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# ***OAR Box 1473***

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**FROM:** John Schaefer

**TO:** Tetrahydrobenzaldehyde Docket

**SUBJECT:** Results of June 28, 1995 Meeting with Union Carbide in Hahnville, LA

**DATE:** August 17, 1995

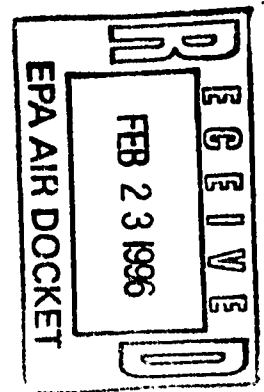
**MEETING BACKGROUND**

**MEDIUM:** Meeting at Union Carbide Taft Plant in Hahnville, LA

**DATE:** 6/28/95

**TIME:** 9:00 am C.S.T.

**PARTIES:** U.S. Environmental Protection Agency (EPA)  
Louisiana Department of Environmental Quality (DEQ)  
Union Carbide Corporation



**\*TOPIC:** Union Carbide Proposal for complying with Louisiana DEQ and Federal requirements for control of Air Toxic Emissions from the Production of Tetrahydrobenzaldehyde

**CONTACT:** John Schaefer / U.S. EPA / (919) 541-0296

**PURPOSE**

The purpose of this meeting was to discuss the proposed development of a Maximum Achievable Control Technology (MACT) Standard for the manufacture of Tetrahydrobenzaldehyde (THBA). THBA is required by the Clean Air Act Amendments of 1990 to be regulated by November 15, 1997. Preliminary discussions between the EPA and Louisiana DEQ led to the initial conclusion that the best way to meet this requirement was to add Tetrahydrobenzaldehyde to the list of Hazardous Organic NESHAP (HON) affected Synthetic Organic Chemical Manufacturing Industry (SOCMI) Chemicals, Code of Federal Regulations §63.105 (Table 2 Subpart F).

In meeting EPA's publicly stated goals of encouraging more participation in the regulatory process from groups outside the regulatory community this conference call was set up to discuss EPA's and the Louisiana DEQ's proposal. Union Carbide is the only known manufacturer of Tetrahydrobenzaldehyde in the nation and the only non-governmental party to express interest in the standard. This memo will discuss the two primary concerns discussed at meeting if Tetrahydrobenzaldehyde is added to the list of HON affected Synthetic Organic Chemical Manufacturing Industry Chemicals, Code of Federal Regulations §63.105 (Table 2 Subpart F).

**MEETING PARTICIPANTS**

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**UNION CARBIDE**

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<b>NAME</b>	<b>LOCATION</b>	<b>POSITION</b>
Tom Covin	Taft Plant - Hahnville, LA	Plant HSE
Joe Hovius	Danbury, CT	Corporate HSE
Ron Hymel	Taft Plant - Hahnville, LA	Production
Bill Nielsen	Taft Plant - Hahnville, LA	Research & Development
John O'Flynn	Taft Plant - Hahnville, LA	Production HSE

Union Carbide Contact: Tom Covin      Ph# (504) 468-4603  
HSE = Health, Safety and Environmental

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**U.S. ENVIRONMENTAL PROTECTION AGENCY**

<b>NAME</b>	<b>POSITION</b>	<b>PHONE</b>
John Schaefer	Environmental Engineer	(919) 541-0296

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**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

<b>NAME</b>	<b>POSITION</b>	<b>PHONE</b>
Bob Marting	Program Manager for Air Toxics	(919) 765-0113

The meeting was a follow up meeting to an early discussion held between EPA, the Louisiana DEQ and Union Carbide on March 29 1995. The primary purpose of this meeting was to further address Union Carbide's concerns about the possible addition of THBA to the HON. The most important of these issues was the possible requirement of the HON for the addition of a steam stripper to control air emissions from wastewater and Union Carbide's desire to keep using its current equipment leaks protocol instead of the HON LDAR protocol specified in §63.13 through §63.151 and §63.173 through §63.176.

The wastewater issue was resolved by determining that the HON was not intended to force Union Carbide to add a wastewater stripper to its process. The reason for this is that methanol the pollutant the stripper was intended to control was from a secondary process in its production unit. The unit is a flexible operation unit and produces THBA for most of the year. Thus under the definition of primary product given in the Hazardous Organic NESHAP Union Carbide should not have to install a steam stripper to control a minor waste stream from a product made for only a small part of the year. In other words the purpose of the HON is to have Union Carbide to install controls to meet all requirements for the major product on its line. Any other products produced on the process line (i.e. the same process equipment) will be controlled according to the conditions under which the primary product is controlled. Clarifying language to this effect may be added to the HON at a later date.

The equipment leaks issue was resolved by determining that Union Carbide's current equipment leak protocol was equivalent to §63.178 of the HON, HON Alternative means of emission limitation: batch processes. In short this section allows the operator to meet equipment leak standards by pressure testing the individual equipment components in the process line at least once a year. Union Carbide indicated it pressure tested its components at least three times between shutdowns of its flexible operation THBA line.

§63.178 is applicable to the THBA line since the unit operates in a series of production campaigns lasting no more than three months in the unit as now designed. At the end of a production campaign the unit must be completely cleaned out. All process equipment subject to the equipment leaks standard of the HON is removed from service, pressure tested, and repaired if found to be leaking. In just about all respects except record keeping Union Carbide's current process appears to meet the requirements of §63.178. In addition a total of 23 ambient acrolein monitors is in place around the unit. These monitors are placed at strategic locations around the unit to detect any significant leak of acrolein. Union Carbide reports good ambient response at .1 ppm ambient concentration of acrolein. A high value of 1.0 ppm is reported for monitors around a sump at the THBA unit.

With these two issues resolved THBA should be able to be added to the Hazardous Organic NESHAP without difficulty. Union Carbide and the State of Louisiana still have several issues to discuss on their own.