

system owned by the Commonfields of Cahokia and the Village of Cahokia which is tributary to the MESD WWTP. However, the MESD WWTP and the sewer collection system are currently on Restricted Status and, absent the granting of the requested variance, connection cannot be allowed.

On February 7, 1983 the Agency conducted an inspection of the Shrine's WWTP and determined that the WWTP consisted of a septic tank and a distribution system that was either an open sand filter or a seepage field that had never been buried. This "sand filter" was located near the edge of a bluff and its boundaries were indistinguishable due to vegetative growth and frozen water on the surface. According to Shrine's representatives present during the inspection, when wastewater from the septic tank is distributed on the "sand filter" it runs off and flows down the bluff. This situation is more likely to occur during the warmer months when more guests are staying in the motel and wastewater flows are greater. On February 7, 1983, evidence of overflows from the sand filter was present but no actual flows going down the bluff were observed.

There have been complaints regarding the discharge of improperly treated sewage from the Shrine. During the Agency's inspection five or six homes were observed which could be affected by the discharge. Donald Radentz, Manager of the Land Development Department of the County of St. Clair, has indicated to the Shrine that a public health hazard exists and that immediate steps must be taken to rectify it.

According to the variance petition, the Shrine has three options: 1) maintain the present WWTP and wait until the sewer rehabilitation work is complete; 2) construct an on-site WWTP; 3) immediately connect to the sewer system. Option (1) would probably result in an intermittent health hazard for at least one year. Option (2) would probably result in an intermittent health hazard for approximately ten months while the WWTP is being constructed. Option (3) would result in the wastewater from the motel being discharged to a sewer collection system which has a history of bypasses and thus could be contributing to a health hazard in the Village of Cahokia or in the Commonfields of Cahokia.

The Shrine alleges that if it were to construct a new on-site WWTP it would have to construct a three cell lagoon with a capital cost of \$58,000 and an annual operation/maintenance cost of \$5,000 to \$6,000 or a recirculating sand filter with a capital cost of \$65,000 and an annual operation/maintenance cost of \$4,000 to \$5,000. Although these capital cost estimates may be somewhat high, any such expenditure could be unnecessary in a relatively short time if the sewer system rehabilitation goes according to schedule. In its petition the Shrine alleges that the Cahokia treatment facility has adequate capacity for the new sewer extension and that the rehabilitation program currently being conducted on the Commonfields of Cahokia sewerage collection

system will be completed before the end of January, 1984. The Agency has not rebutted these allegations.

The Shrine also claims that the present system cannot be modified or upgraded to meet State design or effluent standards. The Agency agrees that any such work would have questionable benefits.

The existing WWTP in Cahokia is owned and operated by MESD and provides primary treatment of wastewater from a tributary area which serves much of Centreville Township. The WWTP has a design capacity of 4.5 MGD and treats predominantly domestic wastewater conveyed to the plant by a separate sanitary sewer system. Treatment consists of raw wastewater pumping, screening, aerated grit removal, and primary sedimentation. Effluent is discharged to Cahokia Chute, a tributary to the Mississippi River.

The MESD Cahokia WWTP has had a history of breakdowns that have resulted in raw sewage being bypassed. In part these bypasses were the subject of an enforcement case (PCB 81-135) that resulted in an October 5, 1982 Board Order to cease and desist from such violations. The occurrence of these bypasses has decreased in the last year. However, the latest bypass incident occurred on January 3-4, 1983.

Daily Monitoring Reports for 1982 indicate that the MESD has been in general compliance with its permit limitations of 130 mg/l five-day biochemical oxygen demand and 110 mg/l suspended solids.

According to the Facilities Plan approved by the Agency, the MESD Cahokia WWTP is to be phased out with flows diverted to the American Bottoms Regional WWTP which is to be located in Sauget. Presently, Step 3 construction has begun on the American Bottoms Plant with completion anticipated to be in four years.

Tributary to the MESD Cahokia WWTP is a trunk sewer which presently has two overflow points: one just upstream from the WWTP, the other approximately 3.5 miles upstream. In the summer of 1981 the Village of Cahokia took over control and operations of that portion of the trunk line within the boundaries of the Village of Cahokia. In addition, the Commfields of Cahokia assumed control and operation of the remainder of the trunk line outside. The Shrine's proposed sewer extension is approximately 7.0 miles upstream from the WWTP and is under the control and operation of the Commonfields of Cahokia. On September 2, 1977 the Agency placed the MESD Cahokia WWTP and collection system on Restricted Status since

"the collection system tributary to the Cahokia Treatment Plant is severely distressed. In many areas subsidence has occurred, causing settlement of the sewers and in some instances, complete collapse has occurred,

allowing excessive infiltration and inflow into the system. Excessive amounts of sand and silt have entered the sewers and lift stations, causing physical damage as well as reducing the normal capacity of the lines."

These problems make the alternative of connecting to the sanitary sewer extension less than desirable. Indeed, that is the purpose of Restricted Status. However, after evaluating the three options, the Board finds that immediate connection to the sewer system would have the least adverse impact when considering the well being of those who may be exposed to present and future health hazards resulting from the Shrine's operation. Thus, the Board concludes that denial of the variance for the existing facility would cause an arbitrary and unreasonable hardship.

The Board will impose the conditions recommended by the Agency. Of note is the fact that the variance is limited to the existing facilities. There is no indication in the record that any money has been spent, or commitments made, either before or after the imposition of restricted status, to pursue the expansion of Pilgrim Inn. Therefore, the Board cannot find that denial of that portion of the variance would constitute an arbitrary or unreasonable hardship. Further, limiting the variance to the existing facilities will abate the public health risk caused by the Shrine's present WWTP while minimizing the additional load on the already overloaded sewer system.

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

ORDER

Petitioners are hereby granted variance from 35 Ill. Adm. Code 309.241(a) so as to allow the Agency to issue a construct and operating permit for a sewer extension subject to the following conditions:

1. The variance shall apply only to the existing motel, business office, and radio station that are presently connected to Shrine of Our Lady of the Snows' WWTP;

2. Within forty-five days of the date of this Order, Petitioners shall execute and forward to the Illinois Environmental Protection Agency, Variance Section, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows:

CERTIFICATE

I, (We), _____,
having read the Order of the Illinois Pollution Control Board in
PCB 83-15, dated _____, understand
and accept the said Order, realizing that such acceptance renders
all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agency

Title

Date

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution
Control Board, hereby certify that the above Opinion and Order
was adopted on the 24th day of March, 1983
by a vote of 5-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board