PHARMACEUTICAL PLANT WASTE DISPOSAL
BY INCINERATION

C. R. BRUNNER and R. P. BROWNELL
Malcolm Pirnie, Inc.
White Plains, New York

J. R. ROWLAND
Pfizer, Inc.
New York, New York

Discussion by

Pete Barba
SCA
Laurence, Massachusetts

(1) How do you handle ash? How do you handle air balance?
(2) In a slagging situation, is there much glass in the trash?

Discussion by

Ross Hoffman
Ross Hoffman Associates
Coral Gables, Florida

(1) Is there any leakage by the rotary kiln? Why?
(2) Was rotary chosen vs nonmoving?

Discussion by

Herbert I. Hollander
Saunders & Thomas Inc.
Pottstown, Pennsylvania

(1) How much water was added?
(2) What was done by blowdown?
(3) Have blowdown materials been characterized?

Discussion by

Soni Shrinivasan
Resource Recovery (Dade County), Inc.
Miami, Florida

(1) What is the cost?
(2) What is the supplementary fuel?

Discussion by

Manfred G. Steltz
VGT, Dyko Industries
Indianapolis, Indiana

What type of refractory?

Discussion by

Kun-Chien Lee
Union Carbide
South Charleston, West Virginia

What is the operating pressure of the kiln?

Discussion by

David Cynar
Washington, Michigan

What permitting is necessary?
Discussion by

Marvin Fink
Black & Veatch
Kansas City, Missouri

What is your opinion on mixing HW with non-HW?

Discussion by

James Martin
EnSCO/Pyrotech
White Bluff, Tennessee

What about particulates and chlorine loading?

Discussion by

Peter Barrowes
Gore & Storrie Ltd.
Toronto, Canada

(1) What materials are used for the scrubber?
(2) What are the criteria?
(3) What safety procedures are used?

Discussion by

Phil Daily
Shirco
Dallas, Texas

How is gas flow controlled in an emergency?

AUTHORS' REPLY

To Pete Barba

(1) 50 – 100% excess air.
(2) Don't have data handy.
(3) There isn't much glass.

To Ross Hoffman

(1) Yes, but it isn't a problem. Liquids going into the secondary chamber avoid leakage.
(2) Here cakes didn't burn well in a stationary type primary. You need movement for burnout.

To Herbert I. Hollander

(1) 50 gpm.
(2) Sewage treatment plant needs the suspended solids.
(3) Not sure.

To Soni Shrinivasan

(1) $850k in 1987.
(2) Fuel oil.

To Manfred G. Steltz

Not sure.

To Kun-Chien Lee

Several inches negative.

To David Cynar

No sizing requirements.

To Marvin Fink

Alright to dilute to a degree. It is good to mix at low levels. If dealing with controversial HW's, keep separate. As long as there are mild MH and non-HW, I don't anticipate any problem.

To James Martin

No.

To Peter Barrowes

Damper and bypass give protection. Will add answers to record.

To Phil Daily

Alarms ring and gas flow is shut down.