

October 11, 1982

J. W. Bloodworth
D. L. Cross
R. E. Healey
B. A. Healy
M. Lukity
R. L. Martin
H. Waltemate

FEDERAL OSHA INSPECTION - PEDRICKTOWN, NEW JERSEY

On July 8, 1982, a federal OSHA Industrial Hygienist arrived at our Pedricktown, N.J. chemical plant to conduct a general inspection under the Hazardous Chemical Target Industry Program.

In the closing conference of July 27, the compliance officer indicated that no violations were found and we will not be cited.

I have taken the liberty to copy the plant's write-up of this inspection and send it along to all of you as an example of a plant that was well prepared for the inspection and had all its "ducks in a row".


Robert A. Kelley

RAK:mak

cc: E. B. Katzenmeyer, Jr.

Attach.

NGC 14445

BFGoodrich
Chemical Division
Inter-Organization Correspondence

To	From
Location	Location
Department	Department
Date	
Subject	

To: Doug Frey
Location:
Department:
From: Chuck McCann
Location:
Department:
Date: 8/17/82
Subject: OSHA - INDUSTRIAL HYGIENE INSPECTIONS - JULY 1982

On 7/8/82 an OSHA inspector came to the plant. He was told by Edie Munyan that the plant was shutdown. On 7/14/82 he returned.

OPENING CONFERENCE

Paul D. Inglesby - OSHA Industrial Hygienist
Jim A. Kiel
John M. Fletcher
John J. Krementz

After appropriate identification was verified, Mr. Inglesby indicated that he would like to perform an industrial hygiene inspection of our facility. Our facility with a SIC code of 2821 has been identified for a routine inspection of our hazardous material handling practices.

The inspection would consist of

- Procedure review
- Training practices
- Typical personnel monitoring results
- Inspection of facilities
- Employee interviews
- Sampling
- Review of 1981 and 1982 YTD OSHA 200 log

Mr. Inglesby requested that we initiate the inspection on 7/14/82.

Herm Waltemate was contacted prior to and subsequent to the opening conference with respect to the OSHA inspector requirements.

A second conference was held with: Paul D. Inglesby
Jim A. Kiel
Chuck E. McCann
Greg A. Kaswell

NGC 14446

The purpose of the inspection was reviewed and a format to accomplish it was developed. The specific review was as follows:

- Review 1981 and 1982 YTD OSHA 200 log - questions on the N₂ inhalation incident and burn incidents were fielded. GAK/JF
- Review general procedural format, ie. Plant SA and department JAK
- Reviewed plant and departmental training program JAK
 - . SA procedures
 - . Departmental procedure
 - . Industrial hygiene annual training
 - . Personnel monitoring results and counseling if required
 - . Facility manager environmental co-ordination meeting

REDACTED

- Compound CEM
 - . Review Compound Lead Handling SA-25
 - . Review plant respirator protection SA-30
 - . Review Compound departmental training program. A copy was requested
 - . Review typical personnel monitoring records
 - 1981 Lead and Antimony
 - 1980, 1981 Lead, Antimony and Noise
- Noise CEM/GAK
 - . Review plant noise program - SA-23
- Latex CEM
 - . Review of company acrylonitrile training program
 - . Review typical personnel monitoring records
 - 1981 Acrylonitrile
 - 1981 Acrylonitrile
- PVC CEM
 - . Review Vinyl Chloride Procedure SA-31
 - . Review of Company VCM Training Program
 - . Review typical personnel monitoring records
 - 1981 VCM
 - 1981 VCM
 - 1981 VCM
 - 1981 VCM
 - 1981 VCM

First quarter 1982 Large Poly results (letter CEM-HW dated 4/16/82)
- GENERAL JAK/CEM/GAK
 - . New employee training GAK
 - . New chemical review - SA-35 JAK
 - . Emergency response-spills CEM
 - . Fire brigade and Tri State Mutual Aid GAK
 - . Emergency procedures - SA-32 JAK
- MEDICAL Jane Jaci
 - . Review typical medical file
 - VCM
 - Compound
 - . Mr. Inglesby requested a copy of BFG form #13613A (Medical tests) and a copy of blood lab tests performed for VCM exam.
- Mr. Inglesby took personal notes throughout the entire review

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The next inspection was scheduled for Thursday, July 22, 1982.

