OAR Box 1473

Prepped by Abdul Stroman

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MEETING MEMORANDUM

DATE:

3/22/93

TIME:

10:00 am -10:35 am e.s.t.

ATTENDANCE:

Les Evans U.S. Environmental Protection Agency John Schaefer U.S. Environmental Protection Agency

Tom Coven Union Carbide Jessica Dipels Union Carbide Ronnie Hymel Union Carbide

The purpose of this meeting was for the EPA to become familiar with the THBA process used at Union Carbide's Taft, Louisiana Plant. The THBA process is listed to be regulated under a National Emission Standard for Hazardous Air Pollutants or NESHAP as defined by the Clean Air Act of 1990. The EPA source category for the THBA process is butadiene dimers. The butadiene dimers source category regulation is due for promulgation by November of 1997.

Union Carbide representatives said that the THBA process produces an intermediate chemical known as THBA. THBA is stored on-site and used in the production of another chemical that is used in the manufacture of paints. THBA is produced for internal consumption only by Union Carbide and is not sold to other manufactures. The Union Carbide representatives said that to the best of their knowledge there is not another plant in the country that manufactures THBA. In 1986 EPA estimated annual production of THBA at about 12 million pounds a year. The Union Carbide representatives present said that current production is well below 12 million pounds a year.

Three HAPS are present in the process: Acrolein, Butadiene, and Hydroquinone. Acrolein and Butadiene are the raw materials used in the THBA process. Hydroquinone is an inhibiter used to inhibit polymerization in Acrolein. Hydroquinone is present in the Acrolein in very small quantities, it is measured in parts per million. The union carbide representatives said they felt that total HAP emissions for the entire process (including fugitives, storage, and process vents) was well under a hundred pounds per year. Except for a few small tanks, all vents and storage tanks are either vented to a flare or an incinerator. The smaller tanks are very low vapor pressure tanks and do not contain any HAPS.

In addition Union Carbide representatives indicated that their fugitive HAP emissions amounted to only a few pounds a year. Sometime after 1988 an outside vendor did an equipment leak test. Out of more than 1000 components, only 14 were found to be leaking. Acrolein emissions are especially tightly controlled. Acrolein detectors that detect acrolein in quantities of .05 ppm are used to detect any acrolein leaks. Fugitive butadiene emissions were felt to be as small as acrolein emissions.

At the end of the meeting Tom Coven of Union Carbide agreed to provide EPA with additional information. The information to be provided is:

- 1)
- A copy of the state air permit for the THBA process. A copy of the latest emissions test done on the THBA 2) process.