PLAINTIFF'S EXHIBIT
tabbies
AL-1578

FROM R. W. KNAPP
MASSENA OPERATIONS

TO MR. R. C. HINKLE
BADIN WORKS

April 13, 1973

RE: OSHA ASBESTOS COMPLIANCE QUESTIONNAIRE - MASSENA OPERATIONS

The information requested in the questionnaire attached to your letter of March 30, 1973, is attached.

The information was collected at a meeting of the following: Messrs. Dr. Elder, Burgert, Lantz, Hinds, Barr, Fairbanks, McLaughlin, Besio, Pashby and Knapp.

Should you have any questions regarding our reply or need more information, contact the writer at Massena 4431.

You will note that we have taken some liberty with the questionnaire to record available information on the problem.

By copy of this report to our Purchasing-Stores department, we are establishing a procedure for controlling non locked-in asbestos products getting into our system.

R. W.KNAPP

RWK:bl

Attachment

Cc: Messrs. Dr. M. J. Elder - Massena
H. Burgert - Massena
G. H. Lantz - Massena
P. J. Hinds - Massena
W. S. Barr - Massena
G. Fairbanks - Massena
H. McLaughlin - Massena
H. P. Besio - Massena
W. J. Pashby - Massena
G. B. Scott - Massena
G. H. Duckworth - Massena
R. J. Kopecky - Massena

L.V.Cralley/P.R.Atkins - Pgh.
R.W.Wrenn/J.A.Dunbar - Pgh.
S.A.Jones/G.R.Swany - Pgh.
W. N. Dawson - Pgh.

ALCOA

LOCATION MASSENA OPERATIONS DATE APRIL 11, 1973

ASBESTOS COMPLIANCE QUESTIONNAIRE

I. Industrial Hygiene, Page 1

1. Have you elected to have the respirable asbestos fiber sampling and/or counting done by non-Alcoans or by Alcoans? Discuss. Have not elected to sample. Have concentrated on eliminating exposure to non locked-in asbestos containing products. Considerable progress has been made in area of substitution and elimination of exposure. We don't machine or saw marinite at Massena.

2. Has the initial workplace environmental monitoring survey been conducted? If not, discuss.

   Initial monitoring survey has not been made as explained under No. 1 above.

3. Has the initial personal monitoring survey been conducted?

   Initial personal monitoring survey has not been conducted as explained in No. 1 above.

4. Does your plant have the specified sampling equipment for both types of surveys?

   We don't have either type of sampling equipment.

5. If you plan to conduct the surveys and/or count fibers with your own people, are they presently capable? If not, what are your plans for reaching competency?

   Under anticipated conditions we shouldn't have to do any sampling.

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ASBESTOS COMPLIANCE QUESTIONNAIRE

Industrial Hygiene, Page 2

6. When is your next semiannual survey scheduled?

Doesn't apply.

7. Estimate the man-hours necessary to conduct your next survey, including counting.

Doesn't apply.

8. As a result of your observations and/or tests, have you identified areas which exceed the current standards? 1976 standard?

Have had areas which probably didn't comply with current and 1976 standards. Existing stock possibly causing non-compliance will be eliminated shortly - by July 1, 1973.

9. Have you made provision for keeping the records of personal and environmental monitoring for at least the required 3 years?

Records that we have or will have will be kept at least three years.

10. Have you had requests for access to such records by employees?

NO.

11. If your plant has operations which require the use of approved (for asbestos) respirators, are such respirators in use where required?

YES

12. How would you rate your plants' general level of compliance in the wearing of respirators?

Good.

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ASBESTOS COMPLIANCE QUESTIONNAIRE

Industrial Hygiene, Page 3

13. List the specific types of respirators in use and make comments as you wish about each.

Our carpenters and masons each have their own respirators and we use AO R8156 with R156 filters. These have been found satisfactory and have received no complaints.

14. Do you have areas where caution signs should be displayed? How many? _____ Are signs displayed now? _____

We store asbestos in several of our storerooms.

Are signs required? We don't have any.

15. Have you established procedures for approved disposal of asbestos wastes? Discuss.

Don't believe we have an exposure to "non locked-in" asbestos fibres exceeding the standard.

16. Do you have or foresee the need for providing special clothing for any of your workers because they work with asbestos? If so, discuss.

We have a furnace to remove containing J.M. Superex and a special procedure has been established. (See attachment.) Coveralls will be used for this demolition.

17. Do you have or foresee the need for special change rooms and double lockering? If so, discuss.

NO.

18. Do you have or foresee the need for special laundering practices? If so, discuss.

NO.

