

InterOffice Memorandum

CENTRAL DISTRICT

TO: File **F4D 980-559-728**

THROUGH: Robert T. Snyder, P.E.
Program Manager
Hazardous Waste Section

THROUGH: Ed Fitzgerald *EH*
Environmental Specialist
Bureau of Emergency Response

THROUGH: William Kappler *W*
Environmental Specialist
Hazardous Waste Program

FROM: John White *SW*
Hazardous Waste Program

DATE: February 21, 1997

SUBJECT: Chemical Conservation Corporation Bromine Release - Orange County - HW

On January 23, 1997, the Orange County Environmental Protection Department (OCEPD) notified the Department of a chemical release at Chemical Conservation Corporation (CCC), located in Orlando, Orange County. During a subsequent telephone conversation between Bob Snyder, Hazardous Waste Program, and Armando Gonzalez, CCC, Armando emphasized he would like DEP and OCEPD to come and see what was going on, he also indicated the first he knew of anything [a problem] was when the hazmat team showed up. Representatives of the Department's Hazardous Waste Section, William Kappler and John White, and Emergency Response, Ed Fitzgerald, accompanied by Dan Carrington, OCEPD, arrived at CCC at 10:15 a.m.

SUMMARY OF EVENTS

At approximately 7:15 a.m., Joe Hughes, a CCC employee, began transferring the contents of a 15 or 30-gallon container of bromine (50%) into a 250-300 gallon container, referred to as a "tote." The bromine container was contained within a larger 55-gallon overpack drum, apparently due to damage sustained at the generator location. During the course of transportation, some of the bromine leaked from the bromine container into the overpack drum. While pumping the contents of the container into the tote, Mr. Hughes noted red fumes coming from the drum and the container. No fumes were noted coming from the tote. However, Mr. Hughes and other CCC employees in the area were wearing respirators and had large fans blowing the fumes out of the work area. Therefore, CCC employees were not affected by the release and were not concerned by the fumes. The transfer took approximately 10 minutes.

The fire department was called out at 7:58 a.m. in response to an odor complaint. According to Lt. Steve Kid of the fire department, he observed a vapor cloud upon arriving at the site. The list of affected business addresses provided by the fire department during the site visit is as follows:

931 West Taft-Vineland (GE Capital) - Original caller.
828 Taft-Vineland (Consolidated Freightways)
726 Taft-Vineland (Superior Transport)
10255 South General

Fifty-two people in businesses adjacent to CCC were treated by fire department personnel, with three of those being transported to Orlando Regional Medical Center - Sand Lake for further treatment (this information is based on a fire department report dated 02/06/1997).

Upon arriving on site, inspectors were informed by Armando Gonzalez, CCC Compliance Officer, that during the transfer of the bromine, from the 30-gallon container and overpack drum, into the tote containing dilute hydrochloric and phosphoric acid, there was no visible reaction, no fumes, and employees reported no problems. Based on the statement by Mr. Gonzalez, inspectors tried to determine the cause of the problem. We began by requesting information regarding the contents of the tote to which the bromine was being transferred. The tote contained approximately 200 gallons of dilute hydrochloric and phosphoric acid. The hazardous waste label on the tote read "RQ Waste Corrosive Liquid, Acidic, Inorg, n.o.s. (Hydrochloric Acid, Phosphoric Acid) D002, D007, D008". According to Armando Gonzalez, prior to mixing the chemicals, a small amount of each material was premixed in a 5-gallon bucket to determine if an incompatibility problem existed. No reaction was noted. A pump with a 2-3 inch diameter hose, about 20 feet long, was used to transfer the bromine. Joe Hughes, the CCC employee who performed the transfer, was asked if it was possible something remaining in the hose caused a reaction. We were told no reaction occurred. This is when John White was informed by Mr. Hughes that red fumes were visible during the transfer. He did not think there was a problem until the fire department showed up. Mr. Hughes noted the red fumes were consistent with bromine. The fumes were coming from the container and the overpack drum. He made no mention of fumes coming from the tote container.

CONCLUSION

Upon completion of the inspection, both William Labadie, CCC vice president, and Armando Gonzalez, CCC compliance officer, were informed that the cause of the problem may have been indifference on the part of CCC employees to the fumes released. This suggestion originated with Armando Gonzalez, CCC compliance officer, who noted that fumes are commonly released during the transfer of acids, such as hydrochloric acid, which constitute a large part of CCC's business. These fumes do not normally cause any problems.

It was suggested that employees be made aware of chemicals which may emit harmful fumes. Mr. Labadie was not necessarily in agreement that this was the cause of the problem, however, he appeared to be receptive to any solutions we had to offer.

jw

TO: Chemical Conservation Corporation File

THROUGH: Bob Snyder, P.E.
Program Manager
Hazardous Waste Section

THROUGH: John White
Environmental Specialist
Hazardous Waste Section

FROM: Mary McGehee
Permitting Engineer
Hazardous Waste Section

DATE: September 23, 1997

This morning, John White passed on information he had received from Mr. Dan Carrington, Orange County Environmental Protection Department. Mr. Carrington was responding to a telephone call by an employee of Cook Composites & Polymers. Cook Composites & Polymers is a business located at 10124 Rocket Boulevard, adjacent to Chemical Conservation Corporation (Chemcon).

On September 22nd, Cook Composites & Polymers voluntarily evacuated their facility due to an alleged chemical release at the Chemcon facility. I called Mr. Armando Gonzalez, Environmental Manager at Chemcon to get details on the alleged event. From the information I have received at this time, it appears Chemcon had a tanker truck emit fumes caused from a chemical reaction involving incompatible acids being bulked in a tanker truck.

Mr. Gonzalez stated he was just about to call the Department to discuss modifying their permit application (Intent to Issue & draft permit in review of signatures) to address the installation of a venting apparatus which will connect to a scrubber. He did state there was a reaction, not a major one in a tanker truck which the tote tanks were being pumped into. This all happened about 3:00 p.m. yesterday, (September 22, 1997). Drums (55-gallon) of acid waste are bulked into tote tanks at the facility. The tote tanks are then further bulked by being pumped into a tanker truck for transportation to an off-site TSD facility. Chemcon is looking into what caused this reaction. I asked if Chemcon notified any agency (Emergency Response, FDEP, County EPD, National Response Center, etc.) about the release and the answer was no. According to Mr. Gonzalez, by the time Chemcon noticed the fumes coming from the tanker truck they had already stopped bulked the acid material. Chemcon moved the tanker truck into their building. After putting the truck inside, Mr. Arthur Hansen, plant manager at Cook Composite & Polymers came over to Chemcon to investigate the odor. Mr. Gonzalez stated Mr. Hansen asked Mr. Labadie if he should evacuate his facility and I believe since it was the end of the work shift anyway the

decision was made to voluntarily evacuate. I have not called Mr. Hansen to document this fact. Mr. Hansen may be contacted at (407) 851-3030.

The tanker truck stopped fuming around 7:00 p.m. Today, Mr. Gonzalez could not find documentation indicating the compatibility test was followed. Mr. Gonzalez stated Chemcon will need to modify the compatibility test to include reaction time and temperature factors.