

ILLINOIS POLLUTION CONTROL BOARD  
March 21, 2002

CITY OF SALEM, )  
 )  
 Petitioner, )  
 )  
 v. )  
 ) PCB 02-87  
 ILLINOIS ENVIRONMENTAL ) (Variance – Public Water Supply)  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

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

This matter is before the Board pursuant to a petition for variance (petition) filed by the City of Salem (Salem), on December 28, 2001. Salem is seeking a variance for its water treatment plant located on Spillway Road in Salem, Marion County. The requested variance is from provisions of the Board's primary drinking water standards: 35 Ill. Adm. Code 611.743, 611.744, and 611.745.<sup>1</sup> These provisions relate to providing filtration and treatment, and installing and recording data from turbidity monitors on each filter in the plant. The variance is requested from January 1, 2002 until May 1, 2003, within which time Salem will complete plant upgrades and install the turbidity monitors and recording system.

Pursuant to Section 35(a) of the Environmental Protection Act (Act), the Board is charged with the responsibility of granting variances from Board regulations whenever immediate compliance with Board regulations would impose an arbitrary or unreasonable hardship on the petitioner. 415 ILCS 5/35(a) (2000). The Illinois Environmental Protection Agency (Agency) is required to appear in hearings on variance petitions. 415 ILCS 5/4(f) (2000). The Agency is also charged with the responsibility of investigating each variance petition and making a recommendation to the Board as to the disposition of the petition. 415 ILCS 5/37(a) (2000).

On February 11, 2002, the Agency filed its recommendation in response to the petition. The Agency recommends that the Board grant the petition subject to certain conditions. Rec. at

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<sup>1</sup> These standards were adopted by the Board in SDWA Update, USEPA Regulations (July 1, 1998 through December 31, 1998), R99-12 (July 22, 1999). They became effective on August 11, 1999, with a compliance date of December 31, 2001, for Section 611.743 and January 1, 2002 for Sections 611.744 and 611.745.

1.<sup>2</sup> Salem initially requested a hearing, but \_\_\_\_\_ filed a notice of withdrawal of the hearing request on February 27, 2002. On March 7, 2002, the Board granted the request.

In a variance proceeding, the burden is on the petitioner to present proof that immediate compliance with Board regulations would cause an arbitrary or unreasonable hardship, which outweighs public interest in compliance with the regulations. Willowbrook Motel v. IPCB, 135 Ill. App. 3d 343, 349, 350, 481 N.E.2d 1032, 1036, 1037 (1st Dist. 1977). Pursuant to Section 35(a) of the Act, the Board finds that Salem has presented adequate proof that immediate compliance with the Board regulations for which relief is being requested would impose such a hardship. For the reasons stated below, the Board grants the Salem's variance request, subject to certain conditions.

### **FACILITY DESCRIPTION**

Salem provides drinking water to over 10,000 people in Salem and surrounding communities. Pet. at 3. The plant has existed since 1914. Pet. at 4. The plant has six full-time employees.

The plant is a conventional surface water filtration plant. Pet. at 5. The plant includes a rapid mix, flocculation basin, settling basins with tube settlers, seven dual media gravity filters utilizing granular activated carbon over sand and support gravel, a clear well, and high service pumps. Pet. at 6.

### **APPLICABLE REGULATIONS AND REQUESTED RELIEF**

Three Board water quality regulations are at issue: 35 Ill. Adm. Code 611.743, which describes specific filtration requirements, 35 Ill. Adm. Code 611.744, which requires public water systems to install turbidity monitors on each filter in the system, and 35 Ill. Adm. Code 611.745, which imposes reporting and recordkeeping requirements from the turbidity monitors. The compliance date for Section 611.743 was December 31, 2001. The compliance date for Sections 611.744 and 611.745 was January 1, 2002. Salem requests that it be granted variance with respect to all three regulations.

The regulations state in pertinent part:

Section 611.743      Filtration

A PWS subject to the requirements of this Subpart that does not meet all of the standards in this Subpart and Subpart B of this Part for avoiding filtration shall provide treatment consisting of both disinfection, as specified in Section 611.242, and filtration treatment which complies with the requirements of subsection (a) or (b) of this Section or Section 611.250 (b) or (c) by December 31, 2001.

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<sup>2</sup> The Agency's recommendations will be cited as "Rec. at \_\_\_\_"; the petition will be cited as "Pet. at \_\_\_\_."

- a) Conventional filtration treatment or direct filtration.
  - 1) For systems using conventional filtration or direct filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 0.3 NTU in at least 95 percent of the measurements taken each month, measured as specified in Sections 611.531 and 611.533.

\* \* \*

#### Section 611.744 Filtration Sampling Requirements

- a) Monitoring requirements for systems using filtration treatment. In addition to monitoring required by Sections 611.531 and 611.533, a PWS subject to the requirements of this Subpart that provides conventional filtration treatment or direct filtration shall conduct continuous monitoring of turbidity for each individual filter using an approved method in Section 611.531(a) and shall calibrate turbidimeters using the procedure specified by the manufacturer. Systems shall record the results of individual filter monitoring every 15 minutes.
- b) If there is a failure in the continuous turbidity monitoring equipment, the system shall conduct grab sampling every four hours in lieu of continuous monitoring, until the turbidimeter is back online. A system shall repair the equipment within a maximum of five working days after failure.

