



**WORLD ENVIRONMENT CENTER**

**STAFF TRIP REPORT**

**TO**

**HUNGARY**

**AND**

**ROMANIA**

**JULY 11 - 20, 1994**

**WORLD ENVIRONMENT CENTER  
419 PARK AVENUE SOUTH, SUITE 1800  
NEW YORK, NEW YORK 10016**

**JULY 1994**

**REPORT DISTRIBUTION:**

James D. Taft, Senior Environmental Specialist, Bureau for Europe and New Independent States, United States Agency for International Development

Richard J. Hough, USAID Representative, Bucharest, Romania

David Cowles, USAID Representative, Budapest, Hungary

Patricia A. Swahn, Acquisitions Manager, Document Acquisitions, United States Agency for International Development

Liviu Ionescu, WEC Coordinator, Romania

Zsuzsanna Dorko, WEC Coordinator, Hungary

Antony G. Marcil

George Carter

Thomas J. McGrath

Romuald Michalek

Bohdan Aftanas

B. Bhushan Lodh

Carl M. Schwing

Valerie Sepe

File

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## **I. EXECUTIVE SUMMARY**

Thomas J. McGrath, WEC staff, met with Hungarian companies which expressed interest in participating in the Waste Minimization Impact Program. All agreed to participate in the U.S. study tour which will take place September 9 to 21. The workshop is from September 26 to 29.

A potential Pollution Prevention Center was visited. The Academy of Engineering is interested and it will consider this opportunity at its September meeting.

In Romania, the largest steel mill, Sidex, agreed to participate in the waste minimization program. FY '94 funding will allow for one waste minimization demonstration project. The Romanian Ministry of Industry requested we consider Sidex.

The Romanian Association of Engineering was visited as a potential Pollution Prevention Center. It will consider this opportunity at its September meeting.

WEC is confident that both Engineering Societies will agree to act as Pollution Prevention Centers. They are excellent candidates because they represent all engineering disciplines, draw members from industry, academia, and government and have branches throughout the country.

## II. MEETINGS

### HUNGARY

During the week of July 10, Thomas J. McGrath, WEC staff, and Zsuzsanna Dorko, V/EC Hungarian Coordinator, met in separate meetings with representatives of the Hungarian companies that will participate in the Waste Minimization Impact Program (WMIP).

Meetings were held with:

United Chemical Plant	Dr. Frigyes Faix General Director
Budapest Chemical Works	Mr. Emil Valovits General Director
Viscosa	Mr. Szilveszter Hermann Deputy General Director
Alkaloida Chemical	Mr. Laslo Hagyo-Kovacs Deputy General Director
Borsodchem Rt.	Mr. Laszlo Szentmiklossy Deputy General Director
Caola Cosmetics and Drug Plant	Mr. Imre Nagy, Ph.D. General Director
Tisza Chemical Plant	Mr. Gyorgy Kalman General Director
Ministry for Industry and Trade	Mr. Denes Olessak Head of Department for Environment and Safety
Ministry for Environment and Regional Policy	Mr. Peter Szanto Head of Department for Waste Management

Due to a sudden illness in his family, Mr. Jozsef Baracscai, Deputy General Director, Nitrochemical Plant cancelled his visit. Ms. Dorko will meet with him

next week and explain the program.

Mr. McGrath explained the WMIP and the concept of the Pollution Prevention Center. The WMIP will begin with a study tour in the U.S.A. from September 9 to September 21. The waste minimization workshop will be held from September 26 to 29.

Following the workshop, each participating company will prepare a waste minimization program and identify five projects, working with Hungarian consulting firms, which will participate in the workshop.

At an appropriate time next Spring, a one day seminar will be held. Hundreds of Hungarian companies will be invited to hear from the Hungarian companies which participated in the WMIP the benefits of their waste minimization programs. The Waste Minimization Manual, workbook, and video tape will be available from the Pollution Prevention Center at an appropriate price. Six Hungarian consulting firms which participated in the WMIP will be ready to provide service to companies which wish to start right away.

#### Battery WMIP

WEC has a battery Waste Minimization Demonstration Project (WMDP) at Perion in Budapest and at Accumulatorul in Bucharest. The purpose of these demonstration projects is to show the economic benefits from improved health and safety practices.

During the visit, Ms. Dorko and Mr. McGrath visited Perion. They met with Dr. Jozsef Keri, General Manager and Ms. Agnes Horvath, Leader of International Group.

