

[illegible]

Correction to UPDATE REPORT 7/8/81
Previous Report 1/28/81

VTVYS1
05000271
LER 80-41/3X

Cause Description and Corrective Actions:

The Reactor Cleanup Line was isolated and the affected portion of the pipe was replaced with a low carbon stainless steel pipe. The pipe material from the regenerative to the Non Regenerative Heat Exchanger was ASTM-A-312, Type 304.

An examination by Battelle Laboratories revealed branching, transgranular cracks originating from pitted areas on the outside diameter surface of the pipe. Scanning electron microscope and metallographic examinations confirmed the transgranular nature of the cracks. X-ray defraction revealed high amounts of chloride in the corrosion product on the outside surface of the pipe. The corrodent indicated the cracks were a result of chloride-stress-corrosion cracking. It appears that the long-term leaching of the asbestos insulation by a high purity water leak from a faulty fitting brought a sufficient amount of chlorides to the surface of the hot pipe (575°F) to result in Stress Corrosion Cracking.