

Interoffice Communication

To J. D. Burns, Administration, Houston -
Timberway
From J. Friend, Plant Manager, Aberdeen
Chemical Plant
Date March 29, 1984
Subject ENVIRONMENTAL SURVEY

The following comments result from the review of the Aberdeen Environmental Survey in the memorandum from B. I. Raffle to F. L. Gannon and H. D. Butter dated February 2, 1984. Section letters and item numbers refer to the numbering used in the subject memorandum by B. I. Raffle.

SECTION A - Water Pollution

1. Item 1, Water Permits, first paragraph. All stormwater runoff from the plant is not covered by our NPDES permit. Only the areas of the plant where stormwater runoff enters settling pits numbers 1 and 2 are covered by the permit. Also, monitoring and reporting obligations are imposed for three priority (toxic) pollutants: Vinyl Chloride, Bis (2-Ethyl-hexyl) Phthalate, and Di-N-Octyl Phthalate.
2. Item 2, Water Compliance, first paragraph. The plant is normally in compliance with the NPDES permit. There has been one BOD excursion in Outfall 001 in the last two years and none after installation of the "bio-disc". The remainder of the out-of-compliance incidents have resulted from spills or bypasses of untreated wastewater around the waste treatment system. The "bio-disc" system was installed primarily to meet more restrictive BOD limits imposed due to the recent resin expansion project. The operation of the "bio-disc" has resulted in a decrease of the vinyl chloride level in Outfall 001 but this is not the primary purpose of the "bio-disc".
3. Item 2, Water Compliance, second paragraph. The API oil-water separator does not overflow during heavy rainstorms, but has been observed to back up

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through surface drains on four occasions. Thus, the water phase of the separator is discharged rather than the oil phase which floats on the surface of the API. The water which is discharged under these conditions enters a storm sewer which flows into a concrete settling basin. Any oil, if it did reach the concrete basin, would remain on the surface and later be skimmed off. The plant has no evidence that the oil layer in the API has been discharged from the plant.

The API oil-water separator has been observed to back up resulting in the by-pass of untreated wastewater on the following dates:

August 6, 1982
June 6, 1983
September 20, 1983
November 23, 1983

These four incidents were reported to the State. Discharges from this API separator are covered in the RCRA Addendum to the plant SPCC plan. The plant's SPCC is up to date.

4. Item 2, Water Compliance, third paragraph. The separator has been observed to back up resulting in a bypass four times and the State has been notified on each of these instances. These four incidents are all the plant is aware of.
5. Item 2, Water Compliance, fourth paragraph. The AFE request for funds to provide a new sewer from the API separator to pond #3 has been approved. Engineering is essentially complete and most materials for the sewer have been purchased.
6. Item, Water Compliance. Personnel from the Mississippi Bureau of Pollution Control visited the plant on February 14, 1984 to conduct an inspection and also investigated the causes of recent excursions to the NPDES permit (primarily bypasses from the API and other bypasses/spills). They indicated they were under pressure from the Regional EPA office to institute more enforcement action and stated continued excursions of our NPDES permit would likely result in enforcement action.

7. Item 3, Future Requirements and Potential Concerns, first paragraph. If the new effluent guidelines and pretreatment standards for the Organic Chemicals, Plastics, and Synthetic Fibers Industry (48FR 11828) are promulgated per the March 21, 1983 proposal, significant additional controls will likely not be required at the Aberdeen plant.

