by \$3,443,050 to \$8,932,050 and WEC's anticipated contribution by \$1,089,800 to \$4,071,800, or approximately 32 percent of the new total.

A. Estimated Funding and Expenditure by Element

Although the CA budget is not broken down by program component and WEC is not required to report its expenditures by component, in the spring of 1992 WEC revised its accounting procedures in an attempt to provide some accounting of future AID direct costs according to four program components: Industrial Health and Safety and Pollution Prevention (IHSPP); Strategic Planning and Action Plans (SP/AP); Long-Term Advisors (LTA); and ELI.

Using that same system, WEC has also reconstructed some of its earlier direct expenditures by designating vouchers to one of the four components. In practice, it is still difficult to accurately breakdown all direct and indirect costs by program component since the start of the CA. Recognizing this difficulty and extrapolating from the WEC system, the evaluation team's estimates of all direct and indirect expenditures to date are found in Table IV.A. In particular, it should be noted that it was not possible to accurately allocate all direct expenses. "Other Direct and Indirect Expenses" includes WEC's fixed overhead rates of 35 percent of direct costs on the WEC core activities, 15 percent on sub-grants, plus staff salaries, telephone, postage, publications, etc. considered as "Other Direct" expenses.

**TOTAL AID EXPENDITURES THROUGH JUNE 30, 1992
U.S. DOLLARS**

	IHSPP	SP/AP	LTA	ELI	TOTAL
DIRECT	595,894	430,512	284,243	275,902	1,586,551
OTHER DIRECT AND INDIRECT ¹	595,894	195,883	196,661	195,887	1,184,325
TOTAL	1,191,788	626,395	480,904	471,790	2,770,876

Table IV.A.

According to WEC accounting, through June 30, 1992, AID expenditures totaled \$2.77 million and WEC contributions (consisting of pro bono services) totaled \$1.06 million or 38 percent.

B. Financial Considerations

- Industrial Health and Safety and Pollution Prevention (IHSPP) includes the travel and expenses of all pro bono experts on plant assessments, WEC staff travel, training workshops, conferences and study tours.

Since this component includes so many disparate pieces, it is the most problematic to allocate. Including other direct and indirect expenses in the unit cost of each activity, the evaluators allocated the approximate costs of each sub-activity as follows:

<u>Plant Assessments</u>	32 @ \$7,000	\$224,000
<u>Study Tours</u>	31 people @ \$16,000	496,000
<u>Workshops</u>	4 @ \$60,000	240,000
<u>Conferences</u>	21 people @ \$4,000	84,000
<u>Co-Sponsor</u>	1 @ \$30,000	30,000
<u>Staff Travel</u>	24 person weeks @ \$5,000	120,000
	Subtotal	\$1,194,000

¹ Assumes that WEC's core activities command proportionately more direct and indirect expenses than non-core activities. Accordingly the total was allocated among the four components at rate of 100% of direct costs for IHSPP and approximately 45% for all others. If "Other Direct and Indirect" had been allocated at the same rate for all components (approximately 39%) the comparable amounts would change to IHSPP - \$444,821; SP/AP - \$321,368; LTA - \$212,181; and ELI \$205,995.

According to WEC reports, the total non-ELI contribution of pro bono services over the evaluation period is approximately 1,409 person-days valued at \$794,560 resulting in an average of approximately \$560 per pro bono day. Approximately 600 pro bono days were for plant assessments, the remainder distributed among, study tours, workshops, conferences and strategic planning and action plan activities. In the latter categories, pro bono includes not just those who worked without pay but also those whose normal fees exceeded the AID rate but were paid AID's maximum daily rates.

By obtaining those 600 person-days of services through the WEC program, rather than at the commercial rates of at least \$800 per day or the approximately \$640 per day fully burdened rate AID commonly pays for technical services through a consulting firm, AID has saved between \$384,000 and \$480,000. More importantly, without WEC, the services of many of the experts could not have been obtained at any price.

Of course the best way to examine cost-effectiveness is to examine the economic and financial benefits resulting from these visits. While this evaluation was unable to do that, the evaluators judge that the benefits of the four out of seven plants visited would be sufficient to more than pay the full costs of this component. WEC speaks of one project not included in this evaluation where its expert's advice might save the client more than \$3 million on the refurbishing of its waste water treatment plant.

Given the measurements of impact presented in Section III, even allowing for a substantial margin of error in the above calculations, the plant assessments are by far the most cost-effective activities in this component.

2. Strategic Planning and Action Plans (SP/AP) includes paid consultants many with a pro bono component provided through the CA for environmental studies, action plans and other macro-level assessment and planning work. (For purposes of this evaluation, the few expenses under "Environmental Economics" are also included in this category.)

Under this component, WEC provided consultants to fulfill 31 projects. While some of the policy changes discussed in Section III. are significant and far-reaching, a quantitative evaluation of costs and benefits is impossible, even a retroactive assessment of reasonableness of costs is difficult. This evaluation did not undertake an exact computation of the total days of consulting services provided. If, however, one assumes that the average project was approximately the AID norm of one person-month, and simply divides the number of projects by the estimated total cost of this component (\$626,395) the resulting cost is approximately \$20,200 per person-month. That figure is comparable to the \$20,000 to

\$22,000 per person-month average for short-term AID technical assistance from other sources which involve overseas travel.

3. Long-Term Advisors (LTA) included salaries, fees and expenses of the two senior environmental advisors provided through the CA.

Only 18 person-months of LTA had been provided during the period covered by this evaluation. If only direct costs are considered, that calculates to approximately \$190,000 per person-year. Including the estimated other direct and indirect expenses, that figure increases to approximately \$320,000 per person-year. These figures seem high considering the fact that the salary and benefits of one of the advisors is being paid by the EPA. It should be noted, however, that one of these advisors covers two countries and, therefore, incurs substantial travel costs. While being fully cognizant of those expenses and of the long-term benefits of the accomplishments of these advisors, these costs still appear to be high relative to the costs of other AID financed advisors around the world.

4. Environmental Law Institute (ELI).

Between September 1990 and June 30, 1992 ELI drew on the assistance of 54 environmental lawyers and other professionals for a total of approximately 238 person-days of pro bono services valued at approximately \$257,000. In addition, approximately 45 person-days of paid assistance were provided. AID financing for ELI channelled through the CA through June 30, 1992 totals \$275,902 or \$975 per person-day of legal services. It must be noted that this figure does not include either the time of ELI staff attorneys dedicated to this work (roughly estimated at 750 person-days) or WEC's other direct and indirect expenses attributed to ELI of approximately \$196,000. With these factors included, the total cost per day of assistance declines to approximately \$455 per day.

Evaluated solely from the narrow perspective of cost per day of service, the ELI program is approximately 29 percent cheaper than the approximately \$640 per day consulting firm rate. It is approximately 62 to 68 percent cheaper than comparable expert services obtained from U.S. law firms at a rate of \$1,200 to \$1,400 per day¹. It should also be recognized that the legal specialists provided by ELI are difficult to find, regardless of cost.

Looked at another way, the ELI component already has, or on the basis of assistance already provided is likely to, favorably influence legislation in at least four countries at a total cost per country of just over \$120,000. It is conceivable that these services could have been provided more cost-effectively with less travel and more use of written correspondence and submissions of pre-existing materials. Such an approach would only work, however, if the local counterparts were already sufficiently familiar with the American system to fully

understand the material sent. It also assumes that no advocating is required. One of the advantages that beneficiaries noted from working with ELI, in comparison with EC counterparts, was that ELI provided personal contact, critical to understanding unfamiliar concepts. On the basis of the information available to the evaluators, it appears that AID is getting good value for its investments under the ELI component of this CA.

