PLAINTIFF'S EXHIBIT

CAP-1800

A/C Pipe
Producers Association

Internal Correspondence

TO Board of Directors
International Affairs Committee

FROM J. F. Welch, Vice President

DATE March 14, 1984

SUBJECT News Article on U.S. Environmental Protection Agency Proposed Ban on A/C Pipe

ACTION REQUIRED: Review for information

The enclosed article, written by Dr. Brian T. Commins, appeared in the February 4, 1984 issue of World Water magazine.

JFW/ajb

Enclosure

cc: A. Kahn, Esq.
Timothy S. Hardy, Esq.

copies to:

Board of Directors

L. Ambler
J. Bogart
L. Cejudo
J. M. Couture
L. Taylor

International Affairs Committee

R. Dorner
A. Junes
G. Zaviezo
M. Elola
L. Dolbeau
P. Hart
R. Hobbs
H. Hudson
M. Delcourt
B. Giboin
R. Jalan
B. Dubois
E. van der Rest
E. Costa
J. Schmaus
R. Cairns
F. Mansour
J. Glanville
A. Saoulis
V. Pattabhi
C. Barton
S. Al-Tarkait
C. Saeng-Xuto

0172031404
Chrono

LETTERS

Stormy baptism for Itaipú spillway

From: G S Sarkaria, Senior Vice President, International Engineering Company, Inc, 180 Howard Street, San Francisco, California 94105, USA.

Sir — The summary of Consultant Flávio Miguez de Mello's presentation in the October issue of *World Water* is an excellent description of comprehensive development of the hydro resources of Rio Paraná, in Brazil.

Since a photo of the Itaipú spillway was included in that article, I thought your readers would be interested in the performance of that project since the reservoir was filled in October 1982. Itaipu spillway gates were opened on 5 November 1982. It has been in continuous operation since that date with the exception of closure of the chutes, one at a time, for periods of less than 24 hours.

The first year of operation has been quite a baptism for the Itaipú spillway. During this period, the inflow into the reservoir and the outflow twice exceeded the previous daily peaks recorded during the 1921-82 period for which the stream-flow date are available. The average historic discharge of the Paraná is 9,000m³/s. During the period 20 October 1982 — 30 October 1983, the mean daily flow exceeded 10,000m³/s 100% of the time, 20,000m³/s for 64% and 30,000m³/s for 11% or 42 days. The spillway discharge peaked at 34,000m³/s on 25 February and at 38,000m³/s on 18 June 1983. Maximum capacity of the spillway, designed to pass a probable maximum flood, is 62,200m³/s.

The spillway was inspected in February and September 1983. No significant erosion or cavitation damage was observed. In the published photo Itaipu is spilling about 30,000m³/s, which is the equivalent of 20,000MW of power. Incidentally the picture is turned around, the flow is from left to right.

Damming evidence

From: Dr BL Sreenivas, Consulting Geologist, Geomysore Services, No 12 Palace Road, Bangalore — 560 052, India.

Sir — You carried in November 1983, very interesting and important news regarding the induced tremors from the reservoir of Bhatsai Dam and recollections of Koyna earthquake.

Impounding waters in any reservoir is bound to create hydrostatic stress and it depends upon the tectonic and structural setting of the terrain on which the impounding is done. We have been working with LANDSAT imageries, on the relation of major lineaments to important irrigation and power projects in Karnataka State. What might be happening around Bhatsai dam and Koyna dam in Maharashtra, could be related to the adjustments of major lineaments to infiltration of impounding waters. Impounding reactivating lineaments could be inducing the tremors.

It is a challenge to geologists and geophysicists for R&D efforts!

Misguided ban

From: BT Commins BSc MSc PhD CChem FRSC, Commins Associates, Environmental and Pollution Consultant, "Pippins" Altwood Close, Maidenhead, Berkshire, England SL6 4PP.

Sir — The article *EPA threatens total ban on AC pipe* in your November issue prompts me to write. From experience on the subject of asbestos cement pipes, I would regard myself as qualified to protest strongly against the threatened banning of the manufacture and use of A/C pipes.

We in Europe look to the US Environmental Protection Agency for guidance on many environmental matters and in many cases in the past such views have been well respected and indeed welcomed. On the issue of asbestos cement pipes, the possible banning is in no way sensible or appropriate and indeed completely lacks any proper rational scientific foundation.

Occupational asbestos in the past has undoubtedly given rise to serious health implications. Nowadays, exposures are dramatically lower and fortunately are at acceptable levels in relation to any possible health risks. Thus A/C pipes can be manufactured without any unacceptable risks; also the current codes of practice for pipelaying etc are very strict, leading to low dust exposure.

In relation to the use of asbestos cement pipes for conveying potable water, I carried out a comprehensive review of all the available evidence and concluded in a detailed technical report published in May 1983 that the health risk would seem to be "sensibly zero or at most exceedingly low".

If EPA goes further ahead with consideration for the banning of A/C pipes, then I feel it runs the risk of becoming the laughing stock of the rest of the world and will lose general credibility. None of us would wish to see such ridicule of a highly respected body.