



INTERNAL
CORRESPONDENCE

UNION CARBIDE CORPORATION P. O. BOX 8004, SOUTH CHARLESTON, WV 25303
SILICONES AND URETHANE INTERMEDIATES
SOUTH CHARLESTON PLANT

*D B. 20 -
gather there
are no optical
microscopy methods
for this?
② C
Right!*

To (Name) C. R. Gillespie
Division
Location Building 46-1/514
Area

Date February 14, 1984

Originating Dept.

Area

Copy to C. E. Fry
T. G. Swanson

Subject Asbestos
Identification
Procedure

Dear Jock:

There is an existing "asbestos screening test" developed by NIOSH workers which we have used here in the plant in an effort to determine if asbestos is present in old insulation materials.

Test results are unreliable in my judgement for the following reasons:

1. Constituents in insulation other than asbestos tend to give poor test color development/appearance. Hence, the test is subjective and dependent upon one's ability to visually detect colors.
2. Uncombined iron, possibly iron oxide or rust, interferes by producing a "positive" false test. (A procedure exists for treating samples to supposedly remove interferences. However, efficiency in performing this step would always be questionable and it's easy to see how our plant samples could pick up iron interference.)
3. I personally demonstrated by using pure-state asbestos materials that you can also obtain "false negative" tests! (I can't explain this but the experience shows that we could develop a false sense of security on the basis of such a test which could have serious consequences.)
4. Instructions provided in commercial test kits purchased by us recommend retesting, by an independent method, all samples giving "positive" tests. (Admission of uncertainty?!)

If we must determine whether asbestos is contained in insulation materials, I recommend we consider sending future samples to an independent laboratory, such as METPATH, Inc., for testing by more reliable methods, e.g., x-ray diffraction. The cost is about \$80.00 per sample. I'll know more about turn around time soon, since I sent them a sample for this examination on February 9, 1984.

Incidentally, x-ray diffraction equipment exists in R & D facilities at the Tech Center! However, upon inquiring about service I was discouraged by their alleged large backlog of work.

Bill Young

WCYoung:b1