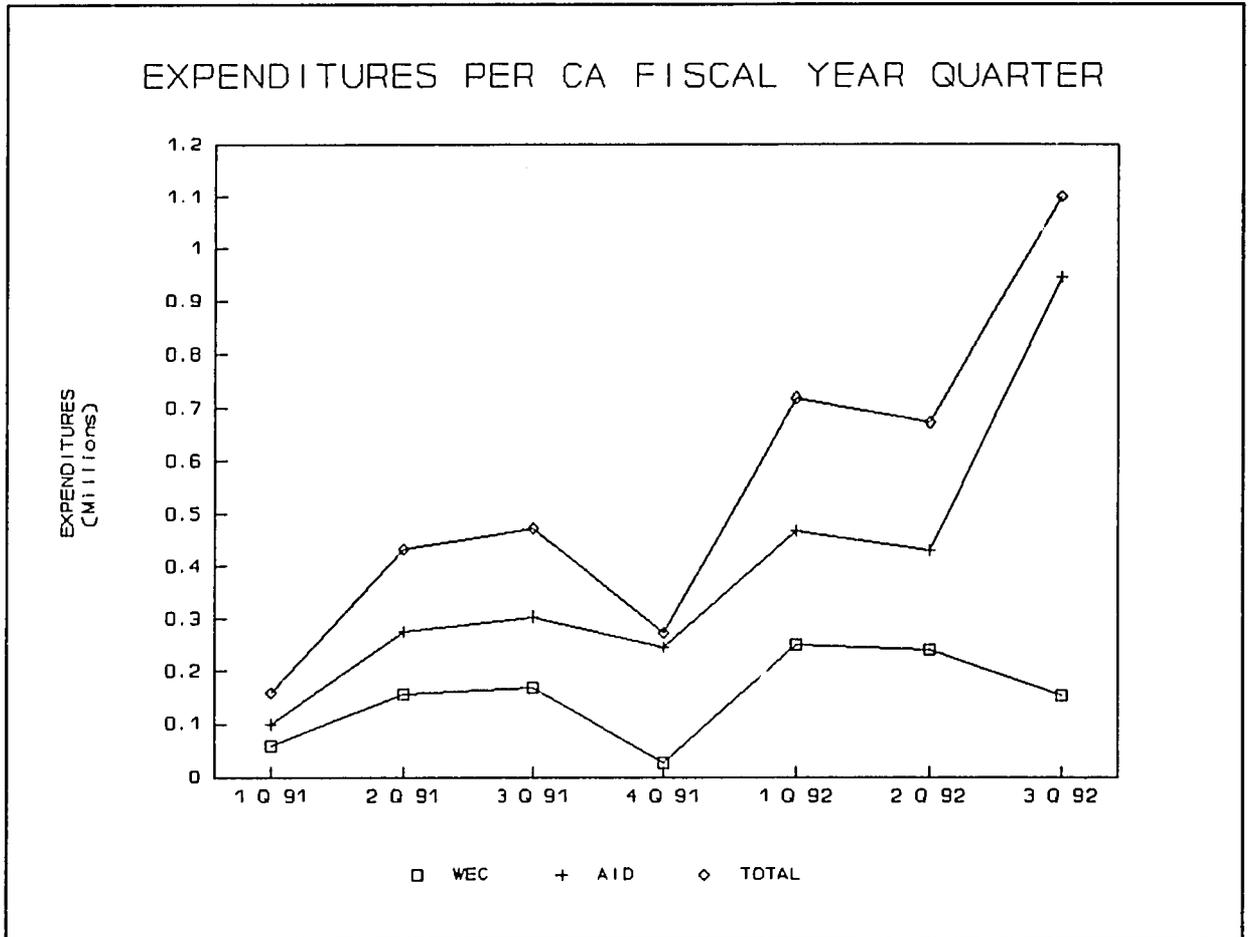


Figure IV.B

FINDINGS

- Through June 30, 1992, the WEC contribution is approximately 28 percent of the total expenses. While only slightly less than the percentage anticipated in the CA, recent expenditures, illustrated in Figure IV.B., suggest that in the future WEC contributions will constitute less and less of the overall CA budget. This trend is due largely to the fact that WEC's contribution consists of pro bono services and that the demand for technical services is increasing at a rate substantially larger than WEC's ability to meet that demand with pro

bono personnel. The pro bono content of all CA elements (according to WEC/ELI reports) totals approximately 2,100 person-days and is valued in excess of \$1.3 million. This alone represents a significant out-of-pocket savings to AID and to the American taxpayer.

- It is virtually impossible to generate a compelling quantitative cost-benefit analysis for the components of this CA, particularly given its emphasis on skills transfer, studies and research, and legal and policy reform. Nevertheless, by most measures available to the evaluators, it appears that AID has received good value for the dollars spent on all CA components.
- Plant assessments, followed by ELI activities and EA workshops appear to be the most cost-effective and to provide for the most immediate impacts. The results of the other activities may be more far reaching and enduring.

V. FUTURE PROGRAM DIRECTIONS

A. Clarifying Program Objectives

Within a CA structure, accountability and results cannot be assured or even promoted without commonly understood, shared and accepted objectives and guidelines. As has been noted, implementation and evaluation of this CA have both been hindered by a lack of clarity and specificity in the CA itself and in subsequent verbal discussions, correspondence and documentation. For example a results or impact orientation was certainly not an expectation of the original CA and, while a reorientation in that direction appears to have been discussed informally between AID and WEC this evaluation found no evidence that this new direction was ever confirmed in writing.

Appendix B, "Proposed Logical Framework Matrix" envisions a project similar to the one illustrated in the logframe of Appendix A. but with more of an impact orientation. As such it represents one alternative for clarifying program objectives. A quick comparison of the two logframes reveals that under the "Impact Orientation," WEC would be more responsible for achieving targets which previously were at the higher goal level, and therefore, from AID's normal perspective, outside its responsibility. Ironically, these targets are already being met to a significant degree. This impact orientation also necessitates a much more hands-on approach requiring more feedback, mechanisms for measuring baseline information and changes, and making more use of in-country personnel.

Possible indicators for measuring progress at the "End of Project Status" level for instance might include:

- Environmental concerns integrated into industrial restructuring plans.
- Remedial or other action to improve management of solid, hazardous and toxic wastes taken in X number of industries.
- Economic savings realized at the plant level.
- Associate legal and economic reforms enacted.

B. Demand for Assistance

The field interviews conducted for this evaluation revealed a strong and consistent demand for four of the five components currently being offered under this CA: industrial assessments, training and information dissemination, long-term advisors and legal assistance. There was no explicit demand for country assessments, strategies and action plans through

WEC, though the involvement of the long-term advisors in this area is well recognized and appreciated.

Industrial Assessments: The demand for environmental examinations and audits of industries throughout CEE far exceeds the capacity of those currently providing such services with donor support (WEC, the World Bank and the NORAD). Those relatively few industries which are prime candidates for privatization and/or outside investment will and should receive priority. For broader socio-economic and political reasons, however, hundreds of other less economically viable industries may continue to operate for several years to come. In the aggregate, these industries will continue to exacerbate the pollution problem. While the increasing fees, penalties and licenses already give them substantial incentives to make changes, they frequently lack the financial and technical resources and will to do so. Broader access to successful programs offering suggestions for no- low-cost improvements (the types of services being offered through WEC) will continue to be required for the medium-term future. To be most effective, however, such programs must be coupled with follow-up, monitoring and dissemination of results. Excluding Yugoslavia, WEC currently has approximately 41 written requests for industrial assessments in CEE.

Training and Information Dissemination: Similarly, as this evaluation has found, continued training of environmental control managers is a relatively low-cost and effective way to reach firms who do not have access to on-site assistance. The managers can either conduct environmental reviews and better monitor activities themselves or train others on their staff to do so. Almost every interviewee expressed the opinion that training of the type provided by WEC through this CA needs to be more widely available. They also noted the importance of having trainers who had substantial, hands-on industrial experience and disenchantment with academics as trainers. WEC currently has at least three requests outstanding for training workshops, five for U.S. study tours and eight others for various kinds of instructors or short-term training. Information dissemination offers yet another way of reaching more people and industries. Such information may include checklists and manuals similar to those developed by WEC for their training plus broader access to information about the techniques, processes or equipment currently available in the field of industrial pollution control, targeted for specific industries or problems.

Long-Term Advisors: While recognizing that the advisors may not have been used as effectively as possible, both the AID representatives and the ministry of environment officials in those countries which currently have long-term advisors (Czech Republic, Slovak Republic and Hungary) requested that their services be continued or increased. A long-term advisor has been requested in Romania and in Poland, the request is being reexamined.