They were informed that the WMDP is progressing according to schedule. Their waste minimization committee is studying the best location for the automatic wastewater sampler provided by WEC and expect to reach a conclusion soon after they complete some tests.

During the meeting, Mr. McGrath proposed that a two-day seminar be held in Budapest at which battery companies in Central and Eastern Europe would attend and hear the positive results of the two WMDPs. Esca Tech, Inc., the WEC consultant, and others would discuss the WMDP at Perion and Acumulatorul.

Mr. Keri strongly endorsed the proposal and volunteered Perion's assistance in organizing the seminar. He will supply the names, addresses, and person to contact at each battery company. Mr. McGrath suggested that the establishment of a regional battery association could be considered at the

seminar. This will provide a medium for a continued exchange of environmental information and possible assistance among the battery companies.

Mr. Keri endorsed this suggestion. Also, he agreed to have the seminar participants visit Perion and see how it implemented the WMDP. He suggested that the battery seminar be held November 8 - 9, 1994.

Mr. McGrath said that he will discuss this with USAID in Budapest and Washington, D.C. for their input and agreement to proceed.

#### Pollution Prevention Center

Ms. Dorko and Mr. McGrath met with Mr. Tamas Szontagh, a representative of the Environmental Section of the Hungarian Chamber of Engineering.

This organization was a very important organization before World War II. Following the changes in 1989, the Chamber started operating again and currently has 3,000 members. The Environmental Section has 200 members.

The Chamber has two full-time and one part-time employee. It is trying to regain its building, which it lost in 1939, but since it's now the Prime Minister's office, the Chamber is not optimistic.

The results of the meeting were that Mr. Szontagh will meet with other key people in the Environmental Section and the Director of the Chamber of Engineering to discuss how best to establish a Pollution Prevention Center within the Environmental Section.

Since this section is comprised primarily of industrial engineers, designers, and professors at various universities, it appears to be an ideal candidate. The section has limited funding and would need funds for staff and office equipment.

Ms. Dorko will meet with the Chamber of Engineering to assist in developing a proposal for WEC's review. Mr. Thomas J. McGrath and Dr. Bohdan Aftanas will attend the waste minimization workshop in late September. During the visit, they will meet with the Chamber to finalize a plan for the establishment of a Pollution Prevention Center within the Environmental Section of the Chamber of Engineering.

Also, Dr. Aftanas, Ms. Dorko and Mr. McGrath will finalize plans for the battery WMIP in September on the condition that USAID agrees with the proposal.

United States Agency for International Development

Ms. Dorko and Mr. McGrath met with Dr. Ferenc Melykuti, Project Specialist, Office of the AID Representative.

Dr. Melykuti was briefed about the chemical WMIP, the proposed WMIP for the battery producers in Central and Eastern Europe, and the proposed Pollution Prevention Center.

He endorsed the programs, noting that the battery WMIP would be very helpful. USAID encourages regional approaches and this program would support that approach.

**ROMANIA**

July 17

Met with Liviu Ionescu, WEC Coordinator, and reviewed agenda for the visits.

July 18

Mr. Ionescu and Mr. McGrath were joined by Mr. Alexandru Georgescu, Ministry of Industry, in Galati and visited the steel works, Sidex.

Met with Deputy General Director Dumitru Nicolae and his staff. Also in attendance was Mr. Petre Oane, Manager, Scientific Research, at the Research and Design Institute for Steel Flat Products and Metal Coatings. Approximately 90% of the Institute's work is for Sidex.

WEC staff explained the waste minimization program. All present agreed that Sidex would enthusiastically support a waste minimization program. It was tentatively agreed that WEC would send a pro bono expert in early September to assess the facility for two weeks to identify waste minimization opportunities.

Sidex was first constructed in 1961 and expanded over the years. It is the largest steel mill in Romania with a capacity of 8.6 million metric tons per year. Last year production was 4 million tons. Employment is 38,000 people.

The facility has many environmental problems. The management wishes to develop a complete environmental program for the facility and welcomes WEC assistance.

In response to Mr. McGrath's questions, Sidex management requested information about the best available technology for pollution prevention, to recycle water and to regenerate H<sub>2</sub>SO<sub>4</sub> in the pickling line.

They also are interested in obtaining information about the safe transportation and sorting of iron ore.

Detailed information about Sidex was obtained and will be given to the WEC pro bono expert.

The Sidex facility is very large. It is six miles long and offers the potential opportunity to conduct a number of WEC programs involving an assessment, WMDP, WMIP and health and safety.

