

To: Alice Simpson

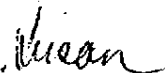
From: Susan Clark

6-1-92

Subject: **INDUSTRIAL HYGIENE MONITORING PLAN**

Attached is an aggressive monitoring schedule that will enable the Louisville Plant to complete industrial hygiene monitoring for OSHA-regulated substances (1910.1000) by 1992 year-end. The listed chemicals have been separated into three priority groups. The "A" group includes the substances of greatest concern, and potentially exposed employees will be monitored by August 31. The "B" and "C" groups are of lesser concern, because previous sampling results or the anticipated exposure is much lower than the PEL. Those groups will be completed by October 30 and December 30, respectively. Area monitoring will be done for several of the chemicals for both industrial hygiene and SARA 313 quantification.

In order to meet this schedule, it will be necessary to utilize the Safety/Training Supervisors in each department for the actual monitoring. I will provide them with equipment and supplies, as well as training on monitoring set-up and sampling. A monthly status report will be issued to track progress in obtaining these goals.


Susan Clark

pm

Attachment

cc: H. Kletke
~~R. Grauer~~/D. Gleghorn*
Department Managers

RECEIVED
JUN 05 1992
Ans'd. 6-15-92

NGC 12413

THE BFGOODRICH COMPANY
LOUISVILLE PLANT

<u>CHEMICAL</u>	<u>HOW USED</u>	<u>PEL</u>	<u>PAST MONITORING? YEAR/# SAMPLES</u>	<u>AVERAGE RESULTS/NOTES</u>	<u>FUTURE MONITORING PRIORITY</u>	<u>DATE</u>
Acrylamide	Geon Latex sope solutions	30 $\mu\text{g}/\text{m}^3$	None	Glass filter in series w/ SGT	A	8/31/92
Acrylic Acid	Made up from drums into 10% water solution. Stored in bulk as 10% solution.	10 ppm	None	XAD-8 (2 tubes)	A	8/31/92
Aluminum	Welding Fumes	5 mg/m^3	1983/ 1	0.10 mg/m^3	LAPVC C - filter cassette	12/30/92
Ammonia	28% aqua ammonia Geon Latex	35 ppm (STEL)	1981/ 6	14.8 ppm Avg./Long term samples.	OR 80-77 B - ORBO-53	10/30/92
Antimony Compounds (as Antimony)	SbO ₂ used as flame retardant in compounds	500 $\mu\text{g}/\text{m}^3$	1979/ 9 1980/19 1982/ 1 1983/ 2 1986/ 1 <u>1987/16</u> Total 48	19.8 $\mu\text{g}/\text{m}^3$ 35.2 $\mu\text{g}/\text{m}^3$ 11.8 $\mu\text{g}/\text{m}^3$ 9.4 $\mu\text{g}/\text{m}^3$ 122.0 $\mu\text{g}/\text{m}^3$ <u>35.1 $\mu\text{g}/\text{m}^3$</u> 32.5 $\mu\text{g}/\text{m}^3$	MCEF 0.8 micron A - filter cassette	8/31/92
Barium Compounds (soluble, as Ba)	Solvent based compound- ing stabilizers. Ba/Cd soaps. A few color pigments contain Ba.	500 $\mu\text{g}/\text{m}^3$	1979/ 3 <u>1988/ 3</u> Total 6	18.6 $\mu\text{g}/\text{m}^3$ <u>8.0 $\mu\text{g}/\text{m}^3$</u> 13.3 $\mu\text{g}/\text{m}^3$	MCEF 0.8 micron C & Area Monitoring - filter cassette	12/30/92
Butyl Acrylate	Bulk stored. Used in Geon Latex polymeriza- tion process and poly- acrylate polymerization.	10 ppm	None	POVM	B	10/30/92

LAPVC = Low Ash PVC 5 micron

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Cadmium Dust (as Cd)	Solvent based compounding stabilizers. Ba/Cd soaps. Color pigments.	In process of 8(b) rulemaking. (0.2 mg/m ³)	1979/ 3 1980/ 11 1982/ 1 1983/ 1 1987/ 3 <u>1988/ 12</u> Total/31	1.45 µg/m ³ 0.00 µg/m ³ 1.00 µg/m ³ 1.00 µg/m ³ 0.80 µg/m ³ <u>10.1 µg/m³</u> 4.2 µg/m ³	MCEF 0.8 micron C filter cassette	12/30/92
Calcium Carbonate	Limestone neutralization	10 mg/m ³	None	LA PVC filter	C	12/30/92
Carbon Black	Respirable Black pigment - Compounding	3.5 mg/m ³	None	LA PVC filter	A	LA PVC 5 micron preceded by 10 mm Nylon Cyclone 8/31/92
Chlorine	Total Used to chlorinate PVC in TempRite process. Also used in water treatment.	0.5 ppm (TWA) 1.0 ppm (STEL)	None	Miget Fritted Glass Bubbler w/ sulfamic acid	B	10/30/92
Coal Dust	Respirable Coal handling in Boiler House	2 mg/m ³ (respirable fraction)	None	LA PVC filter preceded by 10 mm Nylon Cyclone	B	10/30/92
Cyclohexanone	Lab solvent	25 ppm	1990/10	<0.10 ppm	None	
Di-2-ethyl hexyl phthalate	Stored in bulk. Used as plasticizer in Geon Latex and Compounding.	5 mg/m ³ (TWA) 10 mg/m ³ (STEL)	1981/ 6 1982/22 1984/ 3 <u>1986/ 2</u> Total/30	1.56 mg/m ³ 0.50 mg/m ³ 0.07 mg/m ³ Static <u>0.10 mg/m³</u> 0.69 mg/m ³ Excludes static samps.	13 mm B & Area Monitoring XAD-2 tubes w/ glass filter enclosed	10/30/92
Ethyl Acrylate	Geon Latex comonomer and monomer for polyacrylate polymerization. Handled in bulk.	5 ppm (TWA) 25 ppm (STEL)	1979/15 1980/ 6 1981/ 8 1986/ 6 <u>1989/ 9</u> Total/44	0.03 ppm 0.17 ppm 0.48 ppm 0.38 ppm <u><0.2 ppm</u> 0.25 ppm	C & Area Monitoring POVM or Charcoal Tube	12/30/92

