

International Conference on Thermal Conversion of Municipal Sludge

March 21-24, 1983
Sheraton-Hartford Hotel
Hartford, CT

655R84004

United States
Environmental Protection
Agency

Center for Environmental Research
Information
Cincinnati OH 45268

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EPA 335



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12:10 p.m. **Japanese Experience with
Thermal Conversion Systems**
Speaker to be Announced

1:00 p.m. **Lunch Break**

SESSION 4

Moderator: Atal E. Erulp, Ph.D.
Municipal Environmental Research Laboratory
(MERL), USEPA, Cincinnati, OH

2:10 p.m. **Overview of New Techniques**
Atal E. Erulp, Ph.D.

2:40 p.m. **U.C. Davis Gasification Process**
George Tchobanoglous, Ph.D.
University of California
Davis, CA

3:10 p.m. **Battelle Northwest Sewage to
Fuel Oil Conversion**
Peter M. Molton, Ph.D.
Battelle Pacific Northwest
Laboratories
Richland, WA

3:40 p.m. **Summary Evaluation of
Conference Proceedings**
Alan F. Cassel
Arlington County Water Pollution
Control Division
Arlington, VA
Raymond J. Avedt, Ph.D.
Greenborne & O'Mara
Riverdale, MD

4:10 p.m. **Adjournment**

EVENING SESSION

7:00 p.m. **State and Local Considerations**
Speaker to be Announced

7:45 p.m. **General Discussion**

8:00 p.m. **Open Forum: Beerfest**

SESSION 5

Moderator: James E. Smith, Jr., Sc.D.

Thursday, March 24, 1983

8:00 a.m. **Continental Buffet Breakfast**

8:30 a.m. **A Sludge Incinerator Fuel Reduction
Program & Plant Tour Description**
Paul F. Gilbert
Metropolitan District, Hartford County
Hartford, CT

9:30 a.m. **Conference Adjournment**

10:15 a.m. **Departure for Hartford
Wastewater Treatment Plant**

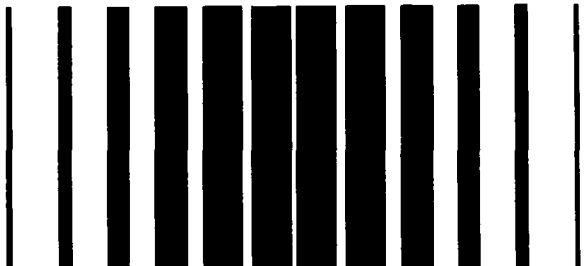
10:45 **Tour Dewatering and Incineration
Facility**

12:15 p.m. **Depart Plant for Airport or Hotel**

CERL-82-8

INTERNATIONAL CONFERENCE ON THERMAL
CONVERSION OF MUNICIPAL SLUDGE
c/o Dynamac Corporation
P.O. Box 827
Rockville, MD 20851-0827

Place
Stamp
Here



Purpose

The International Conference on Thermal Conversion of Municipal Sludge is being sponsored by EPA's Office of Research and Development as part of its Technology Transfer Program. This conference will disseminate the latest information on the design and operation of sludge treatment and disposal systems, emphasizing thermal conversion systems.

Thermal conversion systems such as incineration have not, in recent years, been considered viable alternatives for sludge treatment and disposal for a variety of reasons, namely, the inability to produce a reliable and satisfactory feed, the escalation of fuel costs, and the control of air emissions. At the same time, there have been instances in which small, rural plants have been forced to turn to incineration because land has been scarce or public opposition to either land application or landfilling has been strong.

This conference will evaluate various types of thermal conversion systems and point out their strengths and weaknesses. It will also emphasize the necessity for considering and evaluating the energy and cost balances involved in the total sludge management train, including dewatering, combustion, air pollution control, ash disposal, and the thermal process itself.

Target Audience

Consulting engineers, municipal design engineers, and federal, state, and local officials concerned with pollution control and abatement are invited to participate.

Registration/Conference Site

Because attendance will be limited, early registration is encouraged. There is no registration fee required for attending the conference. An optional social fee of \$27 will cover the cost of all coffee breaks, the March 23 evening beefsteak, and the March 24 continental buffet breakfast. Checks should be made payable to Dynamac Corporation. (Refunds for the optional social fee will be made only upon cancellation, 30 days prior to the conference.)

To register for the conference, simply fill out the attached Registration Form and mail it to: International Conference on Thermal Conversion of Municipal Sludge, c/o Dynamac Corporation, P.O. Box 827, Rockville, MD 20851-0827. For further information, call Sheri Marshall, Conference Coordinator, at (301) 468-2500.

The conference will be held at the Sheraton Hartford Hotel, Trumbull Street & Civic Center Plaza, Hartford, Connecticut, telephone (203) 728-5151. A block of guest rooms is being held until March 1, 1983, after which time rooms may be reserved on a space-available basis. Special guest room rates of \$60 (single) and \$70 (double-occupancy) are available. A hotel reservation card will be sent to you along with a letter confirming the acceptance of your conference registration. You may also make your reservations by phoning the hotel directly and referencing the conference by name.

