

INTEROFFICE MEMORANDUM

Date: 13-Mar-1990 06:26pm
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TO: Howard A. Smith (SMITHHA AT ISCDCVM2)

CC: Roger J. Zipfel (ZIPFEL)

Subject: Status of C-8 Program Items for Dr. Karrh Review 1990

The attached information is to summarize the developments and issues around C-8 that have taken place within the past year. We can work up our April, 1990, meeting with Dr. Karrh from these items plus those that you have.

I am sending this out today with some items that still require some follow-up on my part, but this should give you a feel of where we are and where we are going. I am available any time after 3/22 for a planning meeting.

Community Items:

o In April, 1989, the Lubeck Public Service District requested information from the DuPont Washington Works if we had knowledge of any contaminants which might be entering the District's water system. This was prompted by the Public Service Commission of West Virginia during a routine inspection of Lubeck's facility. We gave the Lubeck Public Service District a letter listing the analysis that had been completed on site wells. In the cover letter, it was pointed out that FC-143 had been detected in concentrations from 1.0 to 2.2 ppb. So far, nothing more has been heard from them.

o In May 1989, a site decision was made to stop the practice of taking off-site samples looking for C-8. We are continuing to monitor Site Well No. 27 (at the fence line near the Lubeck water system), the Washington Works drinking water wells, and at the DuPont Letart landfill.

--Site Well No. 27 data: 5/4/89, 0.44 ppb; 8/1/89, 1.3 ppb; 10/24/89, 1.5 ppb; (normal historic level of 1.3 to 1.5 ppb).

--Site Drinking Water data: 5/8/89, none detected (as has been the normal historic levels).

--Dupont Letart Landfill upper and lower surface water pond discharges (low flow rates from these ponds

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directly to Ohio River, from 0 to 8 gpm depending on rainfall, therefore estimate only ~130 lbs/yr of C-8 to river as we presented last year and confirmed):

---Upper Pond: 3/17/89, 1.1 ppm; 4/25/89, 0.5 ppm; 5/26/89, 0.9 ppm; 6/23/89, 1.9 ppm; 8/31/89, 2.0 ppm; 9/13/89, 1.9 ppm; 10/24/89, 1.7 ppm.

---Lower Pond: 3/17/89, 1.1 ppm; 4/25/89, 1.5 ppm; 5/26/89, 1.2 ppm; 6/23/89, 1.5 ppm; 7/21/89, 2.5 ppm; 8/11/89, 3.2 ppm; 9/13/89, 2.9 ppm; 10/24/89, 1.6 ppm.

We do not understand, at this time, why we are seeing an indication of C-8 in the upper pond.

Site Items:

o We ran the 1989 blood sampling to correspond with the air monitoring program to obtain a correlation of air data with C-8 pick up in blood. You have the work on this from our Nov. meeting. We are not currently taking employee air monitoring data; waiting on the results of our Nov. '89 study work to point ure direction.

o The final Supernate Pond was closed in the 4Q of 1988. Looking for the impact in the water well No. 27, but have not yet seen anything conclusive for showing a significant downward trend.

o Currently the Site has Calvin Chien working on a site-wide assessment for groundwater flows as a part of the SWMU's investigation. This work should give us the needed information around the ground water flows and C-8 movement for the site. I will be finding out if any thing has been learned to date that could be useful for our immediate purposes.

o The use of C-8 in solution form started in August, 1989. This reduces the employee exposure to C-8 as well as eliminate the raw material drums being disposed of in the Letart Landfill.

o The Fine Powder Dryer Recovery Project started up on March 12, 1990. Just now in process of starting to recover material. The reduction of C-8 to Air will now begin shortly, so the amount to Air for 1989, will not be reduced and might show an increase depending on how the material balance comes out.

o I will be doing the C-8 material balance very soon. I expect usage was up (depending on product mix) and therefore expect amount sent to the environment might be up as well. Again no reduction to environment expected until the Dryer Recovery

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. object on stream, then the technology will be expanded where practicable.

- o Fence line monitoring by getting actual samples at the Site's boundary. I will need to confirm, but I don't think in field samples yielded meaningful data.

- o Status of C-8 recovery from the FEP effluent. This work has been on hold since Nov. '89 to push the Fine Powder Dryer Recovery Project start-up.

- o Purchase of Lubeck Water System.

Off-Site Items:

- o The site had a geologist from ESD, L. C. Diaz, look at the Dupont Letart Landfill for a review of the existing hydrogeology. She determined that the current groundwater monitoring system (installed ca 1984) of the 2 wells upstream and the 3 wells downstream could not be used to obtain any meaningful monitoring of the extent, if any, for groundwater contamination with C-8. This means that the groundwater samples that we did get in 1989 are meaningless and we can neither confirm nor deny a groundwater problem at Letart. Monitor wells will have to be drilled to provide the State with data that they will need for permitting. I will check and verify the timing for this work.

- o New West Virginia regulations around non-hazardous landfills (i.e. Dupont Letart Landfill) will require double liners or equivalent, leachate collection facilities, etc. Letart Landfill will be up-graded, in the future, to meet these new rules for permitting and our continued use.

- o The use of liquid C-8 from 3M has stopped the disposal of empty C-8 raw material drums in Letart. The disposal of semi-finished scrap, however, continues at Letart. Currently, there are no other technologies available to eliminate our dependence on Letart for managing the C-8 containing semi-finished scrap wastes. Incineration is being looked at for some other polymer waste stream, but existing commercial facilities do not want to accept the fluorides in their units. Our future state visioning technology is leading in the direction of scrap de-polymerization which is 5 years+ away.

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