CONFIDENTIAL

15th August, 1957.

TURNER BROTHERS ASBESTOS COMPANY LIMITED

ASBESTOS INDUSTRY REGULATIONS - APPLICATION FOR EXEMPTION FROM REGULATION 4(c) RE-CIRCULATION OF FILTERED AIR INTO WORKROOMS

INTRODUCTION

Turner Brothers Asbestos Co. Ltd. wish to make application to the Factory Department for permission to re-circulate air in the workrooms at their Rochdale Factory. In this document are set out the facts on which this application is based and particulars of the proposed method of re-circulation of the air, together with a brief account of the Company's asbestos activities, the measures it takes to safeguard the health of its employees and also some notes on the medical aspects of asbestosis.

BACKGROUND INFORMATION ON T.B.A. CO. LTD.

The Turner Brothers Asbestos Co. Ltd. factory at Rochdale is the largest asbestos textile factory in the world. The Company was a world pioneer in the processing of asbestos textiles and also in the introduction of ventilation and dust collecting systems for controlling the amount of dust in the atmosphere of the workrooms. The active assistance the Company gave during the framing and introduction of the "Asbestos Industry Regulations, 1931" is well known to the Factory Department.

At present 2,200 people are employed in the Rochdale factory of whom 1,390 work in "scheduled areas", i.e. areas to which the Regulations apply. The total weight of dust recovered in the filter rooms weekly is about 15,000 lbs., all of which is dumped to waste.

Routine dust counts (by thermal precipitator and gravimetric methods) are made in all the scheduled areas in the factory and all the dust counts are reviewed regularly by the Company's Health Committee. This Committee meets several times a year and its members include the Executive Director and two other Directors of the Company together with the Company's Chief Medical Officer, the Personnel Manager and other senior Managers.

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As its name implies the purpose of the Committee is to review and co-ordinate all activities connected with safeguarding the health of the Company's employees and also to initiate and review research on asbestosis. A brief review by the Company's Chief Medical Officer of the asbestosis research carried out or sponsored by the Company and current views on the size range of asbestos particles which may present a health hazard are given in Appendix I to this document.

DUST COUNTS IN THE FILTER ROOMS

All the air ventilated from the machines in the several workrooms is drawn into air-filtration plant in one or other of the air-filter rooms. The largest of these filter rooms by far is that which deals with the air ventilated from the Carding and Spinning room ('B' Block). After passing through the filter sleeves the air is exhausted to atmosphere. Fresh air is introduced from the outside into the workrooms and, in compliance with the 1931 Regulations, no air at all is re-circulated.

Since March of this year, dust samples have been taken at fortnightly intervals in the filter room of 'B' Block and also on the roof of 'B' Block from which the incoming air is taken. The samples were collected on glass microscope cover slips using a standard thermal precipitator of Casella manufacture with a sampling rate of 400 ccs. per hour. In order to obtai adequate deposits for counting, the samples in the filter room were each collected over a period of two hours whilst those on the roof were taken in one hour. The frequency of sampling was fortnightly in each location. All samples were incinerated at 500°C for 30 minutes to remove organic deposits and counting was carried out using a Patterson-Cawood graticule in the microscopic eyepiece.

The results of this dust sampling in the 'B' Block filter room and on the roof are given in Appendix II. These results show quite clearly that the amount of inorganic dust in the air in the filter rooms (which is now exhausted to atmosphere) is significantly lower than in the air outside on the roof of the factory; it is this outside air which is at present drawn into the workrooms. Consequently, by re-circulating the air from the filter rooms into the workrooms instead of using air from the outside, less asbestos dust would be introduced into the workrooms and an improvement in working conditions would be obtained.

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