

ILLINOIS POLLUTION CONTROL BOARD  
February 14, 1973

ENVIRONMENTAL PROTECTION AGENCY )  
 )  
 v. ) PCB 71-326  
 )  
 ALLIED CHEMICAL CORPORATION )

OPINION AND ORDER OF THE BOARD (by Mr. Dumelle):

This is an enforcement action alleging violations of Sections 12(a) and (b) of the Environmental Protection Act and Rules 1.03 (a), (b), (c) and (d); Rule 1.05 (d); Rule 1.07(1), (2), (3) and (4); and Rule 1.08 (10)(b)(2), (3) and (4) and 10(c) of the Rules and Regulations of the Illinois Sanitary Water Board as set forth in SWB-14. The violations are alleged to have occurred on May 6, May 26, June 17 and June 25, 1971. Hearing was held on October 9, 1972 at which time a Stipulation of Facts was admitted into the record.

Allied's plant is located in the City of Danville. Their two principal products are fluorinated hydrocarbons and muriatic acid. The production of these products results in a waste reject material containing essentially hydrochloric acid and aluminum chloride-fluoride complex which are neutralized and disposed of via the plant effluent sewer to the Danville Sanitary District. In order to neutralize this waste reject it is pumped into a holding lagoon on the plant property.

The unnamed tributary to Lick Creek which is referred to in the complaint is a natural drainage ditch which flows east and west and is located ten feet north of Allied's property line. This drainage, after passing Allied, flows under Route 136 in a northerly direction. On the north side of Route 136 it is joined by drainage from another ditch and then eventually proceeds westerly again until it empties into Lick Creek.

On May 6, May 26, June 17 and June 25, 1971, the State took various samples at points as indicated on Respondent's Exhibit 1, Overlay 1C. The results of the tests are shown in State's Exhibits 1, 2, 3 and 4. Points 1, 2 and 3 referred to in those Exhibits were points from which samples were taken on Allied's property. Point 4 is located on the north side of Route 136 at the point where the drainage ditch goes under Route 136. Point 5 is located midway between Allied's property and Lick Creek. Point 6 is located 50

feet from where the natural drainage ditch enters Lick Creek. Point 7 is located at a point on Lick Creek above where the natural drainage ditch enters it and Point 8 is located at a point on Lick Creek below where the natural drainage ditch enters it.

On May 6, 1971 (State Ex. 1) samples were taken at Point 1 only. The results show fluoride at 140 mg/l, chloride at 3400 mg/l, total dissolved solids (TDS) at 3600 mg/l, and pH of 2.2. The flow is not given and we have no knowledge of whether this is a torrent or a puddle.

On May 26, 1971 (State Ex. 2) samples were taken at all 8 points. The results show fluoride up to 316 mg/l, chloride up to 5200 mg/l, TDS up to 9830 mg/l and suspended solids up to 510 mg/l. The fluoride water quality in Lick Creek deteriorated from 0.34 mg/l to 13 mg/l after mixing with the natural drainage ditch contents of 18 mg/l. It was admitted by Allied that they had a chemical spill on May 25, 1971 (R. 14-15).

On June 17, 1971 (State Ex. 3) the fluorides from the drainage ditch were at 8.0 mg/l (Point No. 6) while Lick Creek's fluorides were 0.73 mg/l. After mixing Lick Creek became 1.8 mg/l.

The June 25, 1971 data seems anomalous. The drainage ditch at Point No. 6 has 2.0 mg/l fluoride, Lick Creek has zero, yet downstream has 7.4 mg/l.

Rules 1.03 (d) and 1.07 (4) of SWB-14 are identical and require freedom from substances attributable to industrial discharges in concentrations which are toxic or harmful to animal life. The fluoride levels in Lick Creek on May 26 and June 17 exceed the level given in EPA Exhibit 1 (p. 191) as the threshold for effects on animals. The area adjacent to the tributaries is pasture land with stock present (R. 5-6).

Since 1970 Allied has taken numerous steps to eliminate potential sources of pollution such as repairing sewer lines, building a dam surrounding one of its lagoons, anchoring an outlet pipe to prevent wastes from reaching the storm drainage system, installing a plug in a tile from an oil sand filter, installing a pH meter in the storm sewer, diverting floor drains and water softener brine and boiler blowdown from the storm sewers to the sanitary sewers and installing certain pumps to prevent certain discharges from entering the storm drainage sewers.

The Stipulation of Facts on pp. 7-8 recounts the extensive testing that Allied engaged in on December 6-7, 1971 and from October 15, 1971 to October 4, 1972. The December 6-7, 1971 data, using Agency test results show no deleterious effect on Lick Creek's fluoride water quality. The sampling points are incorrectly given in the Stipulation as being on Overlay C. They are on Overlay D. The mass of data in Ex. 34 for October 15, 1971 - October 4, 1972 shows anomalies where downstream levels of fluorides in Lick Creek are higher than the levels in the upstream flows. Either the analytical technique is at fault or some other source is present. We feel that Allied should be commended for its sampling program.

On June 22, 1972, Allied began drilling a 6,000 foot deep waste disposal well under a construction permit from the Agency at a cost of \$500,000. Upon receipt of a permit from the Agency to operate the well Allied will install a 2,000 ton storage tank for waste reject material from its processes for holding prior to injecting it into the deep well. At that time the present lagoon will be retained for an emergency in the event of a breakdown in the deep well system. Since January 1, 1972, Allied has spent on pollution equipment, controls and maintenance \$171,378.

We find that on May 26, 1971 and June 17, 1971 Allied did cause, threaten and allow the discharge of contaminants so as to cause or tend to cause water pollution, in violation of Section 12(a) of the Act and Rules 1.03(d) and 1.07(4) of SWB-14. We also find, however, that Allied has made significant efforts to improve the situation and therefore a penalty of \$1,000 would be appropriate.

ORDER

1. Allied shall cease and desist from all violations found in this opinion.

2. Allied shall continue and adhere to its remedial program as set forth in this opinion and the Stipulation of Facts.

3. Allied shall pay to the State of Illinois by March 15, 1973 the sum of \$1,000. Penalty payment by certified check or money order payable to the State of Illinois shall be made to: Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted on the 14<sup>th</sup> day of February, 1973, by a vote of 3 to 0.

Christan L. Moffett

