

ILLINOIS POLLUTION CONTROL BOARD
February 16, 1995

VILLAGE OF CREVE COEUR,)
)
 Petitioner,)
)
 v.) PCB 94-229
) (Water-Well Setback Exception)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

JULIAN CANNELL APPEARED ON BEHALF OF PETITIONER;

CONNIE L. TONSOR APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by R.C. Flemal):

This matter comes before the Board upon a petition filed by the Village of Creve Coeur (Creve Coeur). Creve Coeur requests that it be granted an exception from the water-well setback requirements found at Section 14.2 of the Environmental Protection Act (Act) (415 ILCS 5/1 et seq. (1992)). Creve Coeur desires to construct a new sludge storage unit within the setback zones of three existing community water supply wells. Construction of this type is prohibited unless an exception has been granted by this Board.

The Board's authority in this matter arises from the Act. The Board is charged there with granting exception from the setback requirements where the Board finds that the petitioner has made several necessary showings. (415 ILCS 5/14.2(c).) The Illinois Environmental Protection Agency (Agency) is required to appear in hearings on petitions for exception. The Agency is also charged, among other matters, with the responsibility of investigating each petition for exception and making a recommendation to the Board as to the disposition of the petition. (35 Ill. Adm. Code 106.603.) The Agency filed its recommendation on November 14, 1994.

Hearing was held on January 16, 1995 in Creve Coeur before hearing officer Stephen H. Gunning. Prior to hearing both Creve Coeur and the Agency provided pre-filed testimony. Creve Coeur filed the testimony of Daniel R. Good, P.E., of Randolph and Associates, Inc., engineering consultants to Creve Coeur. The Agency filed the testimony of William D. McMillan and Ukanno Foxworth, Agency technical personnel who participated in the

investigation of Creve Coeur's petition. The three witnesses also appeared at hearing where they gave additional testimony¹.

Creve Coeur has requested expedited decision on this matter, which the Board grants by today's action.

As presented below, the Board finds that Creve Coeur has made the showings necessary for the grant of exception. Accordingly, the exception will be granted.

BACKGROUND

The Act at Section 14.2 sets out various provisions designed to protect groundwater from possible contamination. Among these provisions is the prescription of a setback zone around each existing community water supply well². Within the setback zone no new potential source nor new potential route of groundwater contamination may be sited, unless an exception has been granted by this Board. (415 ILCS 5/14.2(c).)

Creve Coeur owns and operates a public water supply plant. Located at the plant and at issue in this proceeding are three community water supply wells. The wells supply water from an unconfined aquifer, the Sankoty Sand. (McMillan at p. 4.) Pursuant to Section 14.2(d) of the Act, a community water supply well deriving water from an unconfined aquifer is provided with a 400-foot setback zone.

In addition to its public water supply, Creve Coeur also owns and operates a publicly owned wastewater treatment works (POTW). The POTW is located on land adjacent to the three community water supply wells.

Creve Coeur proposes to build a new sludge storage unit at the POTW. The sludge storage unit would be located in part at distances less than 400 feet from each of the three community water supply wells, and hence would be within the setback zones of the wells.

¹ For purposes of citation herein, the pre-filed testimony is identified by the name of the witness (e.g., "Good at p. __"). The transcript of the hearing is cited to in the form "Tr. at p. __-__". The Agency recommendation and Creve Coeur's petition are cited to in the forms "Rec. at p. __" and "Petition at ¶ __", respectively.

² It is uncontested that the wells at issue are community water supply wells as defined at Section 3.04 of the Act (415 ILCS 5/3.04).

It is uncontested that a sludge storage unit is a potential primary source of groundwater contamination, as that term is defined at Section 3.59 of the Act (415 ILCS 5/3.59). As such, a new sludge storage unit may not be sited in a setback zones absent an exception granted by this Board.

The Board must grant a requested exception when the Board finds that adequate proof has been presented "that compliance with the setback requirements . . . would pose an arbitrary and unreasonable hardship upon the petitioner, that the petitioner will utilize the best available technology controls economically achievable to minimize the likelihood of contamination of the potable water supply well, that the maximum feasible alternative setback will be utilized, and that the location of such potential source . . . will not constitute a significant hazard to the potable water supply well". (415 ILCS 5/14.2(c).)

ARGUMENT

Sludge is generated by Creve Coeur as part of the operations of its POTW. The sludge must be disposed. The possible methods of disposal are land application or landfilling. Creve Coeur desires to land apply the sludge to agricultural lands as the most economical and environmentally suitable method of disposal. (Petition at ¶5.2; Good at p. 1; Tr. at p. 7-8, 19.) Creve Coeur holds a permit that allows it to land apply sludge. (Foxworth at p. 3.)