Legal Assistance: Though relatively few interviewees were familiar with ELI activities, all who were or who had worked with them wanted continued and ongoing access to advice and information from them. Even in those instances where major laws are likely to be

significantly delayed, officials believe that ELI-type services would be very helpful as regulations and guidelines are developed and revised.

C. Strategy and Action Plans

The original CA contained no clear, specific or concrete strategy and this evaluation suggests that was by design. AID wanted a program that was demand-driven, responsive and flexible and WEC is widely recognized for having provided that. (Requests for plant visits are usually filled within three to five months and strategic planning assignments in less than three weeks). There is also a fairly broad consensus within officials in AID and in WEC that at the time the CA was written, it would have been inappropriate to have prepared and followed a more concrete and specific design and implementation plan with more specific objectives and targets. There were simply too many unknowns and too dynamic socio-economic and political environments. Plainly the advocated approach was to see what was out there and to respond to targets of opportunity wherever they arose.

WEC also has frequently stated that a more focused approach might have made some plant-specific impact but little impact from the standpoint of awareness. AID, on the other hand, opined that WEC's diverse focus has yielded few tangible results. Ironically, this evaluation shows that with the diverse focus, there has been substantial plant-specific impact but that increased awareness has not been maximized and has occurred largely by happenstance. With greater knowledge of conditions in the region and growing stability, the evaluation team believes there is now more merit to articulate longer-term strategies, objectives and action plans. Currently, enough is known about each country and situations are sufficiently different to justify country-specific action plans including one or more of the elements discussed above.

WEC has continuously stressed that it had no follow-up responsibility under the CA and hence, it did not follow-up. While the CA does say "Responsibility for the implementation of recommendations will lie with the host-country," it did not absolve WEC from reasonable monitoring and follow-up. Even the pro bono experts indicated that they were disappointed in not knowing what had happened with their recommendations. Any pilot effort needs to be followed closely if it is to be of significant value. WEC has been carrying out the same type of program elsewhere for ten years. There must be a rich set of worldwide experiences which could be identified, analyzed and synthesized and for which powerful case studies or other presentations of impact could be developed.

D. Current Program Proposals

It is the understanding of the evaluation team that AID has requested that the current program be replaced by a highly focussed Waste Minimization Program. Under this program, most CA resources would be concentrated on demonstrating the feasibility and economic benefits of waste minimization in one to three installations in each country. Long-term advisors would continue to be funded as would certain types of legal assistance. Other program elements including industry assessments and training would be sharply curtailed.

While the evaluation team strongly endorses the follow-up and results-oriented thinking implicit in this restructuring, it believes that a wholesale shift to that model may be premature. This belief is supported by:

- The current evaluation demonstrates that the existing program is working and has achieved substantial results, some of which are quantifiable.
- The shift seems to have been motivated by a lack of information about specific and quantifiable impact rather than by specific information that the current model is not working. AID management apparently also wanted pollution prevention activities to model energy efficiency activities as much as possible.
- There are other, potentially more cost-effective options to a major refocus. These include: increased follow-up and documentation of plant-specific activities to date; continuation and/or expansion of training programs; development and dissemination of case studies; adding a cost-benefit component to all plant assessments; and expansion of information dissemination and regional information networks.
- With increased fees, penalties and licenses many installations already have substantial economic incentive to minimize waste. They are frequently impeded more by insufficient technical knowledge about available techniques, practices and equipment regarding low-cost improvements, by insufficient funds to make higher-cost improvements and by inertia. These factors suggest the potential demonstration value of the pilot programs proposed may have no better success bringing about greater impact than the current program.
- The proposed focus will do nothing to address pollution problems in those many economically non-viable installations which will continue to operate for years to come, during a transition period. Support focused only on companies certain to be privatized will do little to rapidly reduce the total pollution problem.

Should the decision be made to continue the Waste Minimization program as currently planned, several suggestions are offered:

- The program objectives and targets should be as clear and specific as possible and agreed upon in writing by both AID and WEC. In the absence of clear objectives, AID and WEC risk repeating many of the same problems encountered to date. Possible objectives include: "to demonstrate the economic benefits of pollution prevention/waste minimization approaches," or "to reduce emission of targeted pollutants (specify) by X percent."
- The plant-specific objectives and targets should be clear, specific as possible and agreed upon in writing by both the plant and WEC. Possible objectives and targets include: W percent reduction in emission of targeted pollutant(s); X percent reduction in fees and penalties; Y percent reduction in usage of raw materials, energy, water; Z percent savings in cost per unit of production.
- Plants should be selected on the basis of clear and consistent criteria which might include:
 - Economic viability and a reasonable candidate for privatization. Where so many eggs are being placed in one basket it is important that the selected enterprises survive. The plants and/or WEC should verify and document justification for the viability and candidacy and WEC coordinators are encouraged to investigate behind the scenes.
 - Evidence of top level management support and some reasonable expectation that the same management will remain in place during the pilot project period.
 - Both the ministry of industry and the ministry of environment should support the program and concur in the plant selected. (Currently Hungary's Ministry of Industry is lukewarm about the concept, based on interviews).
 - The selected plant should have environmental problems which are likely to be responsive to no- low-cost improvements and which are representative of typical industry problem.
- "Go/No-Go" decision points should be built into the initial candidacy and start-up process to allow the facility to be changed if it is determined that the management commitment is insufficient, that the expected savings cannot

demonstrate the results needed for a pilot project or other factors jeopardize success (or do not offer a useful lesson learned) at that facility.

- While specific problems and targets will vary by plant and country, WEC should take a consistent approach to waste minimization in all countries. It makes little sense for WEC staff managers to design and implement substantially different programs.
- WEC should develop a reasonable system to assure that baseline and follow-up information and data are collected, analyzed and synthesized for target facilities.
- Companion training and information programs must be developed to assure that the benefits of and lessons learned from the focus on a limited number of facilities is broadly and effectively transferred to other companies.
- While a hot-spot or geographic focus may be appropriate for power plants, it is not automatically applicable to industrial pollution. Mandating such a focus could even handicap program success. What is desired are the best candidates for waste minimization. Other things being equal, the edge should go to the facility in a hot-spot. This approach was strongly supported by most host-country officials and the long-term advisors.

FINDINGS

- Change to a more result-oriented CA design is justified and attainable. WEC and AID need to have clear, explicit and written agreed upon objectives.
- There is substantial unmet demand for continued industrial assessments, training and information dissemination, long-term advisory services, and legal assistance.
- With greater knowledge of conditions in the region and growing stability, the evaluation team believes there is now more merit to articulate longer-term strategies, objectives and action plans.
- The wholesale shift of the program towards waste minimization was premature. If AID/WEC proceed, they should: clarify objectives and put them in writing; develop plant-specific targets; utilize clear and consistent selection criteria; build in Go/No-Go decision points; assume follow-up; emphasize associated training and information programs; and remain flexible on a hot-spot focus.

VI. MANAGERIAL CONSIDERATIONS

The evaluators were asked to: a) "Evaluate the adequacy of WEC administrative and managerial support of technical consultants and the adequacy of reporting procedures between WEC and its subcontractors and between WEC and AID"; and "Evaluate the adequacy of sub-grantees to provide assistance." During the course of this evaluation, the evaluators gathered a lot of information and impressions regarding the above request and related managerial considerations. This section highlights some of the managerial considerations which are most pertinent to past and future progress and performance. Though the points covered somewhat exceed the requested scope, the evaluators hope they will be useful to WEC and AID.

