PLAINTIFF'S EXHIBIT

BEA-97

The Industrial Commission
Of Ohio
Division Of Safety & Hygiene
246 N. High St., Col., O. 43215

August 5, 1983

Ms. Judy Spencer
Legal Section
The Industrial Commission of Ohio
246 North High Street
Columbus, Ohio 43215

Re: OD 182029
Ben Ford
Koppers Company, Incorporated
Toledo, Ohio

Dear Ms. Spencer:

On July 15, 1983 a visit was made to the Koppers Company 2563 Front Street, in Toledo to gather information on the above claim. Michael Smith, Sales Engineer was interviewed.

The Koppers Company makes coke for use in iron ore processing. The Koppers Company bought the pig iron and coke production facilities of Interlake Iron in 1979 wich was at the same address as above. Koppers stopped pig iron operation in 1980 and shut down 2 of 3 coke oven batteries in various stages. The pig iron blast furnaces and support facilities are presently being demolished.

The claimants work history is as follows:

1937-1948 - Section worker and coal car unloader, G.M.O.R.R. in both Prairie, Mississippi and Milwaukee, Wisconsin.
1948-1963 - Foundry worker, International Harvester, city unknown.
1963-1969 - Construction worker, Milwaukee, Wisconsin.
1969-1979 - Crane operator, cleanup laborer, Interlake Iron.
1979- - General laborer, Koppers Company, Toledo, Ohio.

Environmental sampling to establish the claimants work exposures is impossible. Prior to 1975 Mr. Smith said no environmental sampling occurred at Interlake. From 1975 to 1978 Interlake only sampled coke oven emissions. The claimant worked around the coke ovens only from January 3, 1979 to March 4, 1979 which was his total employment with Koppers.

A general picture of pig iron production gives a few ideas as to potential hazardous airborn materials. The iron ore is iron oxide with variable quantities of silica, clay phosphorus, sulphur titanium, manganese, calcium and magnesium.[2] The claimants job as crane

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operator at Interlake could have involved any or all of the above materials.

The health hazards of some of these materials is briefly reviewed.

Iron Oxide - ore and fume[1].

Siderosis or "iron pigmentation" is a benign pneumoconiosis requiring 6 to 10 years for x-ray diagnosable changes. Iron and steel foundry man subjected to high temperature iron oxide fume and silica developed siderosis, silicosis and mixed dust fibrosis.

Silica

Silicosis is a disease caused by inhalation of dust containing quartz or crystalline free silica. This disease is a form of pneumoconiosis characterized by the formation of small, discrete fibrous nodules in the lung. However, even at the stage of nodular-silicosis, there usually are no accompanying symptoms, and no detectable evidence of pulmonary or overall physical impairment. When the nodulations become larger or when conglomeration occur, recognizable cardiopulmonary impairment tends to occur.

Silicosis is a disabling, progressive, and sometimes fatal pulmonary fibrosis. The clinical signs and symptoms tend to be progressive with continued exposure to quantities of dust containing free silica. Symptoms include cough, dyspnea, wheezing, repeated non-specific chest illnesses, and a decreased capacity to work. Impairment of pulmonary function may be progressive. After dust exposure ceases, there usually is a continuing progression of symptoms. While there is a factor of individual susceptibility to a given silica dust exposure, the risk of onset and rate of progression of the pulmonary lesion is related to the dust concentration and duration of exposure.

Clay

Clay generally contains large percentages of crystalline silica (quartz) and its health hazard is the same as silica.

The previously mentioned materials; silica and iron oxide must also be considered when speculating on the claimants exposures at the International Harvester foundry. The plant operation time period would preclude the present employee exposure controls in the foundry industry.

The claimant's experience as a coal car unloader could have exposed him to unknown levels of coal dust. Most coal dust exposures

only involve the coal dust but some coal dust could contain a significant proportion of free silica.[2]

Coal Dust[2]

Coal dust can cause a complicated pneumoconiosis or progressive massive fibrosis. This results in a reduction of lung gas transfer ability and possible heart failure.

The important aspect of the claimants various exposures to lung irritants is that their synergistic effects have not been established. Individual susceptability must also be considered and the forty plus year of exposure to unknown levels must be considered.

Respectfully submitted,

Richard Wilder

Richard Wilder
Industrial Hygienist

RW/ps

[1] Pattys Industrial Hygiene and Toxicology, 1981, Clayton.
[2] Encyclopaedia of Occupational Health and Safety, 1974, McGraw Hill.