



Interoffice Communication

File: Aberdeen 1978

To G. G. Draper - Aberdeen

From J. E. Cearley - Houston

Date April 21, 1978

Subject Environmental Assessment of Aberdeen Facilities

Following the environmental inspection of your facility, there were several areas of concern that need attention. The following are observations and recommendations pertaining to potential or existing environmental problem areas:

1. A recent upset of the waste treatment system resulted in violations of the NPDES Permit. The poor performance was attributed to cold weather, inadequate nutrient supply, and loss of acclimation to the wastes by the biomass. This loss of acclimation was due to curtailment of the operation of the Plasticizer Unit. This type of upset can be prevented, or at least significantly reduced, by giving proper attention to the waste treatment system. For example, reseedling with municipal sludge and optimizing the N/P ratio on startup or increase in production of the plasticizer; this action would have to be coordinated with a gradual increase of the wastes to the bio-pond. By waiting until the organic concentrations reach the higher levels before reseedling and/or adding additional nutrients, it takes much longer for reestablishment of the biomass.
2. The plant has a relatively large number of unpermitted stormwater discharge points. Several of these point sources were noted to have flow other than stormwater runoff, e.g., wash water, once-through cooling water, and water from unidentified sources. A great deal of the areas in and around the process areas drain to stormwater sewers, increasing the potential for runoff contamination. It is obvious there is a need for improvement in order to reduce contamination of stormwater runoff and eliminate miscellaneous discharges of process wastewater.

An interoffice communication presenting recommendations for evaluating and handling of stormwater point sources is attached. Actions taken according to this memo will enable the plant to determine the type of controls needed and permit limits that will be required.
3. A small earthen pond containing water with an oil emulsion layer was noted on the west side of the plant in close proximity to the plant property line. The pond is subject to overflow due to rainfall, with the discharge entering James Creek. This pond should be eliminated.
4. Tank truck unloading/loading spots, such as the one adjacent to Tank Farm No. 1, should be evaluated as to the need for spill control facilities. The loading spot is in close proximity to a stormwater sewer and a sizable spill could enter the sewer.

SAL 00108434

5. Areas such as the gear and lube-oil lubricants storage area (maintenance shop) should be considered for spill control such as curbing. The area drainage goes to a stormwater sewer located adjacent to the building.
6. Resin was noted in several of the drainage ditches and along the rail trucks on the south side of the plant. This material is subject to being discharged from plant property via stormwater runoff. Provisions need to be made to promptly clean up spills and to take measures to prevent resin spills. The railcar resin heel recovery capital project will help in this area, but more controls are needed.
7. One area we need to improve in is training of employees in spill control, an SPCC requirement. Spill prevention briefings should be held at intervals frequent enough to assure adequate understanding of the SPCC Plan. Any briefings should be documented. I will be contacting the plant in the near future about putting together a slide-presentation type training film on SPCC requirements.
8. It is my understanding that we do not have a state permit for vent stack emissions from the exhaust system servicing the blend building. This is of concern since it is a point source with the potential for particulate emissions. Consideration should be given to permitting of this vent stack.
9. The VCM sphere needs to be diked. Questions have been raised as to whether VCM storage vessels should be diked because of safety reasons. It is our opinion that major vinyl chloride spills, such as a vessel rupture, need to be contained in order to isolate the potential dangers, e.g., fire and exposure. We definitely should not allow any of the material to be discharged from plant property. I contacted representatives of Borden, Shell, Firestone, and PPG, and they all indicated their vinyl spheres were diked, regardless of the location. Shell is currently constructing five new spheres and these will be diked. The vinyl sphere at Aberdeen is of particular concern due to it being located adjacent to James Creek.
10. Considerable quantities of solid wastes are settled out of the process wastewater prior to biological treatment. The plant has been able to contain these solids since startup, so disposal has not been required. Disposal may not be required until 1979. When disposal is necessary, we must be very cautious in the disposal method we choose. Disposal must be done in a fashion that is acceptable to regulatory personnel and to Conoco personnel.

At your convenience, I would appreciate a reply as to your planned course of action on these recommendations. Let me know if I can be of assistance.

g r c
J

JEC/vm

SAL 000108435