ILLINOIS POLLUTION CONTROL BOARD May 5, 2011

IN THE MATTER OF:)	
SETBACK ZONE FOR FAYETTE WATER)	R11-25
COMPANY COMMUNITY WATER)	(Rulemaking - Public Water Supply)
SUPPLY: AMENDMENTS TO 35 ILL.)	
ADM. CODE 618)	
ORDER OF THE BOARD (by A.S. Moore):		

On April 21, 2011, the Board received from the Illinois Environmental Protection Agency (Agency or Illinois EPA) a rulemaking proposal to establish a maximum setback zone for six community water supply (CWS) wells owned by Fayette Water Company (FWC) in Fayette County. Accompanying the proposal was the Agency's Statement of Reasons (SR).

For the reasons below, the Board today accepts the Agency's proposal and directs the hearing officer to proceed to hearing.

STATUTORY AND REGULATORY BACKGROUND

The Agency states that the General Assembly enacted the Illinois Groundwater Protection Act on September 24, 1987. SR at 1, citing 1987 Ill. Laws 3624 (Public Act 85-863). The Agency further states that, although the General Assembly codified various elements of Public Act 85-863 as the Illinois Groundwater Protection Act (415 ILCS 55/1 et seq. (2008)), it codified others as new Sections 14.1-14.5 and 17.1-17.4 of the Environmental Protection Act (Act) (415 ILCS 5/14.1-14.5, 17.1-17.4) (2008)). SR at 2, citing 1987 Ill. Laws 3636.

Section 14.1 of the Act establishes a minimum setback zone by providing that "no new CWS well may be located within 200 feet or 400 feet of any potential primary sources, potential routes, or potential secondary sources," as those three terms are defined by the Act. SR at 2, citing 415 ILCS 5/3.345, 3.350, 3.355, 14.1 (2008) (definitions). Section 14.2 of the Act also establishes a minimum setback zone by providing that "no new potential primary sources, new potential routes or new potential secondary sources may be placed, without a waiver or exception, within 200 feet to 400 feet of an existing CWS or other potable water supply well." SR at 2, citing 415 ILCS 5/14.2 (2008).

Section 14.3 of the Act "allows a county or a municipality served by a CWS to adopt an ordinance establishing a maximum setback zone for CWS wells." SR at 2, citing 415 ILCS 5/14.3 (2008). The Agency states that the Act allows maximum setback zones "when the lateral area of influence (LAI) of the well under normal operating conditions exceeds the radius of the minimum setback zone established pursuant to Section 14.2" SR at 2, citing 415 ILCS 5/14.3(b, c); 35 Ill. Adm. Code 671 (Maximum Setback Zone for Community Water Supply Wells). The Agency further states that a maximum setback zone may have irregular boundaries but no portion of a boundary "in excess of 1,000 feet from the wellhead." SR at 2-3, citing 415 ILCS

5/14.3(c) (2008). The Agency states that the Act prohibits placement of new potential primary sources within the maximum setback zone. SR at 3, citing 415 ILCS 5/14.3(e) (2008).

Section 14.3(d) of the Act provides that, "upon written notice to the county or municipality, the Agency may propose to the Board a regulation establishing a maximum setback zone for any well subject to this Section." 415 ILCS 5/14.3(d) (2008); see SR at 3. The Agency states that any proposal of this kind must "be based upon all reasonably available hydrogeologic information, include the justification for expanding the zone of wellhead protection, and specify the boundaries of such zone." 415 ILCS 5/14.3(d) (2008); see SR at 3. The Agency's "justification may include the need to protect a sole source of public water supply or a highly vulnerable source of groundwater, or an Agency finding that the presence of potential primary or potential secondary sources or potential routes represents a significant hazard to the public health or the environment." 415 ILCS 5/14.3(d) (2008); see SR at 3.

Unless a county or municipality files a written request for a conference with the Agency within 30 days of receiving written notice of a maximum setback proposal, the Agency may proceed to file the proposal. 415 ILCS 5/14.3(d) (2008). If it receives such a request, the Agency must schedule a conference to be held within 90 days. *Id.* The conference "shall inform the county or municipality regarding the proposal." *Id.* Within 30 days after the conference, the county or municipality "may provide written notice to the Agency of its intent to establish a maximum setback zone in lieu of the Agency acting on a proposal." *Id.* If it receives such a notice of intent, "the Agency may not file a proposal with the Board for a period of 6 months." *Id.*

Section 14.4 of the Act requires the Agency to propose to the Board "regulations prescribing standards and requirements for certain activities within a setback zone." SR at 3; *see* 415 ILCS 5/14.4(a) (2008). The Agency states that it has proposed and the Board has adopted such regulations. SR at 3, citing 35 Ill. Adm. Code 615 (Existing Activities in a Setback Zone or Regulated Recharge Area), 616 (New Activities in a Setback Zone or Regulated Recharge Area).