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LOUISVILLE PLANT

<u>CHEMICAL</u>	<u>HOW USED</u>	<u>PEL</u>	<u>PAST MONITORING? YEAR/# SAMPLES</u>	<u>AVERAGE RESULTS/NOTES</u>	<u>FUTURE MONITORING PRIORITY</u>	<u>DATE</u>
Gasoline	Used for plant vehicles.	300 ppm (TWA)	None		Charcoal Charcoal Tube	C12/30/92
Hydrogen chloride	Off-gas from B-Line Farrel	5 ppm Ceiling (~7 mg/m ³)	1991/5	<0.03 mg/m ³	None	
Lead	Compounding: Handled in air pallets. Occasionally hand weighed.	50 µg/m ³	Sampled annually 1991/3 1992/13	<3 µg/m ³ 6.7 µg/m ³	MCEF 0.8 mm A filter cassette	8/31/92
Mercury Vapor	Used in manometers.	0.05 ppm	None		Hydrar tube 3M-PMVM or Hopcalite	C12/30/92
Methyl Acrylate	Geon Latex comonomer and monomer for polyacrylates. Handled in bulk.	10 ppm	1979/15 1980/ 6 1981/ 8 1986/ 6 Total/35	0.05 ppm 0.18 ppm 0.73 ppm 0.75 ppm 0.35 ppm	C & Area Monitoring POVM	12/30/92
Methanol	Ingredient in Alcotex	200 ppm (TWA) 250 ppm (STEL)	None	[SGT]	Silica Gel Tube	B10/30/92
Mineral Spirits (Stoddard Solvent CAS No. 8052-41-3)	Parts cleaning.	100 ppm	None		POVM or Charcoal Tube	B10/30/92
Sulfuric Acid	Reverse Osmosis	1 mg/m ³	None		ORBO - 53 [SGT] or MCEF 0.8 mm	None
Tetrahydrofuran	Laboratory solvent	200 ppm	1991/14	<0.7 ppm	None	
Tetrasodium Pyrophosphate	Buffer for sope solutions and latex. Handled in bags.	5 mg/m ³	None		LA PVC filter - 5 microns	C12/30/92
Titanium Dioxide	Compounding. Handled in bags.	10 mg/m ³ (Total Dust) 5 mg/m ³ (Resp. Dust)	None		LA PVC - 5 microns filter cassette	B10/30/92

PMVM = ^{Passive} Mercury Vapor Monitor Series 3600

NGC 12416

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LOUISVILLE PLANT

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Vinyl Acetate	Geon Latex comonomer. Handled in bulk.	10 ppm	None	tube	A Ambersorb XE-347X Start with Area Monitoring	8/31/92
Vinyl Chloride	Geon Latex and LPA monomer. Handled in bulk.	1 ppm	Sampled annually 1991/110 1992/38 (YTD)	0.32 ppm	A - REAL PD	8/31/92
Vinylidene Chloride	Geon Latex comonomer. Handled in bulk.	1 ppm	1984/4 1985/5 <u>1988/4</u> Total/13	0.2 ppm 0.2 ppm <u>0.1 ppm</u> 0.2 ppm	C & Area Monitoring POVM-B Charcoal Tubes	12/30/92
Wood Dust	Carpentry.	5 mg/m ³ (TWA) 10 mg/m ³ (STEL)	None	PVC filter	C same as PNOC	12/30/92
Chromium Compound Pigment		<u>III</u> <u>VI</u>	?	MCEF 0.8 microns " "	LA PVC 5 micron B or C	
Tin		2 mg/m ³	?	MCEF 0.8 microns	B or C	
Zinc Oxide Total		10 mg/m ³		MCEF 0.8 microns	B or C	
Zinc Oxide Respirable		5 mg/m ³	?	LA PVC 5 microns	B or C	

NGC 12417

PNOC - Particulate Not Otherwise Classified