

TO: G. H. HORNE July 18, 1978
FROM: P. E. JOHNSON file
SUBJECT: COMMENTS ON RECOMMENDED PRACTICE OUR FILE: M. 280.00
NO 12 "TANK INSULATION" YOUR FILE:

We suggest that the following items be considered in reviewing and/or using RP-12:

Item 1 2nd Paragraph.

"New insulation materials do not now contain dry asbestos. However, when removing old insulation the possibility that dry asbestos is present shall be considered. Personnel must follow regulations detailed in the California Code, OSHA regulations title 8, section 5208 when alterations or removal is required."

Item 1 3rd Paragraph

"Spray applied polyurethane foam is also an efficient insulation system when properly applied and properly weathered to prevent UV degradation and moisture absorption. In general, there can be a 10 to 25% overall cost savings over conventional fiberglass/aluminum insulator systems depending upon the area involved

(2)

Item 3

Additional reference documents

Eng. Dept. Specification EG-3354, Insulation
of Heated Storage Tanks (using
polyurethane foam)

Eng. Dept. Recommended Practice No. 48,
Fire Protection of Polyurethane Insulation

Eng. Dept. Design Practice D-131-4, Hot
Oil Storage Tanks Heat Loss, Heaters
Computer Program TANK

Item 6, (1a) Types of Insulation, 12th paragraph

Owens Corning Fiberglas Intermediate
Service board for tank shells and
Owens Corning Fiberglas Roof Deck
Insulation for roofs, or equal products
are in common use.

Item 6 (c) Conventional Block-Type Insulation of Hydrated
Calcium Silicate

All calcium silicate insulation
products on the market today

contain no asbestos fibers in compliance with OSHA regulation

Item 6 (12) Polyurethanes.

The isocyanate types are limited to 200°F with the isocyanurate types limited to 300°F continuous service. These types can be formulated for fothing, pour or spraying applications.

An amine adduct epoxy primer (Napko 5628 or equal) is normally recommended over a commercial (SSPC-6) prepared surface. A primer system is mandatory for all polyurethane foam insulation applications.

Design considerations for polyurethane insulation are more fully discussed in the Engineering Advisory Committee's Recommended Practice #8, Engineering Departments Design Practice N-134-3, - "Polyurethane Foam" and Specification EG-3354 - "Insulation of Heated Storage Tanks (using Polyurethane foam)".

Item 6 (2 b) "Plastic" Insulation

No longer available

Item 7 (2) Asbestos - cement Sheet

This type of weatherjacketing is no longer recommended over insulation because it is more expensive than aluminum, has a tendency to crack after being in service and it contains asbestos. Like asbestos containing insulation, asbestos-cement sheets when handled, must be follow OSHA regulations Title 8 section 5208.

Item 13 Painting Tank Steel

It is the company's normal practice to prime the tank exterior surface, under insulation, when the operating temperature is continuously 150° F or below.

George KP-12 is scheduled for a complete revision during 1978. There are many other numerous minor details that will be changed. Paul S. Johnson