Section 17.1(a) of the Act provides that "[e]very county or municipality which is served by a community water supply well may prepare a groundwater protection needs assessment." 415 ILCS 5/17.1(a) (2008); see SR at 4. Assessments must at a minimum include six specified elements. 415 ILCS 5/17.1(a)(1-6) (2008). Section 17.1(d) of the Act provides that "[t]he Agency shall implement a survey program for community water supply well sites." 415 ILCS 5/17.1(d) (2008); see SR at 4. Surveys must at a minimum include four specified elements. 415 ILCS 5/17.1(d)(1-4) (2008). Section 17.1(h) of the Act provides that a county with a population of fewer than 25,000 persons and a municipality with a population fewer than 5,000 persons that is subject to subsection (a) "may request, upon receipt of a well site survey report, the Agency to identify those potential primary sources, potential secondary sources and potential routes which represent a hazard to the continued availability of groundwaters for public use, given the susceptibility of the groundwater recharge area to contamination." 415 ILCS 5/17.1(h) (2008); see SR at 4.

Section 17.2 of the Act requires the Agency to establish a regional groundwater protection planning program. 415 ILCS 5/17.2(a) (2008); see SR at 4. The Agency states that,

"[u]nder this program, the Illinois EPA, in cooperation with the Department of Natural Resources, has designated priority groundwater protection planning regions, each with a regional planning committee." SR at 4; see 415 ILCS 5/17.2(b) (2008). The Agency reports that it established these regions "based on mapping, the Potential for Aquifer Recharge in Illinois, conducted by the Department of Natural Resources that identified appropriate recharge areas." SR at 4-5, citing 415 ILCS 55/7 (2008).

In addition to addressing minimum and maximum setback zones, Public Act 85-863 also created the Interagency Coordinating Committee on Groundwater (ICCG), which is chaired by the Agency and is comprised of the Illinois Department of Public Health, the Department of Natural Resources, the Department of Agriculture, the Illinois State Fire Marshal, the Department of Commerce and Economic Opportunity, and the Illinois Emergency Management Agency. SR at 5 n.3, citing 415 ILCS 55/4, 1987 Ill. Laws 3625-26. Public Act 85-863 also created the Groundwater Advisory Council (GAC), which includes representatives of "environmental, business, public water supply, county and municipal government, regional planning, and water well driller" organizations. SR at 5 n.3, citing 415 ILCS 55/5 (2008), 1987 Ill. Laws 3625-26. The Agency states that "[t]he ICCG and GAC work jointly, and the Illinois EPA is the liaison between the ICCG and GAC." SR at 5 n.3.

BACKGROUND OF PROPOSAL

The Agency states that FWC's CWS wells are situated in the Kaskaskia River flood plain and "serve portions of Fayette, Shelby, and Kaskaskia Counties." SR at 5. Citing the most recent available data, the Agency reports that "the average daily pumpage from the groundwater source is 864,000 gallons per day (GPD) supplying about 6,510 persons directly." *Id.* The Agency indicates that the counties served by FWC are not located in a groundwater planning region "because these counties lack many areas with high potential for groundwater recharge." *Id.*; *see* 415 ILCS 5/17.2(a) (2008). The Agency argues, however, that FWC's CWS wells "are located in an area on the Potential for Aquifer Recharge Map as having very high potential for recharge." SR at 5.

The Agency cites well records confirming "the presence of permeable sediments at or near the surface." SR at 5. Beneath these sediments in the Kaskaskia River valley are deposits of Pennsylvanian age bedrock, which "tend to be poor aquifers with low rates of production" of highly mineralized groundwater. *Id.* The Agency argues that, in southern Illinois, productive sources of quality groundwater "tend to be limited to alluvial sediments along large streams." *Id.* at 6; *see id.* at 9. The Agency claims that, if the FWC CWS wells became contaminated, "sites for replacement wells would be difficult to find given the hydrogeology of Southern Illinois." *Id.* at 10.

The Agency reports that in 2002 it conducted a source water assessment of FWC's CWS wells pursuant to the Safe Drinking Water Act. SR at 6, citing 42 U.S.C. §300j-13. The assessment "evaluated the existing water quality, intrinsic geologic vulnerability, and existing potential sources of groundwater contamination, and determined the overall susceptibility for these wells based on the combination of these factors." SR at 6. The assessment also delineated

the recharge area of the wells. *Id.* At that time, FWC obtained water from wells designated #2, #3, and #4. *Id.*

The Agency states that it "considers these wells to be geologically sensitive and concluded that all of the water system's wells are highly vulnerable to contamination." SR at 6. The Agency further states that "[t]he wells are susceptible to inorganic chemicals (IOC), volatile organic compounds (VOC) and synthetic organic compounds (SOC)." *Id.* The Agency indicates that it reached these conclusions after examining "agricultural land use, data from monitoring conducted at the wells and the entry point to the distribution system, and hydrogeologic data for the wells." *Id.* Among the steps identified to protect FWC's water supply, the Agency recommended that Fayette County enact a maximum setback zone ordinance. *Id.*

