

ILLINOIS POLLUTION CONTROL BOARD
October 26, 1971

MARS DEVELOPMENT CO.)
)
 v.) # 71-218
)
 ENVIRONMENTAL PROTECTION AGENCY)

MARVIN WASSERMAN et al.)
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Opinion and Order of the Board (by Mr. Currie):

These consolidated petitions seek variances to allow the connection of thirty-three new homes and a department store to sewers tributary to the Waukegan sewage treatment plant of the North Shore Sanitary District, a plant which, because of its overloaded condition, is subject to the prohibition of new sewer connections imposed in # 70-7, League of Women Voters v. North Shore Sanitary District (March 31, 1971).

Because construction had not begun at the time the ban was imposed, the connections here sought do not come within the precedent of such cases as Wachta v. EPA # 71-77 (July 12, 1971); we are not faced with the prospect of finished or half-completed buildings standing vacant prey to vandals and vermin. Wachta and other cases, e.g., Wagnon v. EPA, # 71-83 (July 19, 1971), have made clear that in the absence of other compelling circumstances it is insufficient that such improvements as sewer and water lines and streets have been constructed, as they have in this case, since the improvements will still be there when the treatment plant is upgraded and the ban lifted. The impact of expenditures for such improvements in the present cases, moreover, is lessened further by the fact that the improvements are presently servicing fifty-three existing homes in the same subdivision as well as a National Tea store (R. 129). Nor have we in the present cases the special hardship involved in interdicting a project that would provide housing for those of inadequate means those present living conditions are intolerable as in McAdams v. EPA, # 71-113 (August 5, 1971), or Patricia Development Co. v. EPA, # 71-161 (September 16, 1971).

The present cases, however, present an ingenious new twist that prompted us to hold a hearing in the hopes that it could be demonstrated that the connection would not have an adverse effect upon the environment. The petitioners propose to construct four 10,000-gallon holding tanks, which assertedly will suffice to collect and hold two days' accumulation of wastes not only from their own

proposed new buildings but from the existing homes and store in the subdivision as well. This waste would then be discharged at night, when present flows to the treatment plant are at their lowest (R. 206-07, 219-21, 253, 255). The intention is to take advantage of the fact that, although the plant is badly overloaded in the daytime, it is in much better condition at night.

Flow records from the North Shore Sanitary District corroborated this important fact insofar as dry weather flow is concerned. Raymond Anderson, General Manager of the District, testified that additional flows up to the rate of one quarter to one half million gallons per day could be given secondary treatment and chlorination, within the design capacity of the plant, on dry nights (R. 172-73, 177, 184-85). If this were the whole of the matter, we should happily grant the variance.

Unfortunately, however, the proposed program does not provide adequately for avoiding an adverse impact during wet weather, which is when the plant is most drastically overloaded already. Mr. Anderson testified that, in order to avoid an additional overload in wet weather that could not be adequately treated, a five-day holding capacity should be provided (R. 174). According to the petitioners' own computations¹ the most that will be provided is two days, at the end of which sewage must be and is to be discharged without regard to the condition of the treatment plant, in order to avoid the backup of sewage into the buildings (R. 231, 239-41).

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1. A question was raised as to the adequacy of the tanks to hold even two days' sewage, since the design figure used, taken from secondary studies, was 51 gallons per capita per day, while the customary figure, as testified to by Mr. Anderson, is 100 to 125 (R. 178). The petitioners' witness testified that the higher figure was based upon the assumption that domestic discharges will be augmented by industrial discharges and that it represented not a house discharge but the input to a treatment plant (R. 244-25). This position is largely confirmed by a leading text in the field, of which we take official notice. Fair, Geyer, & Okun, *Water Supply and Wastewater Removal*, vol. I, pp. 2-2, 3-9 (1966), indicating that 150 gpcd is a "useful guide to normal requirements" for community needs in designing water-supply systems; that about 70% of the water supplied becomes wastewater; and that therefore "the average flow in sanitary sewers is about 100 gpcd." This estimate seems to include not only the discharge from individual homes but the entire dry-weather flow of the sewers. We are of course open to more specific proof in future cases.

Moreover, the petitioners' testimony suggests that during wet weather there may be discharges even before the two days are up because of infiltration:

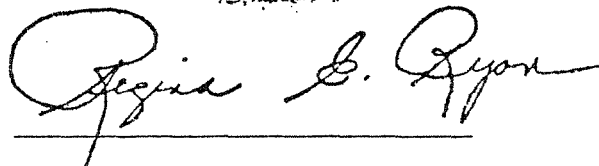
- A. (Mr. Villa) A storm occurring in the area at the time this constant sewage generation is occurring, we would pick up infiltration here. . . .
- Q. Under such circumstances, I take it it would be necessary then to operate the bypasses or weirs, as you have called them, continuously?
- A. Yes, so that it operates essentially as the system operates right now. (R. 255).

In short, while the idea of the holding tank to equalize flows and take advantage of excess night treatment capacity is excellent, we find the holding tanks proposed are insufficient to protect against increased loads to the Waukegan plant at the time it is least able to handle them, namely, during wet weather. We must therefore deny the variance on this record, leaving the door open to a further petition that will give assurance of adequate capacity to do the intended job.

We call attention to one further difficulty that should be addressed if an amended petition is filed. There was no evidence to show that the holding tanks themselves would be adequately protected against dangers of corrosion, explosion, or odor nuisance. We raise these issues not idly but in response to testimony presented by the Agency and by others in regard to a holding tank proposal in the recently decided case of School Building Commission v. EPA, # 71-247 (October 18, 1971). The burden will be on the petitioners to establish this point.

For the reasons given the variances are denied without prejudice to the filing of an amended petition satisfying the questions raised in this opinion.

I, Regina E. Ryan, Clerk of the Pollution Control Board, certify that the Board adopted the above Opinion and Order this 26 day of October, 1971.



Regina E. Ryan