July 22, 1982

Mr. Inglesby met with Con Nosal, Chuck McCann and Greg Kaswell prior to initiating plant inspection.

Compounding

The area was not running since Thursday is Maintenance day. Chuck McCann explained operation of air pallet system. He noted the use of Carbon Black and Cabosil fumed silica.

Inspected weighbooth area and related ventilation. He expressed a request to take a photograph of the weighbooth as his velometer was not working properly. I stated that we could work out taking a photograph and stated that I had some velometer data that I could show him. We reviewed letter from C. McCann to John Goetsch dated 11/26/79 regarding air flowrates at the weighbooth. He was satisfied with this and made no further request to take a photograph. His stated purpose in pursuing the weighbooth item was to document what an excellent program we had.

Respirator storage - Inspected respirator storage area and noted airline hookup to airstream respirator - did not inspect lunchroom (cleanliness of lunchroom had lead to citation in 1977).

Inspected mill and cuber area - noted earmuff model number of muffs hanging on wall outside cuber. Walked through cuber area and I explained engineering controls used abate citation (TV, mirrors, sound panels, speed control from outside cuber room). He asked to see the data we used to abate the noise citation. Reviewed letters from C. McCann to Herm Waltemate dated 2/4/80 and 3/4/80 related to Noise monitoring of January and February 1980. He asked for copies of these letters and I stated that I believed OSHA already had this information. He said he would check his office. (He later checked and confirmed that he had what he needed at his office).

LARGE POLY

While walking to Large Poly, Mr. Inglesby asked how our VCM building monitoring systems were calibrated. I stated that there was a daily span check in addition to routine preventative maintenance performed. He related incidents at other facilities where air sampling piping had rusted through, somehow causing a nuisance alarm which was ignored and asked what we did to insure that the system checked out all the way out the pickup points. After conferring with an instrument technician at Large Poly, I responded that on a non-routine basis, as part of troubleshooting, the gas flow from the sample point to the GC would be checked with bubble tube or flow meter.

Tim Manning, Large Poly engineer, assigned to environmental and industrial hygiene responsibilities described process and building monitoring system. While reviewing recent building monitoring data (Inglesby noting ranges and averages (for 7/16)), gas alarm sounded for Mass resin.

Chuck McCann and Paul Inglesby left Large Poly and headed North on road toward the maintenance shop. Inglesby asked what sort of thing would initiate a gas alarm and whether it was an automatic or manually activated alarm, my response was that the gas alarm was sounded manually by either a console tech or a building person, whenever there was an uncontrolled release of vinyl chloride, or a release, which was under control but might affect operations outside the immediate building.

NGC 14448

While we were walking, I noted the position of the gas alarm indicator lights on each building and how everyone was following the gas alarm procedure by heading upwind of Mass resin building. The all clear sounded and we returned to the Large Poly area and began reviewing building monitoring data gain.

Tim Manning explained the use of the computer at Large Poly and after I checked the G.C. alarm panel for absences of high VCM readings, Paul Inglesby, Tim Manning and I began to enter the Large Poly process building to tour. At this point, Bill Risley, Lead Technician, asked us to leave as there was a vinyl leak. We walked back into the office and further reviewed building monitoring data. (The leak that Risley was referring to was when we blew the rupture disc on the charge line).

