# ILLINOIS POLLUTION CONTROL BOARD February 23, 1989

| VILLAGE OF SUGAR GROVE,                   | )            |
|---|--------------|
| Petitioner,                               | )            |
| v <b>.</b>                                | ) PCB 88-141 |
| ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, | )            |
| Respondent.                               | )            |

LEONARD E. STOECKER, II, ATTORNEY, APPEARED ON BEHALF OF THE PETITIONER; AND

BOBELLA GLATZ, ATTORNEY, APPEARED ON BEHALF OF THE RESPONDENT.

# OPINION AND ORDER OF THE BOARD (by J. Anderson):

This matter comes before the Board on the Third Amendment to Petition for Radium Variance filed by Petitioner, Village of Sugar Grove (Sugar Grove), on January 6, 1989. Sugar Grove requests variance, until January 1, 1992, from 35 Ill. Adm. Code 602.105(a), Standards for Issuance, and 35 Ill. Adm. Code 602.106(b), Restricted Status, but only as such standards relate to 35 Ill. Adm. Code 304.301(a), combined radium-226 and radium-228. On January 20, 1989, the Illinois Environmental Protection Agency filed its recommendation to grant the variance, subject to conditions.

The impetus for this variance request is the Agency's placing of Sugar Grove on the Restricted Status List. The Agency advised Sugar Grove on April 1, 1988 that it would be placed on the list because Sugar Grove's water supply exceeded the maximum allowable concentration for radium. This notice, in turn, was based upon an analysis reported to Sugar Grove on February 19, 1988, of an annual composite of four consecutive quarterly samples or the average of the analyses of four quarterly samples of Sugar Grove's water supply. That analysis showed a radium-226 content of 7.3 pCi/l and a radium-228 content of less than 2 pCi/l. Hence, the combined radium-226 and radium-228 content was 7.3 pCi/l, exceeding the 5 pCi/l standard.

# The Facility

Sugar Grove, which has a population of 1607 (1987 census) operates a water supply system that is presently served by two wells. This system is, in fact, comprised of two free standing water systems (i.e., they are not interconnected). According to Sugar Grove, the Agency's Restrictive Status action was taken with regards to only one of these wells, the "existing deep well"; this well serves only the 300 plus residents as well as eight to ten small businesses of "the affected area", also referred to as "Dugan Woods". It is producing 180 gallons per minute. The other well, which serves the main part of Sugar Grove, is a shallow well; it reportedly does not exceed the radium standard. The distance between the nearest points of existing water mains for the two systems is approximately 10,300 feet.

## Procedural Background

Sugar Grove filed its first petition for variance on September 12, 1988. That petition, inter alia, requested that the variance be granted for a period of five years, with blending of the two wells as the compliance plan. By Order dated September 22, 1988, the Board indicated that the petition was defective in that it failed to "explain why five years are necessary to implement the compliance option of blending"; the Order gave Sugar Grove 45 days to cure this defect. On October 31, 1988, Sugar Grove filed its first Amendment to Petition for Variance in response to the Board's Order. By way of explanation of the five-year request, Sugar Grove noted that the area to be served by the proposed extensions were the subject of negotiations by Sugar Grove with various developers; it was Sugar Grove's hope that the entire cost of extending water mains and installing necessary adjunct facilities (e.g., storage tank and booster pump) could be borne, over time, by the developers.

On November 7, 1988, the Agency filed a Motion to Dismiss the petition as amended, contending that it failed to meet the requirements of 35 Ill. Adm. Code 104.121. Sugar Grove filed its response to the Agency's motion to dismiss on November 15, 1988, together with a second amendment to the petition. By Order of November 17, 1988, the Board denied the Agency's motion to dismiss, citing the new facts adduced in the second amendment as mooting the Agency's motion.

In the second amendment to the petition, Sugar Grove explains the segments of projected development of the affected area and identifies a number of alternative sources of funds which are or may be available to Sugar Grove from developers, "Build Illinois" funds and other sources. Sugar Grove indicated, however, that if such sources are not available to Sugar Grove by July 1, 1990, Sugar Grove will undertake the remaining segments of the project to complete same by 1992, and will borrow money if necessary to fund completion of the project.

