

Mr. Lucas Smith - Conoco Plastics - Aberdeen, Mississippi

Ponca City, Oklahoma

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#### APPRAISAL OF PLANT CONDITIONS

The following is to be my honest appraisal of the plant conditions when viewed from the position of a Federal Inspector.

#### OUTSIDE APPEARANCE

When approaching the entrance of the grounds to the Aberdeen Conoco Plastics plant, one gets an impression of a very clean, neat plant where there is substantially no air pollutants either visible or by sense of smell. The grounds are well kept and the parking space is well arranged and adequate. The office space is adequate and clean, and again, no odor could be detected.

#### INSPECTION OF THE WAREHOUSE

In general, the warehouse appeared neat with adequate ventilation, but there were a number of split bags with some spillage on the floor and general house-keeping could be improved in this area.

#### LABORATORY AREA

The lab seemed to be well vented and arranged in an adequate manner. There were some malodorous air contaminants of a mild nature, which could be detected in the laboratory.

#### INSPECTION OF THE COKE AND EATING ROOM

This area seemed to be adequate in space, but was, at the time of inspection, littered with paper, tables were dirty and floor needed cleaning. A clean and neat lunch and lounge room is essential.

#### TOP FLOOR

In general, this area was not too bad other than specific situations which, I feel, need to be corrected some and may not need large capital expenditures.

- A. The floor spillage is <sup>more</sup> less than desirable and floor cleaning could be improved. Improve ventilatory capacity and enclosures to reduce the amount of dust which occurs during this operation.
- B. At the dry blender, the detergent is added by hand and a considerable amount of spillage is happening. Although this spillage is not necessarily harmful to employees it leaves a lot to be desired in an esthetic sense.
- C. In the area of blending and adding plastizers in finalizing the plastic compound, there are effluents both of odor (which seems to come from the Star valve) and visible dust and odor from the

blenders when the lids are open (noticeably these remain open most of the time). Also, samples from the blenders are taken by hand either by a bucket or a pitcher which exposes the employee to possible accidents from the blades. The open hand dump contributes much dust and spills and should be better enclosed and more ventilation or air suction to reduce the dust.

#### THE LEAD COMPOUNDS WEIGHER

At the time of my inspection, this man was wearing an air filter mask. He was weighing the lead powder by hand with a scoop and there was considerable visible dust in the area. This procedure would be, no doubt, a serious point of criticism when viewed by a Federal Inspector. Some thought should be given to changing this procedure either by automatic weighing machines or a hooded weighing scale.

#### FIRST FLOOR

A considerable amount of clean-up should be attempted in this area because of the severe amount of spillage and also in this area we have a noise problem from the dicers and the fumes from the F.C.M. and mill.

#### HOSE DEPARTMENT

The hose department and area was very clean and is a pleasant working area other than there needs to be more ventilation at the mixer area and a noise problem exists at the dicer and some improvement in the hand-mixing is advised.

#### LINE 1 & 2

From a Federal Inspector's viewpoint, I would probably order this area to be shut down. The dust and fumes here are far in excess of the standard. Noise is also a problem in this area. Some simple changes in maintenance would improve this area considerably. The blender (plastizers being added) vat lids should remain closed. The ceiling vent fans should be put in order by your maintenance crew. Two ceiling fans were not working at all and the others were operating inefficiently because of the accumulation of dust on the fan blades and vents. Here again, hand sampling from the blenders was observed. The spillage around the blenders was grossly out of reason.

In general, I think we are dealing with a very serious problem with lines 1 and 2 when viewed from an Inspector's viewpoint.

#### REACTOR BUILDING

The building with small reactors seemed to be in order. I inspected a reactor which had just been cleaned and water was running in the reactor for beginning another series. The fumes coming from this reactor were exceedingly strong and the possibilities of vinyl chloride being in excess of minimal standards would have to be considered. The procedure indicated to me which occurred just prior to my arrival was that a large rubber hose was placed in the reactor and forced air was passed through this hose while the reactor cleaner was in the reactor. Here, a real problem exists. The following questions need to be

considered:

How much time is given for washing and aeration before the reactor cleaner begins his work in this vessel? How long a period is this man exposed in the reactor? Is the amount of air volume going into the reactor, while the reactor cleaner is working, adequate enough to reduce the effects of vinyl chloride inhalation? Does this man have symptoms of vinyl chloride inhalation, i.e., sleepiness, dizziness, numbness of fingers (this will be discussed with you at length very soon.)

At this time, acceptable vinyl chloride limits (taken from 1970 ACGIH Guide) is not to exceed 500 pp/m.

The first floor was covered with water to the shoe sole level. Other than this, no criticism could be made. While inspecting the grounds surrounding this reactor building, it was noticed that considerable amount of water was running in the drainage ditches. As I understand it, there is a stilling pond close which collects this spillage before it is allowed to enter the creeks in the surrounding areas. This, of course, is an absolute necessity and one which a Federal Inspector would call an obvious default, if it was not present.

The next area to be inspected was the drying and sifting area which, in general, was clean and neat. There was a noise problem there which could possibly be criticized, but at this point, I see no way of eliminating this noise and ear muffs or plugs could be offered to the employees who work here. However, there was dust which I feel could be eliminated by simple maintenance.

#### LARGE REACTOR

We entered the building close to the large reactor area and noticed a pipe which comes through the wall. When followed backwards, this pipe was attached to the bottom of this large reactor. From the pipe, fluid, which appeared to be water, was running into a floor drain next to the men's urinal. A spewing of gas came through the pipe frequently which smelled very strongly of what seemed to be vinyl chloride. I think this is an area of contamination and danger. It should receive immediate attention from your safety people. The large room next to the men's urinal area housed a number of sifters which were not in operation at the time I was inspecting.

I appreciate the opportunity of having been able to visit with you and Mike Raley and other members of your plant. I apologize to you and other members of your staff if I interrupted the normal workday. I hope the above remarks will be taken as they have been intended, as constructive criticism, in preparing you and your staff for a visit from a Federal Inspector.

Some of the nomenclature used in this report may be confusing to you since I have not had time to learn the correct names of the procedures and recepticals used. I might add that considerable thought should be given when correcting the inside dust affluents in order not to risk having more outside affluents visible.

Woodrow W. Massad, M.D.  
Assistant Medical Director

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