LOCATION MASSENA OPERATIONS DATE APRIL 11, 1973

ASBESTOS COMPLIANCE QUESTIONNAIRE

II. Medical, Page 1

1. Have you identified the areas where respirable asbestos fibers do or may, exceed the OSHA limits?

   Early in 1972 we surveyed our possible hazard areas, reviewed our stores items and started the program of eliminating the use of non locked-in asbestos products.

2. How many individuals have you found to be subject to the medical and monitoring provisions of the regulations?

   Should examine past exposures. List now being completed. Routine examinations have not indicated a problem with present or retired employees.

3. Have you conducted the first round of medical examinations, including chest X-rays, pulmonary function tests and clinical data including smoking habits? NO.

   a. Number of employees examined in first round: None -startin in May 1973 will examine some past exposure employees.
   b. Scheduled date of next annual examination.

      Would repeat some in November 1973.

4. Are you conducting the preplacement examinations on individuals who will be exposed to asbestos fibers? YES.

   How many such preplacement examinations have been made since the regulations became effective?

   NONE.

5. How many subject examinations have been made upon termination of employment?

   NONE.

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ASBESTOS COMPLIANCE QUESTIONNAIRE

II. Medical, Page 2

6. Have the results of examinations been evaluated?

Assume this applies to No. 5. Answer "no".

7. Have you encountered any problems in getting individuals to undergo the examinations?

NO.
This applies to regular or special medical examinations.

8. Have arrangements been made for keeping the medical examination records for 20 years?

YES.

9. Have you had requests for examination of the records by any of those persons who are given legal access?

NO.

LOCATION MASSENA OPERATIONS DATE APRIL 11, 1973

ASBESTOS COMPLIANCE QUESTIONNAIRE

III. Compliance, Page 1

1. List here a summary of the areas at your location which are now of concern because of asbestos. Estimate the date of compliance with Section 1910.93a, paragraph (b). If costs can be estimated, note them. No extensive cost study is required.

Work Area	Estimated Compliance Date	Estimated Cost

(We are listing the areas where we may have had an exposure problem so that a record is available).

Machine Shop-	- Discontinued
Cutting and machining marinite	- All done by outside shop. Discontinued from our shop about 5 years ago.
Carpenter Shop-	- All not purchased to size
Cutting asbestos paper and board.	stocks will be used by June 1,1973. Now purchasing board & paper cut to size.
Masons -	- Instructions on proper
Use of asbestos products in furnaces & troughs.	use were issued in May 1972,followed by Safety Memo in August 1972.
	- All non locked-in asbestos insulation & lining material to be eliminated by 7/1/73.
	Old troughlinings containing
	- asbestos to be wet down before removing.
	- Superex 2000, asbestos free, as of 1/1/73.
	- Now using Kaowool as replacement for asbestos shorts in trough lining.
Use of asbestos products in potlining & removal.	-
	- Early in 1973 started using Monoblock non asbestos for solid insulation-considerable less solid insulation in pots for over a year.
	- Late in 1972 substituted Penseal for sealing around the collector bars.

LOCATION MASSENA OPERATIONS DATE APRIL 11, 1973

ASBESTOS COMPLIANCE QUESTIONNAIRE

III. Compliance, Page 1 a

1. List here a summary of the areas at your location which are now of concern because of asbestos. Estimate the date of compliance with Section 1910.93a, paragraph (b). If costs can be estimated, note them. No extensive cost study is required.

Work Area	Estimated Compliance Date	Estimated Cost
Use of asbestos products in potlining & removal.	- For approx.past 10 years have been wetting down pots before lining removal.	
Laborers Removal of Ingot Plant furnace linings.	- Eliminate use of asbestos hard block around 1964. Have one known furnace with old Superex (about 8% asbestos). Special procedure for removal has been established. Fairbanks letter to Walker 3/7/73.	
Employees handling and cutting asbestos board, paper & cloth. (Mainly ingot plant and pot lining)	- Material is broken, or cut with knife or hand saw blade. See that employees are properly instructed to cut without creating a dust and personal exposure.	
Employees removing old pipe insulation.	If asbestos - respirators of approved type must be used.	

The major cost has been the time and effort expended in finding substitutes.

LOCATION MASSENA OPERATIONS DATE APRIL 11, 1973

ASBESTOS COMPLIANCE QUESTIONNAIRE

III. Compliance, Page 2

2. List here (or attach sheets) the asbestos-bearing materials in use at your location. List briefly the uses for each. If such information has been prepared previously, simply attach copies.

