PLAINTIFF'S EXHIBIT
DUP-15

TUESDAY, MAY 21, 1968
HOWARD JOHNSON MOTOR LODGE
NEWARK, DELAWARE

KEPPER - We must do the analysis ourselves. Including calibration of flow-rate. Not our assistants. This must be done in this manner from the Legal standpoint. These instruments are assigned to you as an individual. (I have Instrument [redacted] #22)

Instruments will be called back in about every 3 months for recalibration.

We are 2 years ahead of others on these tests & methods.

"Personnel filter sample" which we are using is the most up-to-date method of sampling.

Threshold limits being lowered soon to 1,000,000 ppm.

From every angle, this program is RIGHT.

DUP 1120487

ADRIAN LINCH –

Filter – a man-made synthetic filter. 8/10 micron holes, & filters on equal & similiar one to the other.

BE SURE BOTH PLUGS ARE IN PLACE WHEN YOU RECEIVE FILTERS. If not, throw filter away.

1. Remove plug from end of filter closest to filter paper.
2. Attach sample tube to filter opening.
3. Remove top cap on opposite end – when ready to sample.
4. Sample.
5. ~~Remove~~ Replace top ring and tape together for shipment. Use any self-adhesive tape, and over end to keep Red & Blue plugs in place.
6. In case of site calibration – Use electrical tape – pulled tight!
7. Wrap in paper towel packing to keep it from breaking in shipment. Can obtain a box or tube from Stationery for shipment – check Stationery catalog. (Linch prefers tube). Tube is 1¾" or 2" x 6" long.

DUP 1120488

8. DO NOT USE ANY DEFECTIVE FILTERS, loose sections, plugs missing, etc.
9. Use the instrument number (CONSTR. #) plus date on filter sample. Put number on under deck part (where hose is attached.
10. Records are important!! In triplicate – 2 copies to Pittsburgh and 1 you keep for ever. Each page to be dated, numbered, & signed.
11. Battery must be inserted properly or pumps will run backwards.
12. Men wearing pumps must be checked every hour.
13. If a hum is noted, linkage between pump & motor may be broken.
14. Connect sample tube to "cc/min" side – lower power side.
15. Be sure plug on left side of pump meter ("LPM") is tightly in place.
16. Adjust pump so that it operates at 1200 cc/min. (or 15 cu. ft. per 8 hours).
17. Rotometer must be vertical when being set at 1200 cc/min.

18. Orfices may be needed in the line. Linch will send one to each Site. Need an orfice when ball goes directly to the top, under load.
19. Must have TIME meter ran, and RATE it ran at.
20. May get instructions later to change the 1200 cc/min flow-rate upor down.
21. If in extremely dusty area, may either have to cut flow-rate down to 600 cc/min, OR cut sample time down to 4 hours.
22. In record keeping, must have temperature, barometer reading humidity, AND, if outdoors, must have wind direction. Record temperature hourly if it fluctuate very much. Particularly important to note any unusual conditions that occur during sample taking, (Inversion, rain, draft from fan, using fan with dust collector,
23. Samples to be taken during the first week of each month (one day-only).

DUP 1120490

24. Remember, this is a "quality control program." Will show how effective our dust control devices are.

25. The units of measurement are thousands, ~~or millions~~ of particles per cubic foot

* 26. CHECK YOUR MAN AT LEAST EVERY HOUR. The man is not to make any adjustment. The man is to note any changes he notices in the sound of the pump.

27. Probably most convenient location for pump is on the belt in the middle of the back.

28. ~~If~~ pump is stopped for any reason, the time must be recorded in order to get total minutes the meter runs.

29. Battery should run at least 10 hours or more on a full charge.

30. Be sure prongs at top of charger are connected.

31. Battery must be put in correctly, positive to positive, or the battery

will explode while charging.

32. Do not plug in without a battery in the charger.

33. Be certain, end prongs are making contact with battery.

34. Recommend a rubber band around charger to hold it together.

35. Cannot overcharge the battery. Can leave battery on charge all the time. Can recharge the battery approx. 1000 times. Recommend plugging battery charger in (with battery) 2 days before the sample is to be taken. Minimum recharge time - 16 hours.

