FILE NAME: Electrical Insulation (ELEC)

DATE: 1985 May 15

DOC#: ELEC016

DOCUMENT DESCRIPTION: Memo

FOR COLEY WILLIAMSON 3/8/88
ALL ASBESTOS WAS REMOVED FROM DHP ARC CHUTES APPROX 1/1/86.
DJSOMLO 3/8/88

From East Pittsburgh, 9N40
Ext 299-4741
Date May 15, 1985
Subject Atlantic Electric Co.
Air Circuit Breakers - Asbestos

To : Allentown Office - Jack Sobota

Reference Customer's letter of March 21, 1985 to you regarding asbestos in breaker arc chutes.

Prior to 1977 all type DH and DHP breaker arc chutes were built with asbestos rope spacers between the ceramic plates of the interrupter stack assembly. The spacers were formed by flattening 3/16" diameter asbestos rope to approximately 1/8" thickness. The assemblies were held together with a white baking enamel which covered the asbestos rope except for the 1/8" exposed surface between the ceramic plates.

Starting approximately January 1, 1977 the asbestos rope was replaced by glass rope in all DH and DHP arc chutes.

In addition to the asbestos rope DH and DHP arc chutes, depending on the rating and vintage, may have some pieces of asbestos cement board in them. This is a hard, dense (90 lbs/cu.ft) asbestos fiber-hydraulic cement board which contains approximately 29% asbestos. This material is still being used.

The asbestos content of the arc chutes in question is as follows:

50DH150 -

Asbestos rope - approx. .15 lbs
Asbestos board - approx. .28 lbs (29% X .98 lbs)

Total % Asbestos = 1.1% $\left(\frac{.15 + .28}{40} \times 100\right)$

50DH150E -

Asbestos rope - approx. .175 lbs
Asbestos board - approx. .77 lbs (29% X 2.64 lbs)

Total % Asbestos = 0.95% $\left(\frac{.175 + .77}{100} \times 100\right)$

150DHP500 - Built prior to January 1977

Asbestos rope - approx. .4 lb
Asbestos board - approx. .25 lbs (29% X .84 lbs)

Total % Asbestos = 0.26% $\left(\frac{.4 + .25}{250} \times 100\right)$

Issue Date:

Exhibit 13
Witness McMullen
Date 9/21/10
Reporter TE

CORK-4490

EXHIBIT
11 JM Mullen JLS

6/9/2011

150DHP500 - Built after January 1977

Asbestos board - .25 lbs (29% X .84 lbs)

Total % Asbestos = 0.1% ($\frac{.25 \times 100}{250}$)

Under normal handling or operation, fiberous asbestos is not given off. If the breaker has undergone a major fault current interruption, there is a remote possibility that a few fibers of asbestos could be released. Therefore, prior to the breaker being examined for maintenance or other reasons, the following procedure should be used. The breaker and assembly should be completely de-energized per the prescribed procedure given in the instruction manual. When de-energized, any particulate matter should be removed by a damp cloth from the inside of the cubicle and the exterior of the breaker and arc chute assembly.
(Note: The equipment should be dry before any electrical testing. The cloth should be disposed of by approved methods for asbestos waste material).

When cleaning the interior of the arc chutes, which involves blowing dry compressed air thru them, some fiberous asbestos may be blown off. Therefore, personnel should be protected using NIOSH approved personnel protection equipment.

A. Tomeo, Manager
M.V. C.O.E.