A. WEC

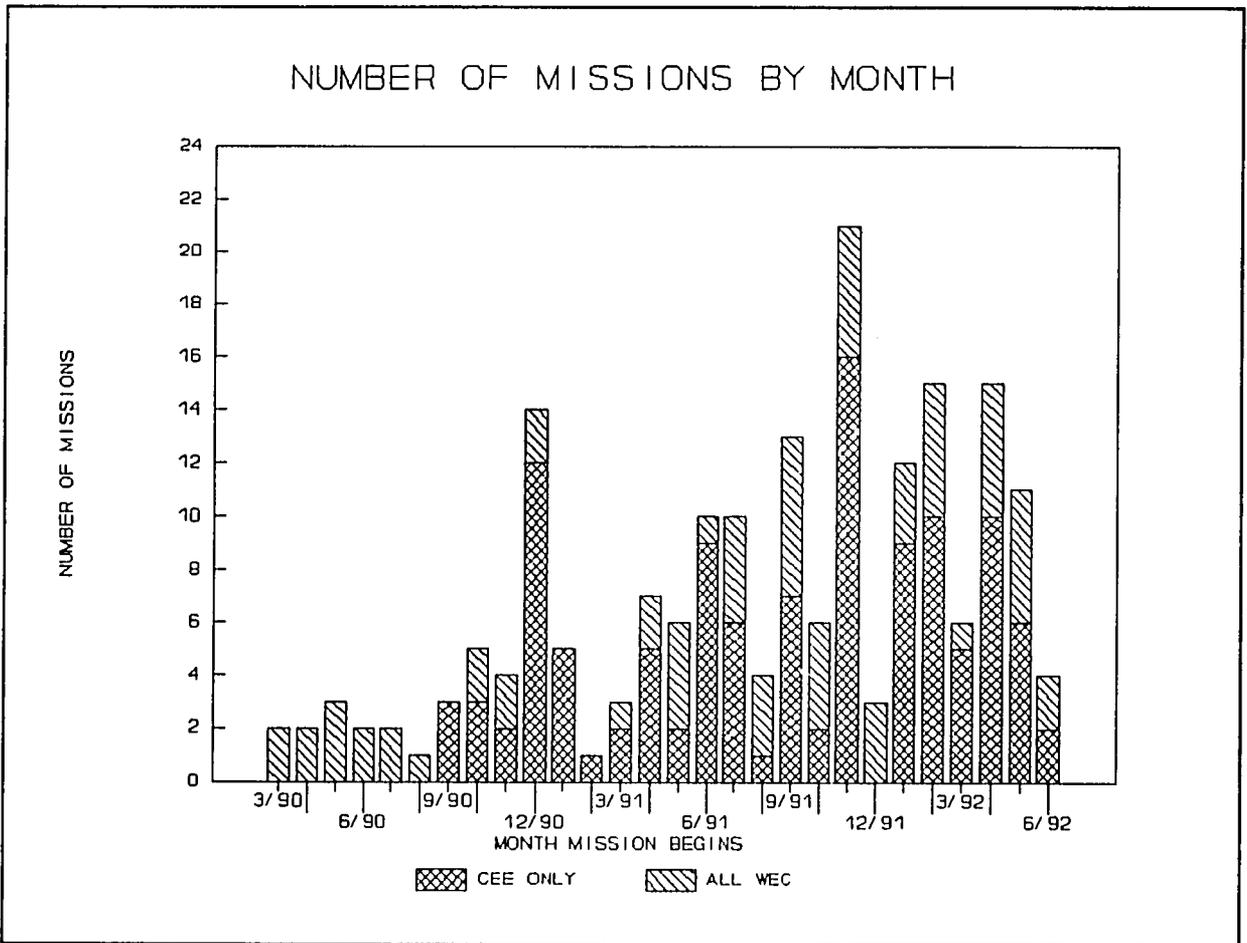


Figure VI.A.

As illustrated in Figure VI.A., the number of projects WEC undertakes each month has risen gradually but significantly since the CA for CEE program was signed. The quantity of projects has increased from an average of two projects per month over the six month period prior to the CA, to an average of eight per month since September 1990. CEE projects have constituted approximately two thirds of all WEC projects over that period.

1. Consultant Support

WEC commonly arranges all logistics for individual consultants or teams, including airline tickets, lodging, clearances from host-country industries or ministries and AID. Additional logistical support is provided by the local WEC coordinator upon arrival to get the consultant settled and introduced to the appropriate industries or organizations. The coordinators also arrange meetings and provide translation services as needed. At WEC's request, individual plants have generally provided additional support including full-time counterpart technicians and translators. On average, WEC has been able to field specialists in less than three weeks. The above support has generally been very good.

On the other hand, pre-project preparation in some instances, has not been adequate. In most cases, the SOWs for a typical plant visit or other consultancy offer little about the fundamental objectives of the assignment or how the work is to be conducted. A standard SOW reads, "The WEC Volunteer Specialist shall visit and perform an environmental review at _____ facility located in _____. Special attention will be given to air, water and soil pollution, solid and liquid waste generation and disposal, energy usage, waste minimization and safety practices." Later SOWs have provided better guidance for the content and format of the trip reports.

There is no reference to such important concepts as no- low-cost recommendations, the economic benefits of pollution control or skills transfer. In those cases where the evaluators found that better SOWs were available, they were prepared by EPA, the World Bank or AID experts. Frequently the experts would receive such general plant literature as may be available in English. Some plant directors prepared specific information for the experts. Except for joint projects with briefings organized by the World Bank or AID, however, experts do not receive pre-departure briefings. Inadequate SOWs and a lack of pre-departure briefings have contributed to a certain amount of wheel-spinning upon arrival, some lack of clarity and even some initial confusion between the expert and the facility. In all situations, reviewed in this evaluation, however, the quality of the experts overcame these problems, resulting in a positive consultancy.

2. Reporting Procedures

AID has expressed a growing frustration that WEC is unable or unwilling to provide it with the types of substantive reporting it needs to justify its programs to the Administration and Congress. In most of the USAIDs visited, one common refrain is "we do not know what WEC has done." Under the CA, WEC was to furnish: annual work plans; quarterly progress reports of long-term personnel; short-term assistance trip reports; sub-grantee completion reports; evaluation reports; and fiscal reports. In comparison to those requirements:

a) Both long-term advisors have been providing monthly (rather than quarterly) reports which the evaluation team found to be adequate. In addition, both advisors have developed at least skeletal country work plans. The long-term advisors usually submit copies of all their reports directly to the local USAIDs, AID/W, and WEC.

b) As a matter of course, WEC sends reports on all facility assessments to the facility, AID, the World Bank, EPA and more recently USAIDs. In most cases, and in respecting confidentiality, any further report distribution in-country (e.g. to ministries) is left up to plant management. While these reports are very brief, they are typically direct, specific and actionable. There have sometimes been delays of up to three months between completion of the on-site review and completion of the trip report, due primarily to the expert's procrastination. In two of the seven plants visited, that delay has caused WEC embarrassment or confusion.

c) The ELI has been preparing periodic activity and accomplishment reports, descriptions of upcoming activities and special reports as requested. Since early 1992 these have been submitted to AID and WEC.

d) WEC submits AID's standard quarterly financial status reports on a timely and satisfactory basis.

e) Work plans have not conformed with the guidance provided in the CA (description of "accomplishments made during the period including findings and recommendations...work to be performed during the next 12 months...and major problems and recommendations for action"). Those submitted have generally consisted of budgetary proposals and the number of activities planned in response to requests received.

While acceptable work plans have not been submitted, WEC has submitted monthly activity reports (broadly disseminated), several program revisions and budgets with justification, and several special reports covering program accomplishments. While AID has been frustrated with WEC's reporting, the evaluation team found no written proposals or correspondence from AID commenting on reports or proposing specific format or content changes. At the

same time, while the WEC Project Manager has opposed reporting changes saying that WEC does not have time to write more reports, the evaluation team believes that the time investment in the above reports must certainly exceed the investment necessary to write and update well-defined periodic reports.

The evaluation team believes that the reporting could be limited to an Annual Work Plan (which includes a progress report), one semi-annual progress report between the work plans and several well-developed case studies and syntheses of experience to date. Nevertheless, any number of reporting options are acceptable. The point is that AID and WEC need to reach agreement on specifically what reports are required, what information will be contained therein, when they will be submitted, and to whom.

3. Other WEC Considerations

a) Recruitment

WEC has always prided itself on being able to field what it calls "world class" people. This evaluation confirms that, with very few exceptions, the experts fielded were all first rate. All experts used for plant visits were obtained on a pro bono basis, most with 25 to 30 years of experience. However, where WEC's reputation was built on providing experts currently employed in U.S. industries, only 25-30 percent of the experts assessing facilities under this CA are now actively affiliated with industry. This change risks reducing the potential value that CEE plants could derive from ongoing partnerships with those industries.