Transportation between Bradley International Airport and the Sheraton Hartford Hotel is provided by Airport Taxi, Inc., at \$4.25 per person, one-way, with buses running every hour. Taxis are also available at approximately \$14

Site Visit

A special site visit to the Hartford Wastewater Treatment Plant is planned for Thursday, March 24, from 10:15 a.m. to 12:15 p.m. Although there is no charge for participation in this site visit, we would like to know if you plan to attend so that adequate transportation may be provided.

PRELIMINARY AGENDA

Monday, March 21, 1983

7:00 p.m. - Registration

8:30 p.m.

Tuesday, March 22, 1983

7:30 a.m. - Registration

8:30 a.m.

SESSION 1

Moderator: James E. Smith, Jr., Sc.D.
Center for Environmental Research Information
(CERI), USEPA, Cincinnati, OH

8:30 a.m. **Welcome**

Thurman L. Milner, Mayor
City of Hartford
Hartford, CT
Regional Representative
USEPA Region I
Boston, MA
Stanley Pac
Commissioner of Environmental
Protection
State of Connecticut
Hartford, CT

9:00 a.m. **Conference Objectives**

James E. Smith, Jr., Sc.D.

9:10 a.m. **Report on the Activities of the USEPA
Sludge Management Task Force**
Speaker to be Announced

9:30 a.m. **Municipal Wastewater Treatment
Plant Management—A Perspective**

Richard I. Dick, Ph.D.
Cornell University
Ithaca, NY
James E. Smith, Jr., Sc.D.

10:15 a.m. **Break**

10:35 a.m. **Current Practices: Problems and
Solutions**

F. Michael Lewis, Ph.D.
Consulting Engineer
Mountain View, CA

11:20 a.m. **Energy Recovery and Optimization:
The HERS Project**

Roger T. Haug, Ph.D.
Technical Consultant
City of Los Angeles
Los Angeles, CA

12:05 p.m. **Lunch Break**

SESSION 2

Moderator: James V. Basilio
Office of Environmental Engineering and
Technology (OEET), USEPA, Washington, DC

1:20 p.m. **Environmental Considerations**

Joseph B. Farrell, Ph.D.
Municipal Environmental Research
Laboratory (MERL)
USEPA, Cincinnati, OH

2:05 p.m. **Residuals Handling Considerations**

Howard O. Wall
Municipal Environmental Research
Laboratory (MERL)
USEPA, Cincinnati, OH

2:40 p.m. **Break**

3:00 p.m. **Operation and Management of
Thermal Systems**

Ted Watts
Envirotech, Inc.
Gulf Breeze, FL

3:45 p.m. **Case Study I—Cyclo Hearth™**

Multiple Hearth Furnace Retrofit at
Lansing, Michigan
Russ G. Forbes
Zimpro Hydro Clear
Rothschild, WI

4:30 p.m. **Case Study II—Fluidized Bed
Combustion Studies: Applications
for Waste Destruction with Energy
Recovery and Utilization**

Clarence J. Wall
Dorr-Oliver, Inc.
Stamford, CT

5:15 p.m. **Adjournment**

SESSION 3

Moderator: Dale C. Bergstedt, P.E.
Consulting Engineer, Pleasant Hill, CA

Wednesday, March 23, 1983

8:30 a.m. **Overview of Codisposal
Alternatives in Use**

Dale C. Bergstedt, P.E.

9:00 a.m. **Case Study I—Commissioning of
the Duluth Fluid Bed Coincinerator**

Ernie Carlson
Carlson Associates Technical Services
Livingston, TX

9:40 a.m. **Case Study II—ECOROCK**

Daniel Pindzola, Ph.D.
The Franklin Institute
Philadelphia, PA

10:20 a.m. **Break**

10:40 a.m. **Case Study III—Dordrecht,
Holland Experience**

Leendert Van der Burg, jr.
Gevudo
Dordrecht, Holland

11:20 a.m. **European Experience with
Thermal Conversion Systems**

Speaker to be Announced

INTERNATIONAL CONFERENCE ON THERMAL CONVERSION OF MUNICIPAL SLUDGE

—U.S. Environmental Protection Agency—

Hartford, CT

March 21-24, 1983

Name _____

Title _____

Organization _____

Address _____

City, State, Zip Code _____

Optional social fee of \$27 is enclosed. * My enclosed check has been made payable to Dynamac Corporation.

I will participate in the site visit to the Hartford Wastewater Treatment Plant.

I will not participate in activities covered by the optional social fee.

I will not participate in the site visit to the Hartford Wastewater Treatment Plant.

*Refund available only upon cancellation 30 days prior to symposium date.

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