#### Section 611.745 Reporting and Recordkeeping Requirements

In addition to the reporting and recordkeeping requirements in Sections 611.261 and 611.262, a public water system subject to the requirements of this Subpart that provides conventional filtration treatment or direct filtration must report monthly to the Agency the information [relating to turbidity measurements and individual filter monitoring specified in subsection (a), (b), and (c) of this section]

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### **COMPLIANCE PLAN**

Salem states that it will install individual continuous recording nephelometers on each filter effluent to continuously measure and record filtered water turbidity. Pet. at 11. Salem will also install a Supervisory Control and Data Acquisition (SCADA) system to continuously monitor and record various process and system functions, including turbidity from each individual filter. Pet. at 11. Salem will modify the filter re-wash piping so individual and combined filter turbidity is not adversely impacted following backwash of the filters. Pet. at 11.

Salem plant to install a “filter aid” chemical feed system for each of the filter banks. Pet. at 12. Salem will also modify the filter influent piping to increase capacity to meet future needs. Pet. at 12.

Salem prepared a schedule for implementing the phases of the control program. Pet. at 12. Beginning on February 15, 2002, Salem was scheduled to submit plans and specifications to the Agency for a construction permit. Pet. at 13. Salem plans to begin construction on September 3, 2002. Pet. at 13. Salem anticipates full compliance with the regulations by May 1, 2003. Pet. at 13. By September 1, 2003, Salem plans to complete remaining improvements and start full operations. Pet. at 13. Salem estimates it will cost \$1,201,600 to complete the project. Pet. at 15.

### **HARDSHIP**

Section 35(a) of the Act requires the Board to determine whether the petitioner has presented adequate proof that it would suffer an arbitrary or unreasonable hardship if required to comply with the Board's regulation at issue. 415 ILCS 5/35(a) (2000). Salem contends the Agency first notified Salem of the new rule on April 12, 2001. Pet. at 10. Salem argues this late notification put them in the “awkward position” of having less than nine months to make the required modifications. Pet. at 10.

Salem further argues that on May 14, 2001, Salem’s engineering consultant, Curry & Associates, sent a response to the Agency’s April 12, 2001 letter, indicating that Salem could not comply with the new rule by January 1, 2002, and described items required for compliance and a proposed timetable. Pet. at 9-10. On October 12, 2001, an Agency representative telephoned Curry & Associates, regarding Salem’s proposed plan and compliance schedule, and told Curry & Associates that compliance must occur by January 1, 2002. Pet. at 10. Salem argues that five months after Salem responded to the Agency’s letter, the Agency responded by merely restating the compliance date. Pet. at 10.

Salem contends that it only had eight months to prepare the required documents and get funding for the project. Pet. at 10. Salem argues that the circumstance would impose an arbitrary or unreasonable hardship to comply by January 1, 2002. Pet. at 10.

The Agency believes that denying the variance would result in an arbitrary or unreasonable hardship because the hardship resulting from denial would outweigh any injury to the public or the environment from a grant of a variance. Rec. at 10.

The Agency states that Salem wants to complete all the improvements as a single project to avoid financing complications. Rec. at 11. The Agency argues that requiring Salem to complete the improvements necessary for compliance with the monitoring and recordkeeping requirements as a separate project will cause financing complications because Salem will have to budget and expend general funds on the improvements, rather than using loan funding to cover all the improvements as a single project. Rec. at 11. The Agency concludes that the hardship associated with requiring compliance is real and unavoidable, while health or environmental

impact would be negligible. Rec. at 11. The hardship, therefore, is arbitrary or unreasonable. Rec. at 11.

### **ENVIRONMENTAL CONSIDERATIONS**

Salem argues that the overall risk to the health of the consumers supplied by Salem's plant, should the variance be granted, seems "tolerable and consistent" with the rule's intent. Pet. at 16. Salem claims that the plant's filters currently can meet the new 0.3 nephelometric turbidity unit (NTU) requirement 95% of the time on the average, using the current turbidity monitoring protocol. Pet. at 15. Additionally, Salem claims that the plant can continue to produce finished water with a turbidity level of 0.5 NTU or less 95% of the time, which 35 Ill. Adm. Code 611.250(a)(1) currently requires. Pet. at 15.

Salem contends that with a few exceptions, during the term of the variance, Salem will comply with the Primary Drinking Water Standards and the Safe Drinking Water Act, and the turbidity requirements contained in the new rules. Pet. at 17. The exceptions include 0.3 NTU/95th percentile combined filter water turbidity requirement, the continuous filter turbidity monitoring, and the recordkeeping and reporting requirements. Pet. at 17.