Sludge may be applied to agricultural lands only before crops are planted in the spring or after crops are harvested in the fall. It is therefore necessary to provide for storage of the sludge during the intervening months. Creve Coeur estimates that capacity of 34,000 cubic feet is required to provide six-months storage of its sludge. (Petition at ¶3.1.)

Creve Coeur proposes a system where, during normal operations, dewatered sludge would be trucked to a storage unit and stored up to six months. During spring and fall, when the fields are available for sludge spreading, the sludge would be removed from the storage unit and trucked to the fields. (Petition at ¶3.2.)

The sludge storage unit that Creve Coeur proposes to construct is 60 feet wide and 80 feet long. It is proposed to have a one-foot thick concrete base slab with a one-foot thick and eight-foot high concrete wall that forms three sides and a center dividing wall. The fourth side would be open to allow truck and endloader access. The open end would have a full-length trench drain for collection of any water that drains from the sludge; any water collected would be conveyed to the influent stream at the head end of the treatment process. The entire unit

is proposed to be covered with a rain-tight roof. (Petition at ¶3.2.)

The Agency observes that the sludge unit as proposed by Creve Coeur constitutes the Best Available Technology (BAT) that is economically available. (Rec. at p. 5; Foxworth at p. 2-3; Tr. at p. 38, 41.) The Agency additionally notes that the unit as proposed is consistent with the requirements for new waste piles at 35 Ill. Adm. Code 616. (Rec. at p. 5; McMillan at p. 7; Tr. at p. 36.)

Based upon the submitted designs, the Agency has issued a permit to Creve Coeur for construction of the sludge storage unit. (Foxworth at p. 3.) However, construction is currently in abeyance pending disposition of the instant exception petition. (Tr. at p. 9.)

The POTW is located within an area confined by an interstate highway, a railroad, a steel storage yard, a steep bluff, and the water supply plant. Creve Coeur contends that for this reason there is only one available location for the new sludge storage; that location is within the 400-foot setbacks distances. (Good at p. 1.) The proposed location for the storage unit would be within 140, 190, and 200 feet of the three wells, respectively. (Rec. at p. 4.) The Agency believes that if the unit is so placed, it will be at the maximum feasible alternative distance, as prescribed at Section 14.2(c) of the Act. (Rec. at p. 7.)

Creve Coeur contends that the usage and design of the sludge storage unit will introduce little or no increased risk of groundwater contamination. (Good at p. 2.) Creve Coeur observes that the unit will be roofed so as to be sheltered from the wind and rain; that the thick concrete walls and floors will prohibit liquid migration out of the structure; that any leachate derived from the sludge will be collected and returned to the POTW for treatment; and that the unit will be sited above the 100-year floodplain. (Id) It is further observed that Creve Coeur has an emergency operations plan to be placed in effect should there be an emergency at either the POTW or water plant. (See attachment to Good testimony.)

Based on its analysis, the Agency concludes that the proposed sludge storage unit does not pose a significant increased risk to the groundwater of the Creve Coeur area. (Tr. at p. 25, 37, 42.)

Both the Agency and Creve Coeur contend that any arrangement of disposal options and storage sites other than that proposed would be more costly, and hence constitute an economic hardship. (Tr. at p. 18-20.) The Agency believes that the hardship rises to the level of an arbitrary and unreasonable hardship. (Tr. at p. 41.)

CONCLUSION

Creve Coeur and the Agency both present evidence and contend that the necessary conditions for the grant of a water-well setback exception have been met. The Board agrees and accordingly finds that exception must be granted.

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

ORDER

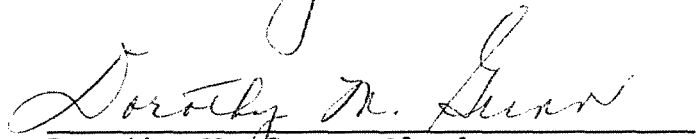
The Village of Creve Coeur is hereby granted, pursuant to Section 14.2(c) of the Environmental Protection Act (415 ILCS 5/14.2(c) (1992)), an exception against the prohibition of siting a new potential source within the setback zone of a community water supply well. The exception applies to the sludge storage unit and three community water supply wells described in the opinion that accompanies this order.

IT IS SO ORDERED.

Board Member J. Theodore Meyer dissented.

Section 41 of the Environmental Protection Act (415 ILCS 5/41 (1992)) provides for the appeal of final Board orders within 35 days of the date of service of this order. The Rules of the Supreme Court of Illinois establish filing requirements. (See also 35 Ill. Adm. Code 101.246 "Motions for Reconsideration".)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 16th day of February, 1995, by a vote of 6-1.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board