The Agency notes that FWC in 2008 added three wells designated #5, #6, and #7. SR at 7. The Agency states that "[t]hese new wells are in the same field as wells #2, #3, and #4, and utilize the same unconfined sand and gravel aquifer; they are of similar construction, and are also vulnerable to contamination." *Id.* The Agency reports that "[t]he recharge area delineation was updated in 2008 to include the new wells." *Id.*

The Agency states that "[n]o potential primary sources, potential routes or potential secondary sources have been identified" near the wells. *Id.* "A petroleum pipeline, however, runs through the well field. A new pipeline has been proposed that would follow the same right-of-way." *Id.* The Agency acknowledges that, "[w]hile neither the minimum nor maximum setback zone prohibit or regulate pipelines, a maximum setback zone will afford the Fayette Water Company wells an additional measure of protection if a release occurs." *Id.* at 10, citing 35 Ill. Adm. Code 742.805 (remediation objectives).

FWC has determined that each of its CWS wells operating under normal conditions has a lateral area of influence (LAI) of approximately 972 feet. SR at 7. Pursuant to a request from FWC, the Agency on July 27, 2009, confirmed the technical adequacy of FWC's determination of the size of the LAI. *Id.* The Agency reports that, "[b]ecause the LAI of the wells under normal operating conditions exceeded the radius of the minimum setback zones established for each well pursuant to Section 14.2 of the Act, Fayette Water Company requested a circular 1,000 foot maximum setback zone." *Id.*

FWC and the Agency "met with the Fayette County Board Rules and Regulations Committee in September 2009 to discuss adoption of the maximum setback zone ordinance..." SR at 7. The Agency reports that "[t]he Fayette County Board did not take any action on the maximum setback zone ordinance during the following six months." *Id.* at 8. Although a March 2010 letter from FWC to the Fayette County Board requested a response to the maximum setback zone proposal and described the Board's authority to adopt maximum setback rules, the Fayette County Board did not respond. *Id.* On May 21, 2010, FWC requested that the Agency propose a maximum setback zone to the Board. *Id.* On July 12, 2010, the Agency notified the Chair of the Fayette County Board that it intended to propose a maximum setback zone for the FWC CWS wells. *Id.* The Agency reports that the Fayette County Board has not responded to this notification. *Id.* After 30 days had passed, the Agency proceeded to develop a maximum

setback zone proposal. *Id.*, citing 415 ILCS 5/14.3(d) (2008). The Agency indicates that it provided a summary of actions regarding a maximum setback zone for FWC to the ICCG on August 18, 2010. *Id.* The Agency states that "[t]he ICCG had no questions or comments. . . ." *Id.*

SUMMARY OF PROPOSED AMENDMENTS

Existing Part 618 of the Board's public water supplies regulations addresses maximum setback zones. 35 Ill. Adm. Code 618. The Agency proposes to amend the general provisions under Subpart A by adding a new Section 618.110 providing "that the groundwater rules of Section 14.4 of the Act and corresponding Board regulations will apply to any activities, facilities and uses within the maximum setback zones established by this Part or the Act." SR at 12. The Agency also proposes to add a new Section 618.115 prohibiting "the placement of any new potential primary source within a maximum setback zone." *Id.* Under Subpart B, the Agency proposes a new Section 618.210 establishing FWC's maximum setback zone. *Id.* at 13. A proposed new Appendix B is a map detailing features including the boundaries of the proposed maximum setback zone. *Id.* The Agency has proposed other amendments not summarized in this order.

BOARD DISCUSSION AND CONCLUSION

The Board finds that the Agency's rulemaking proposal satisfies the content requirements of 35 III. Adm. Code 102.202, and the Board accepts the proposal for hearing. Section 14.3(d) of the Act provides in pertinent part that "[r]ulemaking proceedings initiated by the Agency under this subsection shall be conducted by the Board pursuant to Title VII of this Act, except the subsection (b) of Section 27 shall not apply." 415 ILCS 5/14.3(d) (2008). Section 27(b) of the Act requires the Board to request that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study (EcIS) of proposed substantive rules and to make DCEO's response available at least 20 days before holding a hearing on the proposal's economic impact. 415 ILCS 5/27(b) (2008). Accordingly, the Board will not request that DCEO conduct an EcIS of the Agency's proposal. With that exception, the Board directs the hearing officer assigned to proceed to hearing under the rulemaking provisions of the Act and the Board's procedural rules. See 415 ILCS 5/27, 28 (2008); 35 III. Adm. Code 102.

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on May 5, 2011, by a vote of 5-0.

John T. Therriault, Assistant Clerk Illinois Pollution Control Board