SECTION B - Air Pollution

1. Item 1, Air Permits, first paragraph. The construction permits have all expired. The plant has no active construction permits at this time. In order to continue to operate under a valid air permit, Vista has applied for a new operating permit to become effective on the date of closing.
2. Item 2, Air Compliance, second paragraph. In my opinion from a compliance standpoint, not only past discharges from relief valves but also from manual vents are a concern.
3. Item 2, Air Compliance, third paragraph. The study evaluating the possibility of future releases and identification of certain measures which have been implemented and which could be implemented in the future has been completed by the plant. This study was transmitted to the Conoco Legal Department February 2, 1983, for its review. To date, we have not received Conoco Legal's comments on the study. *I want to call the subject*
4. Item 2, Air Compliance, fourth paragraph. In the opinion of the plant, the [approximately twenty] relief valve discharges which have occurred at the plant are emergency relief valve discharges. The investigation of possible unreported relief valve discharges during the 1977-1978 compliance waiver period has resulted in the reporting of possible emergency relief valve discharges and an emergency manual vent to the Mississippi DNR. *a number of -*
5. Item 2, Air Compliance, fifth paragraph. The Complaint was filed February 1, 1984, in the United States District Court, Northern District of Mississippi. The Complaint is identical to the draft Complaint.

6. Item 2, Air Compliance, seventh paragraph. The prescribed method for sampling and measuring reactor opening loss is impractical and unsafe for our operational procedure of stripping in the reactor. The method requires dumping of the slurry before the sample is taken since the method requires sampling at the bottom, middle, and top of the reactor. During the time period the hot slurry is being dumped from the reactor, VCM leaves the stripped slurry and enters the vapor space in the reactor resulting in an erroneously high VCM content of the reactor vapor space. If reactor opening loss measurements are made according to the prescribed method, the same VCM is essentially counted twice (i.e., once in the resin and once in the vapor space). Because of these complications the plant was forced to develop another procedure for determining reactor opening loss. The procedure the plant developed is described in the next paragraph.

Rather than sampling and analyzing the vapor space after slurry stripping is complete to determine the reactor opening loss for each reactor batch, the Aberdeen plant uses a calculational procedure based on purging steam through the reactor to show compliance with the reactor opening loss requirement. The plant requested this equivalency in a transmittal to EPA Region IV dated August 14, 1978. The request for equivalency was made because no sampling procedure could be developed to obtain a true sample of the reactor atmosphere, which is above 212°F and under a slight vacuum when stripping is complete. Also after slurry stripping to the required level (400 PPM) is complete, vinyl chloride continues to leave the slurry and to enter the reactor atmosphere.

The March 22, 1979 semiannual report to the Regional Administrator, Region IV, states:

"We originally requested an equivalency regarding the reactor opening loss requirements of the standard on August 14, 1978. As expressed in our letter of August 14, we are concerned about the safety of reactor opening loss sampling and do not believe the method is

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accurate for our particular stripping operation. Therefore, we propose a calculational procedure based on a purge method that is employed to meet the requirements of the standard. This purge procedure shows we are in compliance with the reactor opening loss requirements throughout the period".

Each subsequent semiannual report states compliance with the reactor opening loss is attained by using standard operating procedures to strip the resin to less than 400 ppm vinyl chloride and purge the vinyl chloride from the reactor vapor space. These procedures are described in Section VI of the compliance manual which was submitted to EPA Region IV on August 14, 1978.

In my opinion the first sentence in this paragraph of the memorandum meant to say "rather than actually measuring, etc." instead of "rather than actually calculating."

7. Item 2, Air Compliance, eighth paragraph. In addition to possible enforcement action for reactor opening loss violations and slurry stripping, I am also concerned about possible enforcement action due to water stripping violations and that our past responses to detected VCM leaks could be judged unacceptable by EPA enforcement.

SECTION C - Solid Wastes

1. Item 1, Permits, second paragraph. The Conoco RCRA lawyer concurs that the plasticizer filter cake and API solid wastes generated from the plasticizer operation are not RCRA hazardous wastes. The plant manages these wastes as hazardous wastes just because we are conservative. The plant now has a contract with Stauffer Chemicals who will take our waste oil and burn it for fuel.
2. Item 2, Permits, fourth paragraph. The plant now has interim status authority for facilities which store (tanks and drum storage) hazardous wastes. We have deleted interim status authority for facilities which treat (oil/water separation) hazardous wastes.

