ILLINOIS POLLUTION CONTROL BOARD April 19, 1984

| CITY OF OREGON, |) | |
|---|-------------|-----------|
| Petition | er,) | |
| v. | { | PCB 84-48 |
| ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, |))) | |
| Responde | ent.) | |

OPINION AND ORDER OF THE BOARD (by W. J. Nega):

This provisional variance request comes before the Board upon an April 19, 1984 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 3-day provisional variance be granted to the City of Oregon (Oregon) from 35 Ill. Adm. Code 304.120(a), 35 Ill. Adm. Code 304.141(a) and 35 Ill. Adm. Code 309.208 to allow a variance from its NDPES Permit requirements during the time that the Petitioner replaces a wall between the contact and reaeration tanks of its activated sludge process and to allow Oregon to apply liquid sludge from the aerobic digester and partially dried sludge from the sludge drying beds on nearby farmland. (Rec. 1).

The Petitioner owns and operates a wastewater treatment plant (WWTP) which has a design average flow of 0.626 million gallons per day (MGD). Oregon's WWTP provides: (1) primary settling; (2) secondary treatment (utilizing the contact stabilization modification of the activated sludge process); (3) aerobic sludge disgestion; (4) sludge drying, and (5) disinfection. (Rec. 1).

oregon is asking for a provisional variance to allow the dewatering of the contact and reaeration tanks of its activated sludge process so that a new wall can be installed between the tanks. (Rec. 1). The Petitioner is proposing to allow the contents of these tanks to settle and then to pump the resultant clear liquid through the chlorination process. After chlorination occurs, the liquid will be discharged. The accumulated sludge will be pumped to a waste hauler and then applied to farmland by injection and plowing. (Rec. 2).

During the short time period that the contact and reaeration tanks are out of service, Oregon intends to treat the incoming raw sewage by: (1) providing primary treatment in the primary clarifier; (2) increasing settling in the primary clarifier by

adding chemicals to aid settling; (3) providing chlorination before discharge; and (4) providing solids retention capacity by land application of the contents of the sludge drying beds and part of the aerobic digester contents. (Rec. 2).

Oregon believes that it will take about two days to install the new wall provided that no unforeseen difficulties are encountered. As part of the Petitioner's proposed plan, the dewatering of the tanks and installation of the wall will occur on a weekend. (Rec. 2). During the weekend, incoming flows are expected to be reduced because there will be no flow from the Carnation Company's plant which is the primary industrial contributor to Oregon's WWTP flows. (Rec. 2). The Petitioner has stated that, before the dewatering of the tanks commences, all equipment, necessary parts, and sufficient personnel will be on the site to appropriately handle any contingencies that may arise. (Rec. 2).

Since January, 1983, the Petitioner has reported the following levels for biochemical oxygen demand (BOD) and suspended solids (SS) on its discharge monitoring reports to the Agency:

| Month | Flow (MGD) | BOD (mg/1) | SS (mg/1) |
|-----------------|--------------|--------------|--------------|
| January, 1983 | 0.237 | 14 | 10 |
| February, 1983 | 0.260 | 10 | 12 |
| March, 1983 | 0.243 | 8 | 10 |
| April, 1983 | 0.248 | data missing | data missing |
| May, 1983 | 0.246 | 5 | 5 |
| June, 1983 | 0.261 | 6 | 8 |
| July, 1983 | 0.274 | 4 | 5 |
| August, 1983 | 0.273 | 10 | 10 |
| September, 1983 | 0.238 | 6 | 7 |
| October, 1983 | 0.156 | 8 | 9 |
| November, 1983 | data missing | data missing | data missing |
| December, 1983 | data missing | data missing | data missing |
| January, 1984 | data missing | data missing | data missing |
| February, 1984 | 0.257 | data missing | 7 |
| Average | 0.249 | 7.9 | 8.3 |

The Board notes that the requisite discharge monitoring data is missing for the months of April, 1983; November, 1983; December, 1983; January, 1984, and February, 1984. It is assumed that the Petitioner will expeditiously submit the necessary data to the Agency for the aforementioned months.