36. For major repairs or defective instruments - send back to Div. Safety Office.

37. For calibration, send back to Adrian Finch at CVC.

38. $134.00 cost of total unit. Battery itself costs $24.00

39. Is acceptable in all atmospheres.

DUP 1120492

KEUPER

Analysis Procedure, the source for making these samples is the Constr. Div. Do not submit samples from Plant to our Lab in Pittsburgh.

Not all Sites are taking samples. We are charged with these instruments. The engineering dept. has paid for the instruments - not the Sites.

Send instruments & batteries to the Div. Safety Office if they are defective.

Filters will be supplied by the Div. Safety Office.

In Shipping, make certain filter is properly packed and protected.

Send filters 1st class mail.
" Instruments " " "

Identify filter with Instrument number (CONSTR. #22 for mine).

Send 2 copies of Analysis Work Sheet with the filter in the shipping tube. We keep 3rd copy in our files.

On Work Sheet - when listing Site - also show Instrument number on same line.

DUP 1120493

25,000 microns = 1 lineal inch.
You can't see the dust that is harmful.
0.5 micron is about what the best microscope can see. Only concerned with 5.0 micron to 0.5 micron particles. Larger size is naturally filtered out — smaller sizes can't be counted and cause no problem anyway.
People who handle and are exposed to asbestos dust should not smoke.
Nickel cadmium is contained in Crocidolite and Amphibolite asbestos.
Should also be concerned with grinding dust involving nickel cadmium & similar particulate dust
60% Armstrong's employees work on DuPont Sites. They have paid off on 85 cases so far.
Any operation we have that produces, dust, smoke, vapors, etc., we should be concerned with for adequate ventilation & protection.

DUP 1120494

. Tearing down & dismantling is just as hazardous from the dust standpoint as is asbestos handling.

Wives & children of asbestos workers are also being involved because of the dust laden clothes a man wears home at night.

Regardless of letter 4/30/68, Zane to Kemper, we are still NOT going to use ARMASPRAY.

Now trying to get Calcium silicate already "sealed" with a lagging material from the manufacturer. Need more of this type of thinking & suggestions from the field. Discuss them with Dist. Safety Office, FIRST.

LINCH - Reasons for this Program are three-fold;

1. Protect the employee
2. Protect Management in case of claims.
3. This is a quality control Program to determine return on investment for controls established for shops.

THIS IS AN EXPERIMENTAL PROGRAM.

DUP 1120495

May have to sample other items in the future (carbon monoxide, etc.) a shortage of Industrial Hygenists.

KEUPER – We are not "followers" in safety – We are "leaders". 2 years ahead in this phase right now.

Contact Div. Safety office first before making any special studies.

Regular schedule of 1 sample per month. Sample to be made one day during the first week of each month. Sample to be made during one (1), eight (8) hour period.
(USE THE FIRST FULL WEEK OF EACH MONTH).

* Confine samples right now, ONLY to Shop employees. Use employee who has greatest dust exposure. Select man in conjunction with Craft Supt. AND Shop Foreman.

DUP 1120496

When opening cartons, lay the carton horizontally, and cut open like a chest. Stick portable vacuum cleaner nozzle into carton to pick up much of the dust.

Not check a person – but we are checking atmospheric conditions. We are interested in improving working environment.

Refer any questions from the operating Department personnel to Adrian Finch.

Areas other than in the Shop – (dismantling, high dust, fumes, etc) we will use the Model 77 MSA mask with the BM 21 B-97 filter ONLY.
Do not put these respirators on people in the Shop – instead, correct or improve your Shop dust problems. Introduce better work techniques.

* Use Vacuum cleaners with the disposable bags only.

DUP 1120497

There is to be NO SWEEPING of any kind in the Insulation Shop. Only Vacuum clean.

Take the asbestos dust in the disposable bags and bury it. DO NOT BURN IT, since it will then become airborne.

The success of this Program is in the hands of the Site Safety Supervisor.

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Performance this year has been lousy. Don't want to be 2nd place.
An excellerated program will be out soon that you thought wouldn't be possible.
Expect all items & instructions issued to be followed — TO THE LETTER, and not watered down in any sense.