



Interoffice Communication

To Harry Martin
From Jim Weeks
Date May 24, 1977
Subject Benzene Project Progress Report

Preliminary work has been started to see where we stand in order to comply with the new OSHA standard for benzene exposure. This work included the following:

1. Since we do not have benzene as a free product we had to determine where our exposure could exist. It is determined that benzene can be entrained in several of our hydrocarbon streams.

Samples of the suspected streams were sent to Ponca City for analysis. We are now waiting on the results of this analysis to be returned to us.

2. I used an M.S.A. universal tester to check suspected areas for benzene. The universal tester can only tell us the total aromatics in the stream sampled. This test was used just as a guide to give us a starting place until more accurate sampling equipment can be obtained.

The areas checked included such places as sample draws, pump packing, valve seals and control valves associated with the streams thought to have benzene in them. Also inspected were storage tanks and gasoline blending areas. The results of these tests are enclosed.

3. Orders have been placed for personal sampling equipment. This equipment will be used to determine the exact exposure our people are exposed to.

4. Warning signs are on order to mark areas where a benzene hazard could exist. These signs will be posted when determined need can be established.

5. I have talked to suppliers about the availability of breathing protection equipment and ~~to find~~ our need can be supplied on short notice.

6. Benzene material safety data sheets have been compiled and put into the hands of each Division Foreman. These sheets are to be placed in their safety guide booklets and used to educate their people on benzene. A copy is enclosed.

SAL 000009186

Harry Martin
May 24, 1977
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Having completed these steps, we are at a point of having to wait on our ordered sampling equipment. With this equipment, we can better tell exactly where our exposure problems are and how to deal with them.



J. R. Weeks

1h
Enc.

SAL 000009187

SUSPECTED BENZENE STREAMS

<u>Sample</u>	<u>Length of Stain</u>	<u>Total Aromatics</u> <u>PPM</u>
#2 Reformate	Trace	L5
Hot By-pass Valve X-858	2MM	L5
Recycle S ^{os}	Trace	L5
D-100	Trace	L5
#2 Reformate	Trace	L5
P.T.O.H. Sample Draw	5MM	5
P.T.O.H. Control Valve	5MM	5
Coker Gasoline Sample Draw	2MM	L5
#2 Straight Run Gasoline	7MM	10
TCC Gas Sample Draw	27MM	100+
#1 Straight Run Gasoline	12MM	25+
Thermal Gasoline	2MM	L100
Tank 59 Sample Hatch	Trace	L5
Tank 29 Pop Valve	Trace	L5
Blending Area	Trace	L5

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These tests were run with M.S.A. Universal tester pump and reaction tubes.

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TOXIC MATERIALS SURVEY SHEET

Plant Lake Charles Refinery Person Making Survey Jim Weeks

Date May 18, 1977

Chemical Benzene

Area Where Used Entrained in refinery streams

How Used (Include Frequency of Contact) Part of stream

No. of People Involved Varies

Control Measure in Use Closed system

Person in Charge Varies

Comments: The Lake Charles Refinery does not have any fuel benzene in its streams. Could possibly contact benzene in drawing stream samples.

SAL 000009189

U.S. DEPARTMENT OF LABOR
WAGE AND LABOR STANDARDS ADMINISTRATION
Bureau of Labor Standards

MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME None		EMERGENCY TELEPHONE NO. None
ADDRESS (Number, Street, City, State, and ZIP Code) None		
CHEMICAL NAME AND SYNONYMS Benzene	TRADE NAME AND SYNONYMS Benzene	
CHEMICAL FAMILY	FORMULA C₆H₆	

SECTION II HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Can react vigorously with oxidizing agents					

SECTION III PHYSICAL DATA

BOILING POINT (°F.)	176°F	SPECIFIC GRAVITY (H ₂ O=1)	0.9
VAPOR PRESSURE (mm Hg.)	100mm Hg. @	PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)	2.8	EVAPORATION RATE (<u> </u> = 1)	
SOLUBILITY IN WATER	No		
APPEARANCE AND ODOR	Colorless liquid		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	120°F	FLAMMABLE LIMITS	1.3 LeL	7.1 UeL
EXTINGUISHING MEDIA	Dry chemical; carbon dioxide; foam			
SPECIAL FIRE FIGHTING PROCEDURES	Handle as any hydrocarbon fire			
UNUSUAL FIRE AND EXPLOSION HAZARDS				
auto ignition temperature 1044°F				

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE **1 PPM**

Suspected leukemogenic causing agent

EMERGENCY AND FIRST AID PROCEDURES

Remove from exposure, give artificial respiration. Call a physician immediately. Skin - wash with soap and water, eyes - flush 15 min. with water

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

WASTE DISPOSAL METHOD **As any hydrocarbon**

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

Supplied air respirator or chemical cartridge respirator

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES	Rubber	EYE PROTECTION Chemical safety goggles
OTHER PROTECTIVE EQUIPMENT		

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Protect against physical damage. Outside storage if possible. Inside storage should be in a standard storage room or cabinet.

OTHER PRECAUTIONS

SAL 000009191

AMBIENT AIR SAMPLES (CHARCOAL TUBE ABSORPTION)

- SAL 000009192**