Oregon plans to apply about 150,000 gallons of sludge from the aerobic digester and about 3,000 cubic feet of partially dried sludge from the sludge drying beds to the land. The sludge in question has a pH of approximately 7.8 and contains about 5%

organic matter. (Rec. 3). The Agency believes that the Petitioner's plan is practical and workable. Oregon's sludge disposal plan is designed to dispose of the sludge while providing solids retention capacity during the time that the aeration tanks are out of service. (Rec. 3).

The Petitioner has asserted that, because of the high water conditions in the receiving stream during this season of the year, the environmental impact during the time period that the replacement work is done will be a minimal. The Agency agrees with the Petitioner and also indicates that there will be a minimal adverse impact on the environment. (Rec. 3).

The Agency believes that the provisional variance is appropriate because it sees no alternative to bypassing and dewatering of the tanks since the wall must be installed in order for the treatment process to operate as designed. (Rec. 3). Accordingly, the Agency believes that the denial of the provisional variance would impose an arbitrary or unreasonable hardship on the City of Oregon.

Thus, the Agency recommends that the Board grant the City of Oregon a 3-day provisional variance from Sections 304.120(a), 304.141(a), and 309.208, subject to certain conditions. Pursuant to Section 35(b) of the Illinois Environmental Protection Act, the Board hereby grants the provisional variance as recommended.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter

ORDER

The City of Oregon is hereby granted a provisional variance from 35 Ill. Adm. Code 304.120(a), 35 Ill. Adm. Code 304.141(a) and 35 Ill. Adm. Code 309.208 to allow it to replace a wall between the contact and reaeration tanks of its activated sludge process and to allow the application of liquid sludge from the aerobic digester and partially dried sludge from the sludge drying beds on nearby farmland, subject to the following conditions:

- 1. The provisional variance shall be for a period of three (3) days.
- 2. The Petitioner must begin work prior to May 26, 1984.
- 3. The Petitioner shall notify James Frost of the Agency's Compliance Assurance Section via telephone (Telephone #217/782-9720) the day before Petitioner intends to begin dewatering the tanks to allow installation of the new wall.

- 4. The Petitioner shall pump the clear liquid from the tanks being dewatered to the chlorination process for disinfection prior to discharge.
- 5. During the time period that the aeration tanks are out of service, the Petitioner shall provide primary settling and disinfection to the incoming raw sewage, and retention of captured solids from the raw sewage. The Petitioner shall operate and maintain the associated treatment units so as to provide the best treatment possible during this period.
- 6. Each day that the aeration tanks are out of service, the Petitioner shall sample the treatment plant effluent and the receiving stream both upstream and downstream of the discharge at 10:00 A.M. and 6:00 P.M. These samples shall be analyzed for BOD, suspended solids, and dissolved oxygen; and the results recorded.
- 7. The Petitioner shall apply the liquid sludge from the aerobic digester and the partially dried sludge from the sludge beds uniformly to the 14.67 acre site indicated on the map submitted with the variance petition, maintaining necessary buffers around any swale areas located on the site and along the boundaries of the site.
- 8. The Petitioner shall retain a minimum of 5,000 gallons of sludge, from either the aeration tanks or the aerobic digester, to be used as seed sludge to reestablish the secondary treatment process when the aeration tanks are put back into service.
- 9. The Petitioner shall submit in writing the results of the tests performed on the samples collected as part of this variance to James Frost, and the dates and times that the work was begun and completed. This information shall be submitted within 15 days after the work is completed to the address below.
- 10. Within 10 days of the date of the Board's Order, the City of Oregon shall execute a Certificate of Acceptance and Agreement which shall be sent to: Illinois Environmental Protection Agency, Division of Water Pollution Control, Compliance Assurance Section, 2200 Churchill Road, Springfield, Illinois 62706. This certification shall have the following form:

CERTIFICATION

I, (We), _______, having read the Order of the Illinois Pollution Control Board in PCB 84-48 dated April 19, 1984, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

| Peti | tioner | • |
|------|-----------------------|---|
| By: | Authorized Agent | |
| Titl | .e | |
| Date | | • |
| | IT IS SO ORDERED. | |
| | rol Board, hereby cer | tt, Clerk of the Illinois Pollution tify that the above Opinion and Order ay of, 1984 by a vote Christan L. Moffett, Clerk |
| | | Illinois Pollution Control Board |