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3. Item 2, RCRA Compliance, first paragraph. As far as we know, we are in compliance with applicable hazardous waste management regulations, but inspectors may possibly find other technical non-compliance problems.
4. Item 3, Past Waste Disposal Activities, second paragraph. The plant does not have evidence that plasticizer filter cake from the plant was taken to the now inactive municipal landfill which was once operated by the City of Aberdeen and upon which an H.U.D. housing development has since been constructed. However, the plant suspects this to be the case. The Conoco RCRA lawyer concurs that the plasticizer filter cake is not a RCRA hazardous waste.] - *change*
5. Item 3, Past Waste Disposal Activities, third paragraph. Conoco legal was aware and concurred with the covering of pond #2. Prior to covering the pond, verbal discussions were held with the Mississippi DNR. They stated there were no RCRA requirements for closing the pond. The closing procedure of grading, covering, and seeding has verbal concurrence of the Mississippi DNR.
6. Item 3, Past Waste Disposal Activities, fifth paragraph. No contaminants were found in the initial groundwater samples. Groundwater sampling was required initially and is to be done again six months after the first sampling. The ground water sampling plan was approved by the Mississippi DNR. The DNR was advised we would grade and seed the area to keep standing water off the area. The DNR did not respond to the grading and seeding plan. The grading and seeding of the area has been completed.
7. Item 3, Past Waste Disposal Activities, sixth paragraph. The location of the site where the Conoco-labeled drums were found was near Gattman, MS.
8. Item 3, Past Waste Disposal Activities, seventh paragraph. The drums containing DOP lead pigment will be disposed of at the Chemical Waste Management Facility at Emelle, Alabama. The drums

*Conoco legal
concur*

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containing aluminum powder will be sent to a color concentrate manufacturer and be reclaimed.

9. Item 3, Past Waste Disposal Activities, eighth paragraph. The environmental coordinator discovered the drums while conducting a general inspection of plant property outside the plant fence, not while conducting a general environmental survey of the plant.
10. Item 3, Past Waste Disposal Activities, ninth paragraph. Drums containing the following materials were found:

- 30 drums contained waste oil (approximately 30 weight)
- 23 drums contained a thick viscous oil (approximately 140 weight)
- 3 drums contained glycerine
- 3 drums contained detergent
- 1 drum contained phyhalate plasticizer
- 49 drums were empty

Several samples of the oils were analyzed for PCBs and none were found. A composite sample of the oils was checked for priority pollutants. The results are:

- EP toxic metals - none detected
- Acid compounds - none detected
- Base neutral compounds - chrysene, 0.02%
fluorene, 0.03%
phenanthrene, 0.2%
no others detected

The waste oil is currently stored in our waste oil storage tank and will be sent to Stauffer Chemicals which will burn it for heat recovery. The DNR did not request the contaminated soil be tested for priority pollutants.

SECTION E -- Other Matters, first paragraph. A formal protocol for Superfund reporting has not been developed for the Aberdeen plant. The plant currently follows the procedure of not reporting to Superfund "federally permitted" releases. These federally permitted releases include relief valve

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discharges, manual vents and leaks covered by the plant's approved leak detection and elimination plan.

I have no knowledge of matters concerning the Aberdeen Transportation Terminal as set out in page 14 of the memorandum, since such facility is at the present time controlled and managed by the Conoco Inc. Transportation Department. However, on page 14 the statement in the third paragraph under Water Pollution says that the plant maintains a 10,000 gallon diesel storage tank at the terminal. This statement is incorrect. The tank belongs to the terminal, not the plant.

Two additional solid wastes which were not mentioned in the memorandum are generated at the plant. These are reactor culls which are oversized PVC particles produced in the polymerization process and filter elements which are used to filter the VCM before being charged to the reactors. Each of these wastes do contain some vinyl chloride but are not RCRA hazardous wastes according to Conoco legal. These wastes are ~~currently disposed of at the Monroe County landfill.~~ At some time in the future, these wastes may be classified as RCRA hazardous wastes and have to be treated as such.

Also attached are previous letters prepared by the plant covering environmental operations and potential environmental liabilities. All of the potential liabilities discussed in these letters are not specifically included in B. I. Raffle's memorandum of February 2, 1984.

ja
Enc.

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