On December 19, 1988, the Agency filed a Motion for Extension of Time to file its recommendation, citing ongoing discussions with Sugar Grove and Sugar Grove"s representation that it would send to the Board a 45 day waiver of the Board's decision date to accommodate such discussions. On December 20, Sugar Grove did file a request for 45 day extension; by Order of January 5, 1989, the Board granted the Agency's Motion and construed Sugar Grove's request as a 45 day waiver of decision deadline, until April 29, 1989.

Sugar Grove, by a Motion to Expedite a Decision, filed with the Board on February 9, 1989, has advised the Board that the terms of the Agency's recommendation are acceptable to the Village of Sugar Grove and has requested expedited consideration. That motion is hereby granted.

### Compliance Plan

On January 6, 1989, Sugar Grove filed its third amendment to the petition. That amendment sets forth additional information as to the status of the several segments (Sections A through D) of the project. According to this filing, Section A water main extensions are being constructed by the Brewster Corporation. Sections B and C will be the subject of permit applications within 60 days of approval of this variance, with construction to commence as soon as possible. As to Section D, a chronological timetable has been developed pursuant to which compliance will be achieved by January 1, 1992. The Agency's recommendation addresses the petition as thus amended.

Grant of this variance will facilitate significant planned growth in the general area, including phase two of a plotted subdivision, Sugar Creek (Section A of this project); a 4200 foot extension of water main to serve, at least in part, the Aurora Airport under the aegis of a "Build Illinois" project (Section B); and a 3100 foot extension of water main to serve the Dugan Woods subdivision, (Section C). The compliance plan will also require installation of a storage/mixing tank and pump for blending (Section D). Sugar Grove estimates that the cost for constructing all the facilities would be \$2,350 per person (\$705,000 divided by 300 persons), excluding financing costs. this variance is granted, most if not all these costs are expected to be absorbed by developers, the "Build Illinois" funds (Section B) and infrastucture fees levied by Sugar Grove on new construction and paid as each lot is sold, expected to be completed by mid-1990.

Sugar Grove's compliance plan calls for blending of the water from its two wells to produce a single supply which will not exceed the radium standard. Other options have been considered by Sugar Grove but have been rejected as unfeasible. Neither of the alternatives considered (lime-soda softening and ion exchange) are viable, according to Sugar Grove, in light of

the absence of sanitary sewers in the affected area, as well as the lack of space for sludge holding ponds.

# Agency Comments

The Agency's recommendation states that it does not disagree with the facts as stated in the Petition. It notes that Sugar Grove is not on the Restricted Status List for any other It concurs with Sugar Grove's assertion that the contaminant. slightly increased radium levels should cause no significant health risk for the limited population served by new water main extensions for the time period of the recommended variance. The Agency noted "that this grant of variance from restricted status should affect only those users who consume water drawn from any newly extended water lines. This variance should not affect the status of the rest of Petitioner's population drawing water from existing water lines, except insofar as the variance by its conditions may hasten compliance. In so saying, the Agency emphasizes that it continues to place a high priority on compliance with the standards."

It agrees that denial of the variance would result in an arbitrary and unreasonable hardship and states its belief that this variance may be granted consistent with the Federal Safe Drinking Water Act and regulations thereunder, since variance is granted only from restricted status, which is a State, not a Federal, standard. It recommends that the variance be granted subject to conditions.

#### Board Determination

In consideration of the above circumstances, including the insignificant environmental impact during the term of this variance, the Board finds that Sugar Grove has presented adequate proof that compliance with the Board's regulations regarding restricted status as related to the combined radium standards would impose an arbitrary or unreasonable hardship. It also accepts the Agency conditions with certain timetable clarifications and one exception.

The exception is that the term of the variance will be extended for ten months beyond the completion of construction solely to secure the four quarterly samples necessary to demonstrate compliance; thus, since construction for blending must be completed by April 23, 1991, and allowing up to one month for taking the first blended sample, a compliance demonstration with four quarterly samples must be completed by January 23, 1992 (rather than January 1, 1992 as recommended).

