

TO	T.S. Bialke	LOCATION	BFG Akron	DATE YOUR LETTER
FROM	Carl B. Reid	LOCATION	Niagara	DATE THIS LETTER
SUBJECT	November 25/82			
cc: J.J. Dunn D.A. Brooks				

Handwritten signatures and initials are present over the subject line and cc information.

Status Report on Industrial Hygiene Survey - August 1982

<u>A. Previous Survey Items</u>	<u>Comments</u>
1) Formal reply to survey	By Nov. 28/82 as requested.
2) Eyewash fountain, Process 3rd floor replacement	Quotes obtained; GPO being circulated for approval.
3) Physical examinations for worker respirator useage.	Doctor now complies, all plant workers able to wear respirators. Completed project.
4) Respirator program	Completed
5) Dust filters	Completed
6) Ammonia tanks	Completed
7) PVC bagger noise	Completed
8) Increase personal monitoring time for VCM.	Completed
 <u>B. 1982 Recommendations</u>	
1) Written respirator procedure.	Completed
2) SPCC procedure to address protective clothing.	Completed. When issued, SPCC will include this requirement.
3) Written procedure for VCM monitoring.	Will be written.
4) Noise:	
a) Signs at 100% hearing protection areas (above 85 dBA)	To be completed soon. Monitoring still in progress.
b) Signs at Dryer locations.	As above.
c) Dosimeter data supplied to nurse to compare audiometry results.	Completed. Data will be made available for the nurse & doctor as required.
d) Calibrate audio dosimeters annually.	Completed. Unit has returned from supplier.
5) ≥ 80 ft/min. on laboratory fume hood.	Engineering project in progress to achieve this ventilation rate.

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B.	<u>1982 Recommendations</u> - Continued	<u>Comments</u>
6)	Use of respirators and hearing protection be reported monthly.	Completed
7)	4 G.C. probes in Geon South have missing end filters.	Completed
8)	Balston filters in G.C. lines in Geon North not tight.	Completed
9)	Lead stabilizer in lab: Monitoring and blood lead not required.	Completed. In addition, assessment completed for the work place.

Carl Reid

/cs

Carl B. Reid

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BFG45117

TO	J. J. Dunn	FIELD POINT OR DEPT. & BLDG. NO. Niagara Falls, Canada	DATE YOUR LETTER
OM	T. S. Bialke	FIELD POINT OR DEPT. & BLDG. NO. Akron - D/0020, 5-H	DATE THIS LETTER 9-20-82
SUBJECT	<u>Industrial Hygiene Survey; August 10-13, 1982</u>		

An industrial hygiene survey was conducted at the Niagara Falls chemical plant during the period August 10-13, 1982. Most items from the previous survey have been satisfactorily completed; however, no formal reply to the 1980 survey was issued, an eye wash fountain valve had not been changed over, and routine examinations for respirator users had not been implemented.

Items that need attention as a result of this survey include procedures for respirator usage and vinyl chloride monitoring development; the noise program needs refinement, and laboratory hoods need to be updated.

The plant has identified and posted most areas with excessive noise as being "noise hazardous". I found the wearing of hearing protection by plant personnel to be good.

As in the past, I want to thank C. Reid for his help in making my survey productive.

T. S. Bialke
T. S. Bialke/*Rev. m*

v

cc: H.W.Dietz/E.B.Katzenmeyer, Jr.
C.Reid/J.Nagy
H.Waltemate/E.Martinelli
P.J.Weaver/D.A.Brooks
W.C.Becker
R.E.Healey

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Niagara Falls IH Survey; 1982

Findings

Items from Previous Survey

1. No formal reply to 1980 IH survey.

2. Eyewash fountain, 3rd floor poly building, Geon south is still of the spring-loaded type.

3. Physical examinations for respirator wearing approval not being done.

4. Respirator program:
 a. improve storage conditions
 b. assure cleanliness and serviceability
 c. replace 3M8500 with 3M8710.
 d. require PVC bagger to wear respirator until exhaust ventilation is improved.