In retrospect, it was unrealistic to depend upon IEF members to provide pro bono experts to satisfy the increased demands of the CEE program. With each request, efforts are made to recruit through the IEF, but company closings, consolidations, staff cutbacks and other economic crises have made that virtually impossible. For instance, one metallurgical association refused to participate because products from overseas are already threatening the domestic industry. Participating experts and companies do recognize the advantages of providing such experts (professional development, hands-on problem solving, exposure to other cultures, improved knowledge of CEE, positive corporate identification, contacts and sometimes leads to commercial activities) and increased success might be anticipated as the U.S. economy improves and as creative methods are found to stimulate greater industry participation. In the meantime, however, WEC will have to depend significantly upon experts outside the IEF and, in some cases, consultants with extensive industrial experience. Where the IEF may not have produced the numbers of pro bono experts needed, they have been very helpful and accommodating with U.S. study tours and a few short-term training programs.

For most services other than plant assessments, WEC depended almost entirely on paid consultants, frequently acting through other consulting firms and with consultants suggested by others. Many of the analyses undertaken for the country assessment and action plan component for example required skills outside of WEC's traditional range of expertise (e.g. biodiversity, agricultural and coastal environment). WEC appears to have performed the recruiting and support functions for these specialists very well.

b) Uniqueness

WEC is able to tap into industrial networks different from those normally available to AID, the World Bank or through EPA. One very successful U.S. short-term training program was possible because the U.S. company is very supportive of WEC and its goals. It is unlikely that comparable training could have been obtained from any other source. While some aspects of the WEC program are being replicated by the International Executive Service Corps (Stamford, CT) and by the Prince of Wales Business Leaders Forum (Great Britain), WEC's industrial connections still give it a strong comparative advantage. However, as the organization grows and evolves, seeking and obtaining funding and obligations from other sources (now 8:1 government funded), it will have to continually reassess its organizational personality to retain its distinctiveness and comparative advantage.

c) Systems

As might be anticipated, WEC has had to adopt to the growth illustrated in Figure VI.A. Where it could previously afford to be personal and informal in style, its larger size (a staff of 36, of which eight specifically work on CEE) and bigger programs now dictate more formality, standards and systems. Recent changes include an organizational chart, a new senior vice president, a new director of training, a modified accounting system, and a computerized database for paid and pro bono consultants.

WEC does have informal staff meetings where project issues are sometimes raised, but there is no formal system for the regular review of project progress or issues. In the future, WEC may wish to consider a formal follow-up system for training and plant visits. Such a system would assure that reports are timely and that WEC responds to actions requested. It could also prompt follow-up letters and/or phone calls at specified intervals after the activity.

Moreover, WEC does have a standard marketing pitch and a list of questions asked and information gathered by its staff on marketing trips (it does not explicitly mention anything about management commitment or economic viability)

d) Miscellaneous

- AID and the World Bank were highly complimentary of WEC's timeliness, responsiveness and programmatic and geographical flexibility. These shifts in emphasis and direction did, however, affect efficiency.
- WEC local coordinators have been invaluable in arranging logistics and gaining access to local government and industrial officials. Their in-country role might be expanded to include more research or verification of information, prioritization of requests, elaboration and clarification of scopes of work, provision of background information, follow-up, and dissemination of technical information.
- There is a clear but unspoken distinction between WEC's core activities of industrial assessments and training and the other elements of the CA. Because of this disconnect, the elements of this CA are not as mutually supportive as they might be.
- WEC tries to protect, this evaluation believes properly, its independent, non-advocacy, non-commercial orientation. While refraining from passing leads directly to commercial manufacturers, suppliers or brokers, it might more systematically advise AID or the USAIDs of information and activities with commercial potential.
- WEC has worked well with EPA, collaborated constructively on training and on strategic and policy studies. Some believe that WEC has effectively helped calm the seas between EPA and AID.

B. ELI

1. Performance

The actual conduct of ELI activities has been professional and well supported. ELI fields very good, well prepared, well regarded (generally pro bono) experts in a timely fashion. Those experts are unlikely to be available through any other single source. Study tours have been well organized and customized to the participants. Comments and information requests are filled promptly, sometimes overnight. ELI's services are practical and respond directly to client needs. The evaluation turned up absolutely no evidence of missteps or poor performance by ELI, even in Poland where specific concerns had been raised by USAID.

2. Communications

ELI's major shortcoming is that it did not broaden its field of associates and make others aware of ELI's role and objectives. ELI's overall approach is intensive rather than extensive, seeking to influence and empower a few key people. Outside of that small group, however, ELI is virtually invisible in CEE. Their activities are largely unknown not just by local AID projects, but by key people within the Ministries with which they work. Even the long-term advisors and local WEC coordinators, supported under the same CA, knew few details of ELI's activities. While this may not have hindered their primary work, it did limit the synergy which might have resulted from their contacts and work.

C. AID

To its credit, AID has moved quickly between the shifting goal posts of CEE to make things happen. This CA has been creatively used as a mechanism to orchestrate an array of activities which, in less than two years, have produced results which would likely have taken four years under AID's traditional design and contracting process. In so doing, AID has taken some risks and incurred some costs and criticism.

1. Potential Conflicts and/or Redundancies

Even within the U.S. Government supported environmental sector of CEE, there are a host of actors and activities. In some cases, as with this CA, some EPA programs and the Environmental Training Project are in competition with rather than complementary to this CA. As WEC's long-term advisors are helping in the Czech and Slovak Republics and in Hungary, AID needs to actively broker project activities to reduce overlap and conflicts.

2. Contracting and Funding Mechanisms

Due largely to the dynamic and unique political context of AID's CEE program, the CA seems to have been sometimes managed as a contract and sometimes as a traditional grant. For reasons of political, managerial and practical expediency, AID's dealings have been both directive and hands-off. As a result AID and WEC are sometimes on different wave lengths. For example, by June 1992, AID had already moved to concentrate completely on waste minimization, yet WEC marketing letters were continuing to offer a "portfolio of services offered free-of-charge." AID and WEC must first reach common and clear agreement on the goals and objectives of the CA and the general ways in which those objectives will be pursued. They should then reduce those agreements to writing and finally reach agreement on those specific areas in which AID will be substantively involved. Year by year incremental funding has also hindered development of long-term and consistent strategies.

3. WEC Evolution

In many instances, WEC has been used as a vehicle to accomplish AID's broader purposes in strategic planning, legal support and economic studies. In addition, this CA has resulted in a substantial increase in the size of the WEC program and nudged WEC in directions not in keeping with its commonly recognized strengths. For example, by stressing the pro bono consulting system before a way has been found to overhaul that system to meet the increased demand, WEC is being pushed towards a more competitive consulting firm model and away from its comparative advantage.

4. General Modus Operandi

Both AID and WEC have complained about not having enough time to put things in writing. As a result, many material discussions have been held and decisions reached with only verbal communications. By putting very few agreements in writing, the evaluators believe that AID and WEC may have aggravated the confusion and conflict and caused this CA to be more management intensive for both sides. For example, while AID has expressed frustration about the lack of a geographical or results focus, the evaluators found little evidence that their concerns were spelled out in writing.

FINDINGS

- WEC has generally performed its support functions well though more attention needs to be paid to SOWs and pre-departure preparation.
- Effective reporting can be achieved once there is clear and specific agreement on the form and content of the reports.
- WEC continues to fill a unique niche in providing highly qualified experts with substantial hands-on industrial experience.
- ELI needs to be more sensitive to the changing and growing role of AID country projects and the need to keep them advised and informed of ELI activities and accomplishments.
- While a behind the scenes strategy may have merit in some circumstances, ELI should also make a conscious effort to communicate its activities and accomplishments effectively to other in-country organizations. An expanded mailing list and periodic newsletter might help.

VI. MANAGERIAL CONSIDERATIONS (continued)

- AID has effectively used this CA to produce rapid results, but needs to be more conscious of programmatic redundancies or conflicts; be more clear regarding its selective involvement in the CA; and put more of its concerns in writing.

VII. SUMMARY CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

1. Due partly to the unique situation in the CEE, the CA is ill-defined with ambiguous and inconsistent objectives, contributing to misunderstandings and criticisms and making ongoing evaluation of progress difficult.