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

#### ORDER

Variance from 35 Ill. Adm. Code 602.105(a), Standards for Issuance and 602.106(b), Restricted Status, as they relate to the combined radium standard of 35 Ill. Adm. 604.301(a), is granted to the Village of Sugar Grove, subject to the following conditions:

- A) This variance expires on January 23, 1992, or when analysis pursuant to 35 Ill. Adm. Code 605.104(a) shows compliance with the standard for combined radium-226 and radium-228, whichever occurs first.
- In consultation with the Agency, Petitioner shall B) continue its sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Until this variance expires, Petitioner shall collect quarterly samples of its water from its distribution system at locations approved by the The Petitioner shall composite the quarterly samples for each location separately and shall analyze them annually by a laboratory certified by the State of Illinois for radiological analysis so as to determine the concentration of the contaminant in question. results of the analyses shall be reported to the Compliance Assurance Section, Division of Public Water Supplies, 2200 Churchill Road, IEPA, Springfield, Illinois 62794-9276, within 30 days of receipt of each analysis. At the option of Petitioner, the quarterly samples may be analyzed when collected. The running average of the most recent four quarterly sample results shall be reported to the above address within 30 days of receipt of the most recent quarterly sample.
- C) No later than April 24, 1989, Petitioner shall have applied for all necessary permits for construction of Section B and C of Petitioner's Plan for compliance. Construction on Section B and C shall commence as soon thereafter as practicable. Petitioner's Plan (Ex h) is hereby incorporated as if fully set forth herein.
- D) No later than June 23, 1989, a final engineering report for Section D shall be completed. Said engineering report shall be submitted to the Illinois Environmental Protection Agency, Division of Public Water Supplies at 2200 Churchill Road, P. O. Box 19276, Springfield, Illinois 62794-9276.
- E) No later than December 23, 1989, Petitioner shall have completed all final engineering drawings and plans, and shall have made application for all necessary permits for Section D of Petitioner's plan.

- F) No later than March 23, 1990, Petitioner shall advertise for bids on construction for Section D.
- G) No later than April 23, 1990, Petitioner shall have completed financing for completion of the planned method of compliance.
- H) No later than June 23, 1990, Petitioner shall commence construction of Section D of Petitioner's Plan, and said construction shall be completed no later than April 23, 1991.
- I) Pursuant to 35 Ill. Adm. Code 606.201, in its first set of water bills or within three months after the date of this Variance Order, whichever occurs first, and every three months thereafter, Petitioner will send to each user of its public water supply a written notice to the effect that Petitioner has been granted by the Pollution Control Board a variance from 35 Ill. Adm. Code 602.105(a) Standards of Issuance and 35 Ill. Adm. Code 602.106(b) Restricted Status, as it relates to the combined radium standard.
- J) Pursuant to 35 Ill. Adm. Code 606.201, in its first set of water bills or within three months after the date of this Order, whichever occurs first, and every three months thereafter, Petitioner will send to each user of its public water supply a written notice to the effect that Petitioner is not in compliance with the standard in question. The notice shall state the average content of the contaminant in question in samples taken since the last notice period during which samples were taken.
- K) Until full compliance is reached, Petitioner shall take all reasonable measures with its existing equipment to minimize the level of the contaminant in question in its finished drinking water.
- L) Within 45 days of the date of this Order, Petitioner shall execute and forward to Bobella Glatz, Enforcement Programs, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62794-9276, a Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. The 45-day period shall be held in abeyance during any period that this matter is being appealed. The form of said Certification shall be as follows:

#### CERTIFICATION

| dated February 23, 1989, u | , having read the ution Control Board, in PCB 88-147, nderstand and accept the said Order, ance renders all terms and conditions eable. |
|----------------------------|---|
| Petitioner                 |   |
| By: Authorized Agent       |   |
| Title                      |   |
| Date                       |   |

IT IS SO ORDERED.

Board Members B. Forcade and J. Dumelle dissented.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1987 ch. 111 1/2 par. 1041, provides for appeal of Final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the  $23^{\circ}$  day of  $4^{\circ}$ , 1989, by a vote of  $5^{\circ}$ .

Dorothy M. Gunn, Clerk

Illinois Follution Control Board