5. Install dust filters on LPA VCM area monitoring lines.

6. Secure ammonia tank in H₂O treatment building.

Recommendations

1. A formal reply to an IH survey is to be issued within 60 days of the receipt of the survey report and quarterly thereafter until actions addressing each recommendation have been satisfactorily completed.

2. Replace spring loaded valve on referenced eyewash fountain with a type that will remain open until manually closed, thus permitting employee operating fountain to use both hands to keep eyes open when flushing out eye contaminants.

3. BFG policy requires that all employees working on jobs that require wearing of respirators be approve to wear them. All provisions of BFG OHP 1.17 "Use of Respirators" are to be implemented for employees working on jobs at Niagara Falls that require them to wear respirators.

4. completed

5. Completed; however see Item 8 under current findings.

6. Completed.

Exp.date
Completion

Responsi-
bility

1.

done

done in process

done

done

BFG45119

Findings

Recommendations

Items from Previous Survey (con't)

- | | |
|---|---------------|
| 7. Muffle PVC bagger/packer #1 exhaust. | 7. Completed. |
| 8. Increase VCM monitoring times. | 8. Completed. |

Items from this Survey (Current Findings)

- | | | |
|--|--|----------------------|
| 1. No written procedure for wearing, cleaning, disinfecting of respirators or training of users. | 1. A written program must be prepared and kept on file incorporating existing elements of the respirator program to comply with BFG policy and the Ontario Ministry of Health VCM regulations. The written program must establish annual training and fit testing of respirator users. Attachment II is a copy of the Akron chemical plant's respiratory protection program as an example of a good program. | <i>Done</i> |
| 2. Emergency spill and clean-up procedures do not address personal protective clothing and equipment requirements. | 2. All emergency spill and clean-up procedures must contain requirements for the wearing of protective equipment. Such procedures must contain requirements for the wearing of respirators, eye and face protection, boots, gloves, aprons, etc. Each requirement must specify the type of protection necessary to protect against the particular hazard that may be encountered. | <i>Being written</i> |
| 3. No written procedure for VCM monitoring. | 3. To comply with the Ontario Ministry of Health VCM standard, the plant must prepare a written procedure establishing VCM sampling and analysis requirements. Existing sampling procedures are kept "in the head" of the environmental technicians, thus making it very difficult to evaluate procedures when technician responsible is absent. Having no written procedure may also result in loss of program continuity as technical personnel come and go. | <i>Not yet</i> |

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Findings

Recommendations

Exp.Date
Completion

Responsi-
bility

3.

4. Noise

a. Signs for noise hazardous areas have time allowed to be in area limits posted on them.

a. BFG OHP 5.05 "Noise" requires that hearing protection be worn in areas where noise levels exceed 85 dBA.

working on

b. Dryer bldg. noise levels 85-93 dBA at #2 bagger, operator's desk and 3rd floor.

b. Post all of the dryer building as noise hazardous and require hearing protection to be worn while working in this area.

working on

c. Noise dosimeter data not made available to nurse to compare audiometric exams when counseling employees.

c. To facilitate employee counseling re on/off the job noise exposures, the plant nurse should be supplied with noise dosimeter data by employee and job class.

done

d. Last factory calibration of noise dosimeters was done in 1980.

d. To guarantee accurate and precise noise dosimeter readings, the plant's noise dosimeters must be returned to the factory each year for calibration.

done

5. Laboratory hoods operation "O" to 30 fpm across 6" wide face.

5. Upgrade the referenced lab hood ventilation rate to provide for 80 fpm across the face opened to normal operating position. Attach. I is a sketch of a hood modification plan by Ray Marshke of the Brecksville R&D Center. The modification increases the airflow of a typical hood from 28 to 80 fpm across the open face. This simply reduces the area of the hood face and consists of providing for a lock that keeps the horizontal sash hood from being opened above a certain point without unlocking it. A vertical safety shield which is on a rail that can be slid from side to side is also installed. The vertical shield is narrow enough for the lab worker to reach around. Also, an airfoil is attached to the front creating a laminar airflow pattern across the lab hood bench top. An alarm system is

*in progress
pt. 2 of 1*

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Findings

Recommendations

Exp.Date
Completion

Responsi-
bility

5. Laboratory hoods (con't)

built into the hood that will respond, both audibly and visually when (1) static pressure drops too low, or (2) when the hood sash is raised above the lock position. The modifications include parts which are available from hood manufacturers. Contact Roy Marshke at Brecksville, ext. 5273 for more detailed drawings and parts suppliers. Brecksville has estimated that such a retrofit may be done for about \$1,000-\$2,000 per hood. No modifications to ventilation or A/C systems is necessary.