2. Nevertheless, CA activities are having significant and substantial impact: improving industrial pollution control; realizing savings at the plant level; increasing environmental awareness; and supporting preliminary efforts in legal and policy reform.
 - WEC provided hands-on, experienced experts for plant assessments. Their assessments have been a cost-effective method to quickly achieve identifiable improvements in pollution control, advance privatization and increase environmental awareness.
 - WEC's training workshops and study tours have been excellent and have increased environmental awareness, built local capacity and increased linkages with the U.S. and within the region.
 - WEC appears to have provided skilled and effective specialists for the environmental studies and action plans, though none of those interviewed associated this activity with WEC. The studies are well regarded and conscientiously followed in some countries (largely overlooked in others) and are having some identifiable impact on economic and legal policies and regulations, long-range plans and strategies and investment decisions.
 - The long-term environmental advisors are well regarded by host-country and USAID officials alike, but are frustrated by shifting host-country personnel and priorities. They have achieved tangible results including capacity building, improved communications, specific law and policy reforms and improved coordination of AID and other U.S. supported programs.
 - The ELI has made an important and significant behind-the-scenes contribution towards environmental law in CEE through the transfer of American experience, philosophy and approach rather than specific laws or language. Most significant has been the concept of public

participation. ELI has mobilized excellent specialists, but has been ineffective in its communications with AID projects and a broader host-country audience.

3. WEC is handicapping program impact because of a lack of follow-up and inadequate information and communications about the program activities.
4. WEC is recognized for quickly establishing a presence in CEE and responding to changes in-country emphases, and in AID priorities. Shifting political sands and uncertain funding, however, resulted in changing country emphases, wasted effort and changing strategies.
5. The reconstructed objectives and results of this CA fully support AID's Environmental Strategy for CEE. The activities are strengthening government and private sector capacity to undertake EAs and economic analysis. They are: promoting public participation; beginning to foster closer linkages between environment and economics; promoting policy reform; and supporting economic restructuring and privatization.
6. Except for inclusion in environmental studies and action plans and in occasional industry assessments, identification of health hazards has not been a priority objective of this CA.
7. By most measures, it appears that AID has received good value for the dollars spent.

B. Recommendations

1. The core of the WEC program, plant assessments and training, should not be abandoned in favor of Waste Minimization. They are cost-effective and essential elements in the privatization process. Impeding that ability by cutting back on training and the number of plants assisted may slow privatization.

2. An extension and increase of funding to this CA should be considered. However, any such extension/increase should:

- Agree in writing regarding the broad objectives and, to the extent possible, specific targets of the CA and AID's "substantive involvement" therein.
- Include requirements and support for increased follow-up, monitoring, analysis and dissemination of results. ✓
- Urge WEC, in collaboration with host-country entities, to more carefully screen candidates for plant assessments regarding economic viability, management commitment, and the viability of the proposed environmental improvements. ✓
- Put more emphasis on collection and dissemination of technical information, especially on no- low-cost methods.
- Reach agreement on reporting content, form, distribution and frequency. ✓
- Request separate country-specific action plans. Situations within the individual countries of CEE are sufficiently different and now sufficiently understood to justify such plans.

3. Modest support to ELI law drafting activities should continue. Existing plans and commitments to current focus countries should be fulfilled and nominal support (say \$75,000 per year) for legal networks and priority information requests preserved. Greater emphasis should be placed on new countries where it should be most cost-effective to adapt the work from current emphasis countries. ELI must do a better job of communicating its programs to USAID Projects and to host-country governments and NGOs.

4. WEC should strengthen, clarify and customize its SOWs and provide the experts with more country and plant-specific background information prior to departure. WEC might even encourage brief telephone conversations between the WEC experts and the plants to be visited prior to departure to assure a clear understanding of what is to be done. The local coordinators, who were uniformly good, might also be better utilized in this way. The SOWs might also be broadened to include preliminary estimates of the costs and payback on recommended modifications. ✓

VII. SUMMARY CONCLUSIONS AND RECOMMENDATIONS (continued)

5. While other training may be available through the World Bank, the Environmental Training Project or the Environmental Protection Agency, AID should continue to emphasize the use of trainers with hands-on industrial experience and discourage the use of academics.

LOGICAL FRAMEWORK MATRIX
"SKILLS TRANSFER MODEL"

GOAL	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>To help industries in Central & Eastern Europe improve their environmental compliance and become more efficient.</p>	<p>Environmental concerns integrated into industrial restructuring plans.</p> <p>Improved management of solid, hazardous and toxic wastes.</p> <p>Economic savings realized at the plant level.</p> <p>Associated legal and economic reforms enacted.</p>	<p>Review of plans</p> <p>_____</p> <p>Plant balance sheets and reports.</p> <p>National registers and legislative reports</p>	<p>External variables, including funding, bureaucracies, etc. enable improvements to take place.</p> <p>Increased public awareness reinforces political will for environmental reform.</p>
PROJECT PURPOSE	END OF PROJECT STATUS		
<p>To transfer U.S. environmental expertise and skills to industries and governments in Central and Eastern Europe.</p>	<p>CEE governments, industries and public aware of and better understand costs of industrial pollution and potential benefits of pollution control.</p> <p>Industrial pollution hazards with most significant health impacts identified.</p> <p>Legal and economic policy restructuring to improve climate for environmental control is accelerated.</p> <p>On-going linkages established with American industry and environmental community.</p> <p>Demand created for services like those provided in CA.</p>	<p>Interviews</p> <p>Special surveys</p> <p>Newspapers</p> <p>Action plans</p> <p>_____</p> <p>AID rep and SEE reports</p>	<p>Increasing the quantity of communications (getting the message out) would result in "transfer".</p>
OUTPUTS			
<p>1. Country assessments, strategies and action plans completed.</p> <p>2. Industrial pollution concerns addressed.</p> <p>3. Legal constraints identified and addressed.</p> <p>4. People trained.</p> <p>5. Information dissemination</p>	<p>1. No. completed and identifiable results.</p> <p>2.a. ___ Individual enterprises reviewed.</p> <p>2.b. Identifiable improvements made.</p> <p>2.c. ___ industrial sector assessments, strategies and action plans completed.</p> <p>3. _____</p> <p>4. ___ U.S., in-country, regional or in-plant workshops, conferences, study tours, internships.</p> <p>5.a. Reference libraries and centers established or improved.</p> <p>5.b. Documents, reports, materials purchased, prepared and/or adapted.</p> <p>5.c. Public awareness programs.</p>	<p>Project reports</p> <p>Evaluations</p>	<p>Governments and industries provide access, participation and support for CA services.</p> <p>People made available for training.</p>
INPUTS			
<p>Long-Term TA</p> <p>Short-Term TA</p> <p>Confs/Wkshps/Study tours, etc.</p> <p>Sub-grants</p> <p>CA Mgt./Overhead</p> <p>Evaluations/Audits</p> <p>Inflation/contingency</p> <p>TOTAL</p>		<p>Project budgets</p> <p>Financial reports</p>	<p>Qualified expertise will be available.</p> <p>Majority of ST TA will be provided from the U.S. private sector on a pro bono basis.</p>

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LOGICAL FRAMEWORK MATRIX
"IMPACT ORIENTATION"

