Mining and Metals Division
Technology Department
Niagara Falls, New York

S.E.P. No. M&M 73-3

935-1128

PLAINTIFF'S EXHIBIT

UC-4504

SCOPE ENGINEERING
DESIGN MEMORANDUM

PROJECT: RG-244 FACILITY PHASE II
EXPANSION - 935-1128

BY: D. Holt

DATE: August 15, 1973

DESIGN MEMO NO. 8
Revision 0
Subject: Environmental Protection

INTRODUCTION

It is Corporation policy that all new facilities be designed to meet or exceed pollution control regulations and standards, for the protection not only of the environment, but also of the health and comfort of our employees.

GENERAL

The toxicology and industrial hygiene aspects of chrysotile asbestos are well covered in literature. The maximum permissible concentration, as stated by the California Industrial Safety Emergency Regulations, that an employee may be exposed to shall not exceed a weighted 8-hour average concentration of airborne asbestos fibers of more than 5 fibers, longer than 5 micro meters, per cubic centimeter of air as determined by the membrane filter method using phase contrast illumination and 400 x to 450 x magnification. This 8-hour weighted concentration of airborne asbestos fibers is scheduled to be reduced to 2 fibers per cubic centimeter on July 1, 1976. Tests conducted for the Corporation by Mellon Institute have indicated that RG-244 is no worse than chrysotile when inhaled, so it is assumed that the same MPC would apply. Airborne dust concentrations throughout the plant are monitored by plant personnel under the direction of the UCC Industrial Hygiene Department.

Due to the fine particle size, RG-244 product is readily dispersed in air. However, possibly because of the static charge on the fibers or some other reason, it tends to clump together in feathery agglomerates which settle readily and are easily collectible in bag filters. Dust counts in the RG-244 packaging area have consistently been below the MPC, even though abundant visible airborne asbestos was present. The grinding and packaging area is, and should continue to be, a respirator area, because of bags occasionally bursting when being filled.

A24217

AIR

The off-gas from the Roto-Louvre dryer should be cleaned in a high efficiency cyclone followed by a bag dust collector before release to the atmosphere. Stack sampling ports should be provided near the top of the stack for periodic checking of the solids emission. Stack height should be at least 5 feet above the roof peak of the mill building, or equipment in close proximity.

A Mikro-Pulsaire bag collector is installed in the grinding and packaging circuit. Even though no dust is visible in the discharge, it should be tested occasionally to build up a case history. All possible precautions should be taken to prevent RG-244 from spills, broken bags or reblending from becoming airborne in the Salinas Valley zephyrs.

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