The Agency responds that granting a variance from Section 611.744 and 611.745 should impose no significant injury to the public or the environment. Rec. at 9, 10. The Agency contends, however, that Salem's plant currently distributes finished water that meets the standard in Section 611.743(a)(1). Rec. at 4. The Agency argues that Section 611.743 has a turbidity standard for no more than 0.3 NTUs in at least 95% of the measurement taken each month, with no measurement exceeding 1 NTU. Rec. at 10. Because the Agency believes Salem will continue to meet the more stringent turbidity standard in Section 611.743(a)(1) throughout the variance, the Agency does not believe a variance from this standard is necessary. Rec. at 2, 10. In its notice of withdrawal of hearing request, filed February 27, 2002, Salem recognized the Agency's observation and stated Salem is willing to accept the terms of the Agency's recommendation. Notice at 2.

### **CONSISTENCY WITH FEDERAL LAWS**

Salem and the Agency agree that the variance may be granted consistent with Section 1412(b)(10) of the Safe Drinking Water Act (42 U.S.C. Sec. 300g-1(b)(10)). Pet. at 20. Rec. at 12. That section provides, in pertinent part:

A State . . . may allow up to 2 additional years [beyond the effective date of the regulation] to comply with a . . . treatment technique if the . . . State . . . determines that additional time is necessary for capital improvements. 42 U.S.C. Sec. 300g-1(b)(10).

### **RETROACTIVE VARIANCES**

Salem requests a variance beginning January 1, 2002, which would be a retroactive variance. The Board has previously considered requests for retroactive variances. The Board

will not apply retroactive starting dates for variances where the petitioner has filed late and the delay was the petitioner's fault. Marathon Oil Co. v. IEPA, PCB 95-150 (May 16, 1996). Another reason for not applying a retroactive starting date is if the petitioner's hardship is self-imposed as a result of the petitioner's inactivity or faulty decision-making. Marathon Oil Co. v. IEPA, PCB 95-150 (May 16, 1996). The Board may grant a retroactive variance if the petitioner has diligently sought relief and has made a good faith effort toward achieving compliance with Board regulations. Marathon Oil Co. v. IEPA, PCB 95-150 (May 16, 1996); Deere & Co. v. IEPA, PCB 88-22 (Sept. 8, 1988). The Board has also provided retroactive variances where there was a procedural delay that was not the petitioner's fault or was the result of confusion over federal regulations. Marathon Oil Co. v. IEPA, PCB 95-150 (May 16, 1996); Allied Signal v. IEPA, PCB 88-172 (Nov. 2, 1989).

Salem did not file the instant petition until December 28, 2001. Salem does not provide any reason for filing the petition so close to the compliance dates of December 31, 2001, and January 1, 2002. The Board will not grant a retroactive variance, but will instead grant the variance effective as of the date of this order.

### **CONCLUSION**

The Board finds that, if the instant variance petition is not granted, the City of Salem will incur an arbitrary or unreasonable hardship. For this reason, the Board will grant a variance from 35 Ill. Adm. Code 611.744 and 611.745, subject to the conditions recommended by the Agency.

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

### **ORDER**

The Board hereby grants petitioner, City of Salem, variance from 35 Ill. Adm. Code 611.744 and 611.745 for its water treatment plant in Salem, Marion County from March 21, 2002, to May 1, 2003, subject to the following conditions:

1. City of Salem will take all reasonable measures with existing equipment to minimize the level of turbidity in its finished drinking water, until full compliance is reached.
2. City of Salem will comply with the requirements of 35 Ill. Adm. Code 611.745(a) and 611.745(c), which do not apply to individual filter monitoring.
3. City of Salem shall provide written progress reports to the Agency's Division of Public Water Supplies, Field Operations Section every three months concerning steps taken to modify the filter rewash (filter-to-waste) piping and valves; and to complete the installation of the turbidity monitors and a new SCADA system to collect and record the turbidity readings, as required for compliance with 35 Ill. Adm. Code 611.744 and 611.745. The first of these reports is due June 19, 2002.

IT IS SO ORDERED.

If petitioner chooses to accept this variance, within 45 days after the date of this opinion and order, petitioner shall execute and forward to:

Vera Herst  
Division of Legal Counsel  
Illinois Environmental Protection Agency  
1021 North Grand Avenue  
P.O. Box 19276  
Mail Code #21  
Springfield, Illinois 62794-9276

a certificate of acceptance and agreement to be bound by all the terms and conditions of the granted variance. The 45-day period shall be held in abeyance during any period that this matter is appealed. Failure to execute and forward the certificate within 45 days renders this variance void. The form of the certificate is as follows:

**CERTIFICATE OF ACCEPTANCE**

The City of Salem accepts and agrees to be bound by all terms and conditions of the Pollution Control Board’s March 21, 2002 order in PCB 02-87.

\_\_\_\_\_  
Petitioner

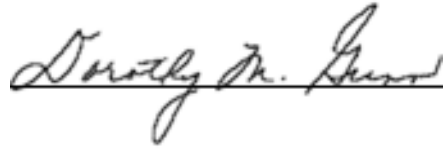
\_\_\_\_\_  
Authorized Agent

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2000); *see also* 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board’s procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; *see also* 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on March 21, 2002, by a vote of 7-0.

A handwritten signature in cursive script, reading "Dorothy M. Gunn", written over a horizontal line.

Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board