Mr. McGrath inquired about the other industries in Galati and was informed that there is a large pulp and paper mill located by the Danube which pollutes. He inquired if it would welcome a WEC assessment. The following day, Mr. Georgescu informed Mr. McGrath that officials in the Ministry strongly endorsed a WEC assessment of the pulp and paper mill.

Mr. McGrath advised that tentatively WEC will try to send a pro bono expert at the same time it sends the steel expert. This way they could share experiences which could enhance their findings. Mr. Ionescu will visit the mill to explain the WEC programs.

#### July 18

Messrs. Ionescu and McGrath reviewed the tape of the workshop. It should be ready in final form by late August.

#### Pollution Prevention Center

Messrs. Ionescu and McGrath met with Prof. Dr. Ing. Mihai Mihaita, President, The Romanian General Association of Engineers.

The organizational structure is similar to the Hungarian Chamber of Engineering. Information about the General Association was obtained and Mr. Ionescu will send a translation to Mr. McGrath.

This association has a staff of 10 people, represents all types of Engineers, participates in international activities and owns its own building. Members dues are very modest at 1,000 lei (about 55 cents per year). It receives most of its revenue from conferences and renting space in the building. Mr. Mihaita would welcome further discussions with WEC after he discusses our conversation with

his Executive Board.

To date, WEC has visited four organizations which could be Pollution Prevention Centers. This one appears most suitable.

### **III. BUSINESS CARDS OF CONTACTS**



**Prof.Dr.ing. Mihai Mihaiță**  
President

THE ROMANIAN GENERAL ASSOCIATION OF ENGINEERS  
118, Calea Victoriei - 70179 București Tel: 40 1 659 41 60 Fax: 40 1 312 55 31



**RICHTER GEDEON VEGYÉSZETI GYÁR RT.**

1103 Budapest X., Gyömrői út 19-21. • Tx: 22-5067  
Tel.: 261-2199, 260-7614 • Fax: 260-4891, 260-6650

**SZONTAGH TAMÁS**  
osztályvezető

Környezetvédelmi Osztály  
Telefon: 261 2-742



**Dr. József KÉRI**  
General Manager

**PERION AKKU AG.**  
H-1138 Budapest,  
Váci út 135-139., Ungarn

Tel.: 361/120-8831  
Fax: 361/120-2279  
Telex: 22-4596

COMBINATUL SIDERURGIC  
„SIDEX” S. A.  
GALATI — ROMANIA

**NICOLAE DUMITRU**  
— DIRECTOR GENERAL ADJUNCT —

Str. Smirdan nr. 1  
6200 — Galati  
☎ 31900/2000

Telex: 51257  
Fax: 934/30003  
☎ 934/30003



THE RESEARCH AND DESIGN INSTITUTE FOR  
STEEL FLAT PRODUCTS AND METAL COATINGS

**PETRE OANE**  
MANAGER  
SCIENTIFIC RESEARCH

HEAD OFFICE :  
STR. SMIRDAN NR. 2  
6200 — GALATI, ROMANIA  
Telephone 934 42932  
Telex 51299  
Telefax ~~11299~~  
**036/461238**



U. S. AGENCY FOR INTERNATIONAL DEVELOPMENT  
BUDAPEST, HUNGARY

**Dr. Ferenc Mélykuti**  
Project Specialist

EMBASSY OF THE UNITED STATES OF AMERICA  
OFFICE OF THE AID REPRESENTATIVE  
Károlyi krt. 11, 5th fl.  
1075 BUDAPEST, HUNGARY  
TEL: (36-1) 269-7860  
FAX: (36-1) 251-1981

**CAOLA**COMPANY FOR COSMETICS AND  
HOUSEHOLD CHEMICALS**IMRE NAGY**  
General ManagerH-1113 Budapest  
Bocskai str. 90.Phone: (36-1) 209-0326  
Fax: (36-1) 209-0326TECHNICAL UNIVERSITY OF BUDAPEST  
Conference Office**Ms. Mónika Jetzin**  
Conference OrganizerMűgyetem rkp 3-9  
H-1521 Budapest  
HungaryOffice: Building Z, 2 nd floor 201.  
Phone: 181-2179  
Telex: 22-5931 muegy h  
Fax: (36-1) 185-2218**PERION**  
Founded in 1893**Ágnes HORVÁTH Chem. Eng.**  
Leader of International Group**PERION AKKU CO. LTD.**  
H-1138 Budapest,  
Váci út 135-139., HungaryTel: 361/120 8831  
Fax: 361/120 2279  
Telex: 22-4596**KOLTAINÉ**  
**Dr. PFEIFFER ZSUZSANNA**

környezetvédelmi osztályvezető

TELEFON:  
210-0560  
/101TELEFAX:  
210-0572**FŐVÁROSI KÖZTERÜLET-FENNTARTÓ VÁLLALAT**  
1081 Budapest VIII., Alföldi u. 7.**ALKALOIDA**

Chemical Company Ltd.

