4500 NORTH WEST AVE. . P. O. BOX 231 . EL DORADO, AR 71731 . (870) 863-1400

Certified Mail: Z 057526782

ELDORADO

CHEMICAL COMPANY

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April 23, 1998

Mr. Nelson Jackson, Esquire ADPCE P. O. Box 8913 Little Rock, AR 72219



Dear Mr. Jackson:

Per your recent phone conversation with Chuck Nestrud, reference is made to the Sodium Hydroxide spill which occurred at El Dorado Chemical Company (EDCC) on May 5, 1997. Chuck indicated that you had relayed an ADPC&E concern regarding EDCC's initial response to the spill, and whether EDCC had followed proper procedure in its efforts to mitigate the spill's impact. The following summarizes our response which has been previously documented in a May 9, 1997 letter to Orene Robertson of the Department.

On the morning of May 5, 1997, the Boiler House operator was making routine rounds when a leak was discovered from the bottom of the Sodium Hydroxide (NaOH) tank. The NaOH was flowing from a 2-inch PVC line which had separated from the bottom of the vessel. The NaOH was entering a floor drain. The operator notified the Shift Supervisor, who in turn notified the Environmental Department. At this particular point, the NaOH was believed to be flowing via the plant industrial sewer to Lake Lee. The Environmental Coordinator went immediately to Lake Lee and prepared to block in the spill and neutralize with mineral acid available on site. The Environmental Coordinator took a pH reading which did not indicate that the NaOH was flowing into the pond. He then went to Outfall 005, which is a stormwater outfall on the south side of the facility and took a pH reading of 12.2. Due to the location of Outfall 005, which has poor access and swamp-like conditions, it was not practical to implement containment procedures.

At this point the Environmental Coordinator notified the Boiler Operator to add dilution water in attempts to dilute the spill. He also notified the ADPC&E, NRC, OES, and LEPC shortly after his discovery, which has been previously documented. The Environmental Coordinator's rationale was that he did not believe that the amount of caustic spilled would cause an off-site impact because of the addition of the dilution water added at the Boiler House, the dilution water in the shallow receiving stream into which NPDES Outfall 005 flows (estimated flow for that day of approximately 0.5 million gallons per day) and the availability of background dilution water received from NPDES Outfall 001 which is approximately 1.4 million gallons per day. As previously documented all of this activity occurred prior to 12:00 Noon on May 5, 1997.

Throughout the afternoon of May 5, 1997, pH samples were taken at the bridge on Highway 7 Spur, where the spill commingled with the unnamed tributary of Haynes Creek. The pH was less than 9 throughout the afternoon. At this point, those pH readings indicated that EDCC's response measures had proven to be effective. An environmental technician was dispatched to Ruston, LA, the nearest location Citric Acid could be located, as a precautionary measure. The Environmental Manager arrived at the scene from out of town, at the scene around 5 p.m. At this time the spill had been diluted and the pH readings (less than 9.0) indicated that the spill was under control. No effort had been made to contain the spill due to the remote location of the spill discharge, and the additional dilution. To be certain that there would be no off-site impact, the Environmental Manager ordered that samples be taken on one hour intervals at the Highway 7 Spur bridge. At 6:50 p.m.a pH of 10 was observed at Highway 7 Spur. Four bags, all the inventory available, of Citric Acid were added at the Highway 7 Spur. The pH continued to rise to the 11 and 12 range, and more notifications were made to the proper authorities. At 8:40 p.m. when it became apparent that the pH was not immediately descending, Haztech, a spill contractor, was commissioned to come to the scene. •

At 11:15 p.m., when the Haztech team leader arrived, the pH had dropped to 9.5 at the Highway Spur. More Citric Acid was immediately ordered. Both EDCC and the spill contractor agreed that neutralizing with HCl or some other mineral acid would be too harsh and had a potential for causing environmental harm. For the following two days the spill was neutralized with citric acid in the stream and at access points downstream of the facility, which has been previously documented.

In conclusion, the following facts should be re-emphasized and considered.

- Upon discovery of the NaOH spill, EDCC believed that the spill had entered into Lake Lee, and would be manageable within the NPDES wastewater system which discharges to NPDES outfall 001.
- When the spill was discovered flowing out Stormwater Outfall 005, no attempt was made to contain the spill because of the large volume of dilution water available (estimated at two million gallons per day) and the poor access trees and swamp-like conditions.
- EDCC made all the proper notifications, as has been documented.
- After the spill, EDCC continued to monitor throughout May 5, 1997 for potential off-site impacts and found no pH's greater than 9 prior to 6:50 p.m.
- No Citric Acid was available in El Dorado as has been previously referenced, yet EDCC unertook locating Citric Acid at Ruston, LA roughly 60 miles away as a precautionary measure. HCl and other mineral acids were not considered because of concern of losing the pH to the lower end of the pH range (which was also the advice of the spill contractor).
- A spill contractor was contacted within two hours of discovery of the high pH at the Highway 7 Spur. The contractor cost to neutralize the spill was approximately \$50,000.
- EDCC's concern and rapid response was successful in avoiding a large fish kill downstream, where fish populations increase.
- At no time was the pH measured at 12.5 or above in the receiving stream.

I hope this summary provides the information you need. It clearly shows that EDCC made every logical effort based upon the information available at the time to effectively mitigate the spill.

Sinderely,

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Environmental & Safety Manager

cc: Chuck Nestrud, Esquire John Carver

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