6. Use of respirators and hearing protection not reported when monitoring data results are listed in monthly environmental report.

6. When an employee is monitored for VCM, dust, noise, etc. a record must be made if the employee wore personal protective equipment. The use of such equipment is also to be noted on the monthly reporting of environmental data.

7. Geon S, four GC probes found with missing filters.

7. To protect the VCL area G.C., probes must have filters installed in the lines to prevent particulates from contaminating the system.

8. Boston filters installed in Geon north G.C.; area monitoring lines not tightly sealed.

8. The G.C. lines are made of teflon which is very inflexible. When the Boston filters were installed, the rigidity of the teflon lines resulted in a poor connection between the Boston in-line filter and sample line. A tighter connection is needed to ensure that no leakage occurs at the filter installation point. Perhaps a more flexible connector such as Tygon or surgical tubing between the Boston filter and teflon sample line would provide for a gas-tight seal providing no organics diffuse out of the tubing into the sample stream to interfere with the G.C.'s analysis of VCM.

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Niagara Falls IH Survey; 1982

Findings

9. Eighty pounds of lead stearate used in laboratory in 1981.

Recommendations

9. Due to the small volume and infrequent use of lead, monitoring for lead exposure in the laboratory is not necessary. Also, blood lead exams for lab workers are not necessary.

Exp.Date
Completion

5.
Responsi-
bility

ok

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Discussion:

Table I contains results of noise dosimeter monitoring conducted at the plant during this survey. Dosimeter readings were taken with instruments set to the US OSHA standard of 90 dBA exposure for 8 hours, equal to 100%. The Ontario Ministry of Health standard is 85 dBA exposure for 8 hours equal to 100%. Results obtained with my instruments above 50% indicate worker exposures may have exceeded Ontario Ministry of Health standards. The operator helper, Geon south was exposed to noise above 50%. He wore hearing protection. It is difficult to point to any one area or piece of equipment as the cause of the operator's exposure because of the fluid nature of his job and the numerous pieces of equipment in Geon south that are noise producers. Noise dosimeter monitoring is to continue in Geon south and hearing protection must be worn in this area. The outside operator, Glen Way, was overexposed to noise as a result of chipping welds inside the dryer; hearing protection was worn.

The Ontario Ministry of Health has recently passed a bill regulating vinyl chloride. At the time of my visit, the regulation was just becoming available. Please forward a copy of the VCM standard to the Department of Environmental Health in Akron at your earliest convenience.

As health standards are promulgated by the Ontario Ministry of Health, please provide this department with copies.

TSB

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TABLE I.

NOISE DOSIMETER MONITORING RESULTS
Niagara Falls, Aug. 10-13, 1982

<u>Employee/SS#</u>	<u>Job/Area</u>	<u>Sample Time (min.)</u>	<u>H.P. Worn</u>	<u>¹% 8-Hr. TWA 90 for 8 hrs.=100%</u>
S.Kvas 455-04-7266	#2 oper., Geon S.	398	yes	45
D.Arseneault 455-12-0238	#1 " " "	397	"	34
C.Reidy 455-54-2036	Oper. helper, Geon S.	397	"	67.9
J.Morrison 455-16-5978	Foreman, LPA	387	"	10
R.Jollifte 455-69-5827	Pigment man, LPA	386	"	11
G.Way* 455-89-6439	outside oper., Geon S.	385	"	160

*Helped welder chip slag from weld inside dryer.

¹Ontario Ministry of Health standard for noise is 85 dBA for 8 hours is equal to 100%.

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