

**CONSTRUCTION
PRODUCTS
DIVISION**

AUG 18 1980

REPORT: 69609
GROUP: ICG
DATE: 8 August 1980
CHARGE NO: 9-113-30-009
REQUESTOR: H. A. Eschenbach
MARKETING OR MANUFACTURING APPROVALS:
NAME: H. A. Eschenbach
APPROVED: *H. A. Eschenbach*
(CS)

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REQUEST FOR TECHNICAL SERVICE

PROBLEM TITLE: Ceiling Material Evaluation -- Asbestos Content

PLAINTIFF'S
EXHIBIT
WRG-741a

SIGNIFICANCE: Ceiling material that contains asbestos must be removed to
• control any employee exposures, and to comply with OSHA regulations.

SPECIFIC OBJECTIVE: Determine whether or not the ceiling material supplied from the Organic Chemical Plant, Nashua, N.H., contains any asbestos.

SUGGESTED APPROACH: Y-ray

DEADLINE (Last day information will be of value): 2 weeks

DETAILS OF PROBLEM: Sample supplied to lab in bottle identified as "OCD-NTA Plant."

[R000524

ACCEPTED BY RESEARCH DEPT.: *Julie 1.4-8*
ASSIGNED TO: *J.P. Wallace / Jey*
ADDITIONAL COPIES: Original to Library (H.C. Duecker, H.A. Eschenbach)

DATE: *8/8/80*

15159353

REQUEST FOR TECHNICAL SERVICE

NUMBER: 69609
GROUP: ICG
ACTUAL COST: \$70.00
REPORTING DATE: August 15, 1980

SUMMARY:

The ceiling material from the Organic Chemical plant in Hashua, New Hampshire, was examined by x-ray diffraction method and light microscopic method, and found to have both chrysotile asbestos and mineral fibers.

EXPERIMENTAL1. XRD Analysis

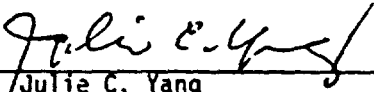
The crystalline fibers were identified by x-rays as chrysotile.

2. Petrographic Microscopic Examination

A portion of the sample was heated in an oven @ 450°C, overnight, to burn all the organic fibers if present. Then the remaining material was wet ground lightly with acetone in an agate mortar, and immersed in oils with R.I. 1.545, 1.520 for microscopic examination at 100X and 430X.

Two kinds of fibers were identified, one was chrysotile and the other mineral wool fibers.

Reference: XRD Misc. - 350.


Julie C. Yang

JCY:mlr

R000525 ;

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CONSTRUCTION

SEP 30 1980

PRODUCTS

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REQUEST FOR TECHNICAL SERVICE

NUMBER: 69629

GROUP:

DATE: 19 September 1980

CHARGE NO. 3 (OCD X-5-040-09) 1174

REQUESTOR: T. E. Hamilton

MARKETING OR MANUFACTURING APPROVA

NAME: TEH

APPROVED:

PROBLEM TITLE: Environmental Evaluation - Air - Fibrous Materials.

SIGNIFICANCE: The evaluation of workplace air on a periodic basis is necessary to comply with the air sampling section of the OSHA Asbestos Standard.

SPECIFIC OBJECTIVE: Determine fiber counts for filter media.

SUGGESTED APPROACH: Phase contrast microscopy.

DEADLINE (Last day information will be of value): 2 weeks.

DETAILS OF PROBLEM: Evaluate samples from OCD Nashua, N.H., plant -- N-1, N-2

Samples collected in area where sprayed on asbestos (chrysotile) is peeling off the ceiling.

ACCEPTED BY RESEARCH DEPT.:

John C. G.

DATE:

9/19/80

ASSIGNED TO:

B. O'Leary

ADDITIONAL COPIES: Original to Library; H. Duecker, F.W.Eaton, T.E.Hamilton, J.W.Wolter, E.S.Wood

CONFIDENTIAL

[R000526]

15159355

REQUEST FOR TECHNICAL SERVICE

NUMBER: 03023

GROUP: Organic Chemical Div.

ACTUAL COST: \$165.00

REPORTING DATE: Sept. 24, 1980

SUMMARY

Two engineering samples were received from Nashua, New Hampshire and evaluated for their fiber content. The slides were very clean.

DATA AND ANALYSIS:

The results are as shown on the attached Air Sampling Recr Sheet.

Barbara J. O'Leary
B. J. O'Leary

BJO:mlr
attachment

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CAMBRIDGE

TO: J. McCarthy/Nashua DATE: 10 November 1980
FROM: T. E. Hamilton SUBJECT: Asbestos
CC: R. P. Cronin/Nashua

H. Eschenbach and I collected asbestos air samples at two locations at Nashua on 18 SEPT 80. Samples from the vermiculite chelate spray operation and from the third floor NTA plant show that asbestos exposures normally do not occur in either area. I have made arrangements to take "total dust" samples in the vermiculite operation. We recommend that the asbestos be removed from the ceiling of the NTA plant.

Vermiculite Chelate Spray

The asbestos fiber levels in this area are quite low when the individual samples are averaged over the entire shift. The following calculations of Time-Weighted-Averages (TWA) take into account the time when the employees are not exposed to any fibers, such as breaks and lunch. The present OSHA Permissible Exposure Level for fibers is 2.0 f/cc for an 8-hour TWA. OSHA also requires medical monitoring if the TWA is above 0.1 f/cc. Medical monitoring includes annual chest x-ray and lung function tests.

<u>Employee</u>	<u>TWA</u>
David Christopher	0.02 f/cc
Jim Fitzpatrick	0.02
Ron Cloutier	0.01

The only problem that could change these TWA's would be if the employees were involved in trailer unloading for more than six hours. It is possible that the TWA would go above the 0.1 f/cc level and then we would be required to do the medical tests.

Samples 8 and 10, taken on Fitzpatrick while he was dumping bags into the hopper, are very low at approximately 0.03 f/cc. The only job they do that is dusty is the unloading and I have made plans to take total dust samples on this job.

NTA Plant - Asbestos Ceiling

Stationery air samples were collected directly below the ceiling area where the asbestos is peeling. The levels are so low that they are below

[R000529]

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J. McCarthy

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the detection limit of the fiber counting method. However, asbestos is peeling off the ceiling and it is possible that some employees may be exposed to concentrations of asbestos.

We recommend that you consider removing the material. We are available to make recommendations on how to do this. In brief, the employees involved in the removal would be required to wear airline respirators and disposable uniforms. During the clean up, no other employees would be allowed in the area. For more details, contact HAE or myself.

Tom

T. E. Hamilton

TEH/cs

attachments

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