Material	Uses (Detailed uses are available if you so desire).
a. Gasketing, gaskets & packing. (Gaskets bought cut to size)	In ingot plant, potrooms and maintenance.
b. Asbestos cloth.	In ingot plant, potrooms, maintenance and fabricating heat-treatment.
(J-M states, "cloth we furnish will be lint free and the material as we furnish it will not become airborne under reasonable, foreseeable conditions of use".) (Letter 9/18/72).	
c. Superex 2000. Now asbestos free.	In ingot plant furnaces.
d. Garments (Our supplier states, "Meet Federal regulations and so constructed that the asbestos fibers will not become airborne under reasonable, foreseeable conditions of use".) (Letter 9/1/72).	In ingot plant, potrooms, maintenance.
e. Asbestos board.	In ingot plant, potrooms and maintenance
f. Asbestos paper. 14 lb.-various widths. (Buying to cut widths)	In ingot plant, potrooms and maintenance.

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ASBESTOS COMPLIANCE QUESTIONNAIRE

III. Compliance, Page 3

3. On succeeding forms entitled "Asbestos Compliance Status Sheet", discuss each work area of concern. Group identical areas. The form is intended to provide a history of progress as more information is added in the future.

Our main program is to continue with the elimination of non locked-in asbestos products and prevent the use of them creeping back in. Also where non locked-in asbestos products are used, to use them properly and prevent exposure by proper instruction and monitoring. We are going to medically review those that have had considerable exposure in the past.

By copy of this report to the Purchasing Department - Storeskeeper, we request that any new item of non locked-in asbestos be cleared with the Manager of Environmental Services and Safety before purchase.

About January 1, 1974, we should re-review our asbestos situation plantwide and list what is being done and has been done since this report.

About every nine months to one year thereafter the situation should be reviewed again.

FROM: G. W. FAIRBANKS TO: MR. J. B. WALKER

March 7, 1973

RE: REPLACEMENT OF ASBESTOS CONTAINING INSULATING BLOCK

Recently a letter was received from A. J. Sortschev and R. P. Carter advising of problems with block type insulation containing asbestos. The letter covered two main points--the first is to discontinue the use of block insulation containing asbestos. This has been done in all areas of the plant. The second is how to deal with the removal of asbestos containing block insulation during refractory repairs or relining. The letter requests that we describe our plans to handle the required control of asbestos.

The arrangement of our organization indicates that this problem can best be handled by dividing it along Fabricating and Smelting lines. I will develop our program for the Fabricating Division, including the Ingot Plant. I suggest that the Smelting program be handled by someone in that organization.

Fabricating Division including the Ingot Plant

Approximately 1964 we discontinued the use of "hard" block type insulation with about 8% asbestos such as J. M. Superex and Carey 19 in the Ingot Plant. We standardized on Monoblock because it is softer and causes less distortion of furnace shells. In the years since the change, the hard insulation has been worked out of the system. Monoblock does not contain asbestos. Pittsburgh designed, and specified furnaces, however, have used J. M. Superex more recently. We have one remaining furnace, #14S, in which all the block is Superex. This furnace is scheduled for rebuild in the second or third quarter of this year. Removal of the old lining will involve exposure to asbestos dust from the block insulation. Our plans to control asbestos dust exposure are to require the use of approved respirators and supply coveralls for the men involved in removing the old refractory lining. Clean up will be by the use of a vacuum cleaner, rather than sweeping.

The remainder of the Fabricating Division furnaces involve heat treating furnaces, controlled atmosphere, and air atmosphere annealing furnaces, aging ovens, reheat furnaces, preheat furnaces, etc. The insulating materials usually are mineral wool blanket and block insulation. The block insulation may or may not contain asbestos. Where the purchase orders are available, we probably can

determine the specific brand, and from the brand, the asbestos content. In most cases, however, the purchase orders have been destroyed so we cannot determine in advance the asbestos content of the insulation. In general, the asbestos containing blocks can be identified by inspection of the relative hardness and color. The white, hard material contains asbestos (Carey 19 and Superex) and the dark brown, soft material (Monoblock) does not.

We have no plans to remove, relocate, or modify any of these furnaces so we are not facing an immediate problem. In the future, we will have to remain alert to the dangers of asbestos, and make a determination in each instance whether or asbestos is present. Where asbestos is present, respirators, coveralls, and vacuum cleaning dust control will be required.

G. W. FAIRBANKS

GWF:bt

CC: Messrs. W. Barr
H. Desio, W. Molnar
B. P. Wilkerson, R. H. Snodgrass
File