

ILLINOIS POLLUTION CONTROL BOARD
August 23, 1973

CITY OF HIGHLAND)
)
)
 v.) PCB 73-221
)
 ENVIRONMENTAL PROTECTION AGENCY)
)

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

Petition for variance was filed on May 25, 1973 to relax an existing sewer connection ban to permit hooking up a projected rest area to be built along Interstate Route 70 in Highland, Madison County, by the Illinois Department of Transportation.

The Agency filed its recommendation on June 29, 1973 and recommended denial. Public hearing was held on July 16, 1973 in Highland.

The site for the rest area was selected in 1963 for maximum scenic value and adequate spacing (about one hour travel) from other rest areas. It overlooks Silver Lake which is the water supply for Highland.

The City's interest in the variance is obvious. Since the State would construct 14,000 lineal feet of 12" diameter sewer to the rest area and through an area presently containing overloaded septic tanks, the City would be spared this expense, said to be about \$130,000 (R.42), and when its sewage plant is again at proper capacity, could connect on those homes.

The State Transportation Department's interest in the variance (though not a party) is that the alternative to a sewer is much more costly and has other disadvantages. A lagoon for sewage treatment would require 6.7 acres at a cost of \$16,000 to \$20,000 for the land plus \$160,000 for outfall lines and pumping stations plus \$54,000 for maintenance for a total of \$234,000 (R.36). Later on the figure of \$280,000 is given without a detailed breakdown (R.49).

We do not agree with either the \$234,000 or \$280,000 figures. The latter is unsubstantiated and the former incorrectly lumps in annual maintenance. Later testimony revealed that the incremental cost attached to lagooning treatment alone was not known (R. 55). Thus the correct figure is more nearly the land cost (\$20,000) plus the outfall lines (\$160,000) plus some capitalized equivalent of the

unknown maintenance costs.

The other disadvantages to lagooning are (1) placement of a sewage lagoon within 1,000 feet of the City's water supply which we feel is not desirable (2) aesthetic impairment of what apparently is a beautiful site (3) some organic loading to a stream which flows through a dairy farm.

The rest area, to be completed in late summer of 1975 (two years from now) would add to the plant about 47.1 lbs. of BOD per day or a population equivalent of 282. The flow would be 20,732 gpd for a P.E. of 207 (R.46). The sewage plant has a 7,000 P.E. design but is limited to 5,000 P.E. by the final clarifier (R.83, 87).

The City's consulting engineer testified that the new sewage plant might be on line about the summer of 1975 (R.90) but admitted that he was perhaps "optimistic" (R.91).

Agency witnesses told of the degradation of the branch of Sugar Creek which flows to the Kaskaskia River and noted sludge deposits and undiversified stream fauna (R.103). Low dissolved oxygen (0.2 mg/l) was reported which was far below the State 5.0 mg/l standard for a 16 hour period (State Ex. 1). About five miles below the sewage plant, the stream began to recover (R.104).

Other testimony told of nozzles missing or clogged and the wrong size aggregate in the fixed trickling filter (R.135). Also ponding was noted as well as "black, anaerobic growth" at the filter (R.134, 140).

On balance, we grant the variance. While the sewage plant may be expanded just in time we know full well there is many a slip 'twixt the plan and the Federal grant. And the Illinois Department of Transportation should know now that it will have a sewer connection for its rest area so that it can proceed with orderly planning and construction contracts.

But there are many things Highland can and must do to improve its sewage treatment and its resulting effects upon the stream. It should remove the many "drifts" (blockages) along the stream (eight major and 12 partial were noted) (R. 167). The trickling filter's missing nozzles should be replaced and others made to function and the correct size aggregate should be installed. The use of chemicals to decrease overloading should be explored. Chlorination, due by July 31, 1972 (Rule 405), shall be installed with a temporary facility within 120 days. And the June 26, 1972 sewer control ordinance shall be enforced to protect the biological sewage treatment process from deleterious industrial wastes.

This opinion constitutes the Board's findings of fact and conclusions of law.

ORDER

1. Variance is granted from the Sanitary Water Board ban of February 20, 1969 to connect the rest area on Interstate Route 70 to the Highland Sewage Treatment Plant.
2. The City shall remove, within 60 days, and keep free the receiving stream from drifts (blockages) in order to promote maximum reaeration.
3. The feasibility of using chemicals to improve sewage treatment shall be studied and reported to the Agency within 90 days. If feasible, the Agency may ask the Board to issue an additional order in this proceeding to require their use.
4. A temporary chlorination facility sufficient to meet the standard shall be installed and operated within 120 days from this date.
5. The trickling filter shall be made completely operable within 60 days including nozzles and correct size aggregate.
6. Studies of industrial wastes and pretreatment programs shall be pursued to completion by June 30, 1974. If not satisfactory to the Agency, request may be made to the Board to enter further orders as are appropriate.
7. This proceeding shall remain open for further orders of the Board as listed in No. 3 and No. 6 above.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 23rd day of August, 1973 by a vote of 3-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board