LATEX

Toured Latex building, starting with fourth floor and working down. I explained process of making latex and Paul Inglesby interviewed charging technician. The following information was discussed during the interview (responses in parentheses)

- Name, address and phone number.
- Is he aware of the hazards associated with acrylonitrile? What are they? (Cancer central nervous system disorders)
- What type of respirator does he use? (Cartridge-change out once a week)
- What type of protection is worn during acrylic acid handling? (Rubber gloves, R-55 respirator, faceshield)
- Fit check for respirator (Ben describes negative pressure and irritant smoke test)
- Have you used powered air purifier (No)
- Training on Scott air pack - frequency (drill once/quarter)
- Exposure points for hazardous material - (rinsing out poly and charging drummed monomer)
- Demonstration of task wearing respirator - (nothing going on right now to show h

Walked out to fourth floor area - inspected Poly 1 - reactor cleaning system nozzle

- Asked what type of reactor it was (Ron Szmerda, Area Manager replied Pfauldler)
Checked location and operation of eyewash
Checked use of caustic and location of personal protective equipment for handling
- Noted use of Methacrylic acid. (Ron stated that we use approximately 30 raw materials in latex process)

Ron and Chuck conducted tour of remainder of building.

Paul Inglesby particularly impressed by spot ventilation on second floor.

Explained ductwork and EA destruction system.

DISPENSARY

Reviewed several checklists for OSHA required medical surveillance for VCM, PB and AN
Reviewed with Jane Jackson.

Supplied him with blank VCM blood worksheet and Master Medical Examination (BFG form)
Supplied him with "Working with Lead Compounds and Other Toxic Materials in the Compound Area" BFG training material (all pages stamped Confidential).

REDACTED

TANK FARM

Interview:

- Name, address and phone
- Aware of hazards of VCM? (Yes)
- Training and medical surveillance (Joe details)
- What mechanisms do we have to detect VCM?
(Joe outlines LEL/THA system)

Reviewed location of airline connections

- How often are airline filters changed?

SUSPENSION LARGE POLY

Reviewed GC records again

7/13, 7/16

Inspected Suspension Large Poly area with Console technician

Inglesby took instantaneous sound level meter readings in the building - results ranged from 82-87 dBA in first floor of Building 531, below 85 dBA all throughout remainder of Building 531 as well as slurry building. Recovery build readings 87 dBA.

DISPERSION

Reviewed dispersion area with

Process description and location of building monitoring points. Sound level measurements in building ranged 82-85 dBA.

Inglesby requested copy of building vinyl excursion checksheet (BFG form 16807). After and I reviewed it for potentially sensitive or confidential information, we supplied him with a blank copy.

Reviewed computer printout of Building 513 building monitoring monitoring system dates of 7/13, 7/16, 7/20 and 7/22, noted averages and ranges.

Requested copy of typical day printout.

Supplied him with a copy of page 002061, 7/13/82 2300 printout.

MASS

Reviewed mass resin with as well as use of process computer to control dispersion and mass resin production.

Tour through process - Inglesby reviewed visible section of strip chart of GC

Reviewed plot plan of plant (supplied him with copy)

Follow up visit scheduled for 7/27/82 to cover Ammonia, Pigment Building, PLP utilities, Dryer, Construction Warehouse, Lab, Boiler and Compound in operation.

Held short closing session with Con Nosal where Paul Inglesby related his very positive findings.

NGC 14450

REDACTED

Phone Call of 7/26/82

Paul Inglesby called to confirm his scheduled visit of 7/27/82 and noted that he would like the following information.

Recent air sampling personnel monitoring information for lead and antimony - since air pallet startup.

Recent acrylonitrile sampling results

Recent vinyl chloride results in all three process areas

Questions regarding notification to OSHA of startup of Suspension Large Poly (I replied that the Company's position was that the Large Poly area is not a regulated area and that personnel monitoring has confirmed this position).

He would like to witness a poly entry or interview someone who routinely performs this task

Is an x-ray provided for acrylonitrile medical surveillance?

Is there a CO alarm on breathing air, do we have an oil lubricated compressor for breathing air?

Do we check self contained breathing apparatus for air content and alarm operation on routine basis?

Stated that he would like a copy of the vinyl chloride and acrylonitrile programs as was given to Frank Lewis of OSHA during his 7/19/77-12/29/77 OSHA Industrial Hygiene Inspection.