NEW GOAL	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Industrial pollution reduced; health and safety practices improved and industrial waste is minimized.</p>	<p>Releases of industrial pollution into water, air and/or land reduced by __%.</p> <p>Industries become more attractive to private investors.</p> <p>Aggregate economic savings improve the GDP.</p> <p>Morbidity and mortality from pollution related chronic diseases decreases __%</p>	<p>National and plant monitoring systems</p> <p>Plant sales records</p> <p>National accounts</p> <p>Vital statistics</p>	<p>Industries will adapt to private reform by conserving higher priced resources and hence creating less pollution.</p> <p>Initial economic savings encourage additional investment in pollution management and control.</p> <p>Other variables affecting health do not deteriorate.</p>
<p>NEW PURPOSE</p> <p>To assist Eastern Europe improve the environmental management of its industries and modify related policies, regulations and legal constraints.</p>	<p>NEW END OF PROJECT STATUS</p> <p>Environmental concerns integrated into industrial restructuring plans.</p> <p>Remedial or other action to improve management of solid, hazardous and toxic wastes taken in __ industries.</p> <p>Economic savings realized at the plant level.</p> <p>Associated legal and economic reforms enacted.</p>	<p>Review of plans</p> <p>_____</p> <p>Plant balance sheets and reports</p> <p>National registers and legislative reports</p>	<p>External variables, including funding, bureaucracies, etc. enable improvements to take place.</p> <p>Increased public awareness reinforces political will for environmental reform.</p>
<p>NEW PROJECT OUTPUTS</p> <p>1. U.S. environmental expertise and skills effectively transferred to industries and governments in Central and Eastern Europe.</p> <p>2. Studies, strategies and action plans completed.</p> <p>3. Economic and legal constraints identified and addressed.</p> <p>4. Information dissemination</p>	<p>MAGNITUDE OF OUTPUTS</p> <p>1.a. __ people trained in __ U.S., in-country, regional or in-plant workshops, conferences, study tours, internships.</p> <p>1.b. CEE governments and industries demonstrate desire and ability to use the products and services provided.</p> <p>1.c. CEE governments and industries initiate and manage own industrial pollution control and reform programs.</p> <p>1.d. On-going linkages established with American industry and environmental community.</p> <p>2.a. __ country assessments, strategies and action plans identify and address industrial pollution hazards with most significant health impacts.</p> <p>2.b. __ industrial pollution concerns examined and addressed.</p> <p>3. _____</p> <p>4.a. Reference libraries and centers established or improved.</p> <p>4.b. Documents, reports, materials purchased, prepared and/or adapted.</p> <p>4.c. Public awareness programs.</p>	<p>Interviews</p> <p>Special surveys</p> <p>Newspapers</p> <p>Action plans</p> <p>AID Rep. and SEE reports</p> <p>Evaluations</p>	<p>Targeting and effectiveness of communications is critical to transfer.</p> <p>Governments and industries provide access, participation and support for CA services.</p> <p>People made available for training.</p>
<p>INPUTS</p> <p>Long-Term TA</p> <p>Short-Term TA</p> <p>Confs/Wkshps/Study tours, etc.</p> <p>Sub-grants</p> <p>CA Mgt./Overhead</p> <p>Evaluations/Audits</p> <p>Inflation/contingency</p> <p>TOTAL</p>			<p>Qualified expertise will be available.</p> <p>Majority of ST TA will be provided from the U.S. private sector on a pro bono basis.</p>

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TIMELINE OF IMPORTANT ACTIONS

DATE	ACTION	COMMENT (\$000)
9/1/90	CA Signed	LOP \$5,389; CO ¹ \$700
10/28/90	1st advisory mission begins to Czech	
11/90	Project Director hired	
12/90	1st monthly report	
1/91	1st advisory mission begins to Hungary	
1/91	Request from ELI for \$536,408 in support to Law Drafting Assistance Project	
2/91	Draft of Czech JES ² (+ Action Plan) completed	
3/91	First visit to Yugoslavia	
3/91	Distribution of monthly reports expanded	
3/91	First visit to Poland	
3/29/91	Amend. # 1	LOP \$5,389; CO \$4,700
5/91	In-country coordinator in Poland	
5/91	WEC conference in Vienna, 10 delegates sponsored	
5/91	Follow-up to IEF regarding corporate volunteers	
6/91	WEC's 100th mission celebrated in Poland	
7/91	Long-Term Environmental Advisor hired for Slovak Rep. & Hungary	
7/91	WEC advises AID that current funding is inadequate to meet demand	
8/91	WEC/AID meeting to project needs through 1995	
9/21/91	Amend. # 2	LOP \$5,389, CO \$5,140. Reminds WEC of need to submit proposed budget at least 90 days prior to each budget year
9/91	Environmental Action Plan drafted for Bulgaria	
10/91	WEC submits proposal for CA increase up to \$18.96 million	

DATE	ACTION	COMMENT (\$000)
9/1/90	CA Signed	LOP \$5,389; CO ¹ \$700
10/28/90	1st advisory mission begins to Czech	
11/91	Czech Environmental Assessment training	
11/91	1st visit to Romania	
12/91	WEC/NYC finds expanded space for CEE program staff	
12/91	Monthly report notes difficulty finding pro bono advisors	
1/92	Long-Term Environmental Expert hired for Czech Rep. and Federal Comm. for Env.	
2/92	JES of Romania	
2/92	1st visit to Baltics	
2/92	Monthly reports express disappointment re: lack of general directors at Slovak Env. Assessment workshop & lack of coordination with Slovak Min. of Industry	
3/92	Subgrant to HIID for Env. Economic Policy Reform signed (Poland, Czech. Rep. & Baltics)	
4/92	Past environmental liabilities identified as major stumbling block to western investment	
5/92	Staff realignment to improve program services	
5/92	Hungary Env. Assessment workshop	
5/92	Joint mission to the Baltics	
5/8/92	Amend. # 3	LOP \$8932, authorized purchase and installation of equipment to promote waste minimization and pollution control
6/92	Poland Environmental Assessment workshop	

1. Cumulative Obligation
2. Joint Environmental Study

ILLUSTRATIVE INTERVIEW GUIDELINES

GENERAL BACKGROUND

- NAME & TITLE:
 - ROLES & RESPONSIBILITIES:
 - COMMUNICATIONS & RELATIONSHIPS:
 - Within WEC
 - With AID/W & AID Reps.
 - Host Country personnel
 - Sub-contractors
 - Short-term experts, pro bono or consultant
 - SYSTEMS FOR SUPPORTING PROGRAM:
 - Fielding and processing requests for assistance
 - Recruitment and contracting
 - Office space, hardware, support staff
 - Clearances, tickets, lodging, expenses, background information
 - Reporting (workplans, trip, financial, etc.)
 - Program evaluations
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A. INDUSTRIAL REVIEWS

MACRO (update plus)

- (Update of February information)
- # of facilities visited (% age by industrial sector)
- # of facilities assessed (% age by industrial sector)
- # or % for which prior determination of economic viability
- Geographic location with "Hot Spot" overlay
- # of different experts utilized
- # or % from: US corporations (pro bono), WEC staff, EPA, paid consultants

INDUSTRY SPECIFIC (Generic for interviews and based on review of 20 reports)

- How many requests for assistance have been received? How many rejected? How many filled? Pending? How long pending?
- Average time lapse between receipt of request and TA arrival in country?
- How was the site identified, chosen? What criteria were used? Is that criteria in writing?
- When and how were country TA priorities established?
- How do the sites conform to country priorities?
- Relationship to JES or other country action plans?
- In retrospect, is the HC industry economically viable?
- How was the specialist chosen? Technically qualified? Able to speak the language?
- Did he have clear objectives and a clear/detailed SOW?
- Was WEC logistic support adequate? (WEC obtained HC assistance, clearances, office space, schedule, counterparts, tax exemptions, tickets, lodging? other logistics?) Has WEC obtained background info. including detailed SOW, HC legal & regulatory requirements, other expert reports? Set up briefings? Field trips?

- Extent to which SOW was coordinated with HC, AID and EPA?
- What was the nature and extent of host country/industry participation and commitment to the activity? How was commitment to undertake plant reforms measured? Evidence?
- Nature and extent of training provided during visit?
- How many of what materials were provided during the visit? Were they appropriate?
- Were the conclusions and recommendations presented to the HC government/industry prior to departure? In seminar format?
- Did the report contain clear and specific conclusions and recommendations for addressing specific problems? Did it identify sources for additional TA and/or training? Did it clearly set forth who was responsible and who would pay?
- Did report include specific processing changes? Evidence that the recommended changes are the least-cost approach?
- Was the report timely? Was it cleared by the sponsoring company? Was it translated? Where, when and how distributed?
- What, if any, follow-up actions have been taken? Letters, phone calls, visits? Was follow-up to government or industry?
- If there has been no follow-up, has there been a response of any kind (positive or negative) as a result of the TA and/or the TA report?
- What ongoing linkages have been established as a result of these reviews? Evidence?
- What, if any, evidence that the information/skills provided has been assimilated/used?
- What, if any evidence of pollution reduction?
- What has been the average cost of an industry review? How has it been computed?
- What have been the major lessons learned to date about industrial reviews?