H-4440 Tiszavasvári, Pf. 1. Hungary

**LÁSZLÓ HAGYÓ-KOVÁTS**  
Technical Manager

Telephone: 36-42-372876 Telefax: 36-42-372137 Telex: 073275



BORSODCHEM RT.

**LÁSZLÓ SZENTMIKLÓSSY**  
deputy general director**BORSODCHEM RT.**  
H-3702 KAZINCBARCIKA,  
P.O.B. 208. HUNGARYTel: 36-48/310-211, 310-697  
Fax: 36-48/311-769  
Telex: 64-222

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**magyar viscosa rt**  
H-2537 NYERGESÚJFALU

**Dipl. Ing. SZILVESZTER HERMANN**  
Technical manager

Phone: 33-355-353 Telefax: 33-355-207 Telex: 22-5626  
33-355-244\* Telefax: 33-355-541\*

Egerszegi János  
igazgató igazgató

ERM Hungária Kft.

Bogdányi u. 1  
H-1117 Budapest  
Telefon 166 9907  
Telefax 185 0240



CHEMIEWERKE BUDAPEST AG.

**EMIL VALOVITS**  
Generaldirektor

Telefon: (36-1) 127-7253  
Telefax: (36-1) 147-7702  
Telex: 22-5597 chemie h

Budapest IX., Kén utca 5.  
Adresse:  
H-1476 Budapest, Pf. 236.



**Péter SZÁNTÓ**  
Head of Department

Department for Waste Management  
AGENCY FOR ENVIRONMENTAL PROTECTION

MINISTRY FOR ENVIRONMENT AND REGIONAL POLICY  
H-1011 Budapest I, Fő u. 44-50. Phone: (36-1)201-5180 Fax: (36-1)201-2491



**Dr. Frigyes FAIX**  
Chairman, general manager

H-1172 Budapest, XVII. Cinkotai út 26.  
Tel.: (36-1) 256-2576, 256-2365  
Fax: (36-1) 257-1671  
Telex: 22-4043



MINISTRY OF INDUSTRY  
AND TRADE

H-1024 BUDAPEST II.,  
Margit körút 85.  
P.O.B. H-1525 Budapest, Pf. 96.

**Dénes Olessák**  
Head of Division for  
Environmental Protection  
and Safety

Telephone: (36-1) 156-4773  
(36-1) 156-8591  
Fax: (36-1) 175-9693  
(36-1) 175-0219  
Telex: 22-5376



MINISTRY OF ECONOMY  
OF THE SLOVAK REPUBLIC

György KÁLMÁN  
director

**Viliam DANIŠ**  
Chemical and Pharmaceutical Industry

Address:  
Micrová 19  
827 15 Bratislava

Tel.: 0042-7-2998285  
Fax: 0042-7-231 485  
0042-7-232 024



**TISZAI VEGYI KOMBINÁT RT.**

H-3581 Tiszaújváros, P.O.B. 20  
Telephone: +36 49 321 983  
Telex: 22 6419  
Facsimile: +36 49 321 580  
HUNGARY



Environmental Consulting  
Services s.r.o.

RNDr. Ludovít Kucharič, CSc.  
výkonný riaditeľ

052 01 Spišská Nová Ves  
Zimná 72  
Tel./Fax: 0965/21562  
Privát: 0965/32172

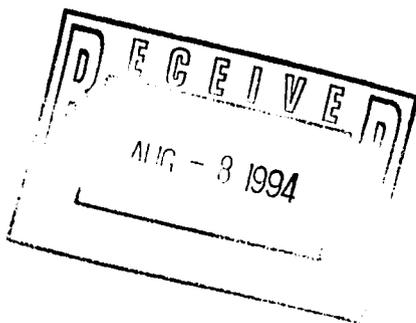


**Martin Brunovský**  
Project Adviser  
Environment/Agriculture

Panská 33  
811 02 Bratislava  
Slovakia

Tel.: (42)-7-330-667  
(42)-7-331-588  
Fax: (42)-7-334-711

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