July 27, 1982

Paul Inglesby arrived at 0900 and we proceeded directly to the Compound operation. Toured compound with John Goetsch.

Third floor mixing area

Interviewed: - Compound Technician

Name, Address and Phone #

Asked about job rotation, training, medical surveillance

Do we ever hand mix lead? (Only when we run out of air pallet material or system is down for maintenance-rarely)

Knowledge of hazards of lead and Di n-octyl Phthalate

Took velometer reading at dumpchute

His only response was "great"

Readings were 150 ft/min. at breathing zone, 300-500 fpm at dumpchute

Compound First Floor

Sound level readings taken

Farrell discharge 82

Mill TV area 82 (even with breeze)

Packaging 85

NGC 14451

REDACTED

Compound first floor (cont.)

Interviewed - Compound Technician

- . Name, address and Phone #
- . Audiogram - does he get tested? (Yes)
- . Use of hearing protection (all the time in Cuber)
- . Does he spend most of his time outside Cuber room? (Yes)

Interviewed - Allied Packaging man

- . Name, address and phone #
- . Use of hearing protection
- . Training provided
- . Asked if he was related to who lodged OSHA complaint against Dupont? (Answered Yes)

Suspension Large Poly

Ammonia Building 505 - Alarm levels 50 ppm

Is there anyone out in this building on routine basis? (No)

Lance Mayer, Process Engineer-took us through Pigment Building 532. Noted: ATSC handling equipment including vortex suit and local shower-verbally reviewed ATSC handling procedure

Walked through inspection of several buildings

Construction Warehouse

High Pressure Pumphouse

Catalyst Bldg.-noted capacities of freezer

Maintenance Shop-noted welding fume exhaust

Laboratory-noted personnel monitoring equipment

Drier

Boiler-interviewed -Allied Boiler Operator

- . Took name, address and Phone #
- . Keyed in on operation of plant breathing air system, Bernie reminded Inglesby to wear his hearing protection outside booth.

Interviewed - BFG Utility Tech Dispersion

- . Name, address, Phone #
- . How long does a vessel entry usually take?
 - Anywhere from 10-45 min, average 10 min.
- . How do you check for O₂? (check with O₂ meter-must be 21%)
- . Do you check for anything else - (Check for vinyl chloride using HnU greater than 200 ppm requires extra precautions, usually level less than 5 ppm.

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Page 8:

Dispensary

Checked audiometric equipment, and audiogram forms.

Asked Jane Jackson about her certification to perform audiometric exam (she stated that she has had it since 1970)

Jane confirmed that x-rays were part of routine AN medical surveillance

Answered remainder of Mr. Inglesby's questions

Reviewed raw data for personnel monitoring for VCl, AN, Pb and Sb for April, May and J

There is no CO alarm required for breathing air as the compressor is not oil lubricate

Scott air paks checked for air content and alarm operation on routine basis

Airline filters changed on semi-annual basis

Closing Conference - 7/27/82

Joe Smith - Purchasing Manager (Acting Facility Manager)

Chuck McCann - BFG Environmental Engineer

Paul Inglesby - OSHA Industrial Hygiene Inspector

Paul reviewed reason for inspection - SIC number placed BFG facility into "high hazard category. The Pedricktown facility had not undergone an in-depth industrial hygiene inspection such as this since 1977.

Paul noted that in the four years he had been an inspector with OSHA, he had never, until now, done a full fledged industrial hygiene inspection at a large facility without finding something that needed improving. The BFG Pedricktown facility was fully satisfactory. There were no safety or health hazards apparent. Employee interviews were all very positive and indicated a high level of awareness of hazards of materials as well as a high level of awareness of proper procedures and personal protective equipment. He noted the extensive checks and double checks built into our programs dealing with health and safety.

He characterized Pedricktown as a truly exemplary facility and noted the extremely cooperative nature of all persons he dealt with.

Chuck McCann

Chuck McCann

CEM/re

NGC 14453