(METHODOLOGIES: TALK TO WEC, SPECIALISTS (5), INDUSTRIES + SITE VISITS (5), HC REPS, SEEs, REVIEW 20 REPORTS, TRACE 2 EXAMPLES FROM START TO FINISH)

B. TRAINING (for a matrix)

- What are the various types of training that have been provided workshops, conferences, study tours, internships, on-the-job, other?
- Where has training been conducted (in U.S. or other (in-country, regional, in-plant)?
- What has been the subject area for training (general industrial pollution, waste minimization, hazardous waste management and control, legal reforms, standards, incentives, risk assessments, etc.)
- What has been the average duration for each type of training?
- What has been the basic strategy for identifying training needs and conducting training (in each industry, country, region)?
- How was audience chosen and specific participants identified? What criteria were used? Are these criteria formal/written? What percentage were "trainers"?
- What materials were provided? Did they address the specific topic being discussed? Were they translated?
- What was the language of the training?
- Who planned the training? Who conducted it?
- What was the role of LT personnel, HC counterparts?
- Was training focused on specific existing problems needing correction?
- Did the participants evaluate the training? By what mechanism? How have their comments been incorporated into future training?
- Have reports been prepare on the results of all training?
- What ongoing linkages have been established as a result of these reviews? Evidence?
- What evidence exists that the training has been used? Evidence of increased awareness and/or skill transfer? Has there been any follow-up?
- What is the current demand for future training? How is that measured?

- What is the average cost per type of training? Per participant? How calculated? Is it reasonable
- How were the expenses of the training paid? Cost-sharing arrangements?
- What have been the major lessons learned to date about training?

(METHODOLOGIES: TALK TO WEC, AID REPS, TRAINERS (3), INDUSTRIES (5), PARTICIPANTS (5), HC REPS, REVIEW TRAINING REPORTS, EVALUATIONS AND MATERIALS)

C. COUNTRY ASSESSMENTS, STRATEGIES AND ACTION PLANS

- What are the specific products that have been produced (assessments, strategies and action plans)? Where? When?
- What was the origin of the request? How was it handled? To what extent was WEC a catalyst?
- Does the work respond to a particular, defined problem?
- Who (organizations and individuals) participated in the work? How were the specialists chosen? Technically qualified? Able to speak the language? If shared, what portion of the work was carried out by WEC associated personnel?
- Who (organizations and individuals) managed the work? Relationship to WEC?
- How did WEC support the work logistically?
- Was there a clear objective, SOW? Content outline?
- What was the nature and extent of host country/industry participation and commitment to the activity? How was commitment to undertake reforms measured? Evidence?
- Are the conclusions and recommendations clear and practical?
- Are actions prioritized? Criteria for prioritization?
- How were the conclusions and recommendations communicated?
- What actions or reforms have been taken since the report? by whom? Any evidence of reduced pollution or industrial efficiency? To what extent can they be attributed to the report? To WEC participation?

- What ongoing linkages have been established as a result of these reviews? Evidence?
- What other evidence exists of increased awareness, understanding or skill transfer?
- Was there ever any explicit suggestion that assessments, strategies and action plans should precede corrective actions?
- What is the current demand for future assessments, strategies and action plans? How is that measured?
- What have been the major lessons learned to date about country assessments, etc.?
- What were the costs of the work and reports? What share was paid from the CA?

(METHODOLOGIES: TALK TO WEC, WORLD BANK, EPA, SEEs, HC REPS, REVIEW ALL REPORTS, REVIEW 2 FILES FROM START TO FINISH)

D. INFORMATION DISSEMINATION

- For each of the following describe the product, the numbers disseminated, the type and location of the target audience, and the method of dissemination:
 - Environmental reference libraries (G or PS);
 - Regional Environmental Centers;
 - Center for Environmental Management;
 - Programs to heighten public awareness (general public, educators, media, other professionals)
 - Reports and materials in conjunction with ST advisory services;
 - Training equipment of materials (docs, pamphlets, manuals etc.) specially procured by WEC;
 - Production or adaptation of training materials (conversion of training tapes, films, handbooks, booklets, other)
 - General WEC program information (modify as needed and provide copies of existing materials, slides, videos)
- How open is the access to the libraries and centers? How widely are they being used? Evidence?
- Has the material provided included technical guidelines and regulations on waste minimization, general pollution control solutions and sources of TA.; general texts; and trade brochures? What percentage is available in the local language?

- How relevant is the material to HC priorities and action plans?
- What are the sources of the materials disseminated?
- Who is in charge of information dissemination?
- How are the audiences targeted?
- What ongoing linkages have been established as a result of these reviews? Evidence?
- To what extent did local representatives (government, industry, NGOs) participate in the selection of the material provided?
- What is the evidence that the materials have been used?
- What has been the effect of that usage?
- What evidence exists of increased awareness, understanding or skills transfer?
- What have been the costs of the materials provided? How were those costs calculated?
- What is the current demand for future information? How is that demand measured? How is it being addressed?
- What have been the major lessons learned to date about information dissemination?

(METHODOLOGIES: TALK TO WEC, AID, AID REPS, SEEs, INDUSTRIES (5), HC REPS, VISIT LIBRARIES AND CENTERS, REVIEW MATERIALS PROVIDED)

E. LEGAL ACTIVITIES

- ELI's Program for CEE has 4-5 elements. Where does the WEC/AID assistance fit within these elements? How are the other elements of the CEE program funded?
- What is the origin of the legal activities element? Why was it incorporated into the WEC CA?
- How was ELI identified? For CEE, towards what other alternatives might countries turn for assistance?
- How have legal constraints to pollution control been identified? Prioritized? Mechanisms and criteria?

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- What specific activities or products (by country) have they completed or are currently underway (studies, workshops, drafting legislation or regulations, other)? Where and When?
- What is the relationship to the country strategy?
- Who/what is their primary audience? How is that audience being reached? How has the activity spread beyond the narrow interests of environmental lawyers?
- What was the nature and extent of host country participation and commitment to the activity? How was commitment to undertake reforms measured? Evidence?
- If laws or regulations drafted or reforms proposed, what is their current status and anticipated results?
- What is the evidence that the products have been used?
- What has been the effect of that usage?
- What evidence exists that activity has contributed to increased awareness, understanding or skills transfer?
- What have been the costs of the activities to date? What have been the costs to WEC/AID, those provided on a pro bono basis, those provided by the participating countries, those from other sources? How were those costs calculated?
- What is the current demand for future ELI activities? How is that demand measured? How is it being addressed?
- What have been the major lessons learned to date about legal activities?

(METHODOLOGIES: TALK TO WEC, AID, AID REPS, ELI REPS, HC REPS, SEEs, REVIEW ELI FILES)

F. LONG-TERM ADVISORS

- What is the nature and magnitude of the following advisory services or products?
 - Day to day assistance to the counterpart ministry;
 - Advise ministers and ministries on policy formulation, technical assessments and management training;
 - Providing direct TA on pollution reduction;
 - Setting country priorities and refining environmental strategies;
 - Formulating environmental policies;

- Identifying needs for other advisory services and training;
 - Coordinating, supporting and managing other programs of the CA;
 - Preparing country reports;
 - Determination of priority health risks;
 - Determination of policy and legal constraints;
 - Identifying or mitigating critical environmental problems.
- What is the relationship with and access to HC entities (government, industries, NGOs)?
 - How often do you meet with them?
 - Their evaluation of the WEC program (old/new strategies)
 - What is the evidence that the services and products have been used?
 - What has been the effect of that usage?
 - What evidence exists that activity has contributed to increased awareness, understanding or skills transfer?
 - What have been the costs of the long-term advisors to date? How were those costs calculated?
 - What is the current demand for future LT advisory services? How is that demand measured? How is it being addressed?
 - What have been the major lessons learned to date about legal activities?

(METHODOLOGIES: TALK TO WEC, AID, AID REPS, HC REPS, SEEs, REVIEW SOW AND COUNTRY REPORTS)