## ILLINOIS POLLUTION CONTROL BOARD September 17, 1987

87-35

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

This matter comes before the Board on the petition for variance filed by the Village of Minooka (Village) on March 16, 1987 as amended May 27, 1987. The Village requests variance until March 20, 1990, from 35 Ill. Adm. Code 602.105(a) (Standards for Issuance) and 35 Ill. Adm. Code 602.106(b) (Restricted Status List) as they relate to violations of the 5 pCi/l combined radium-226 and radium-228 standard of 35 Ill. Adm. Code 604.301(a). The Village seeks extension of the variance previously granted in PCB 85-100 (September 20, 1985) which expired March 27, 1987, to allow the Agency to issue permits for water main extensions during the period of the Village's non-compliance with the radium standard.

On July 31, 1987, the Illinois Environmental Protection Agency (Agency) filed a Recommendation that variance be denied. Despite its conclusion that there are mitigating factors, the Agency has recommended denial of variance on the grounds that the Village failed to timely comply with conditions 1(b) and 1(c) of the PCB 85-100 variance, and that the Village failed to prove existence of an arbitrary or unreasonable hardship. The Village filed a response in opposition to the Recommendation on August 7, 1987. Hearing was waived and none has been held.

The Village of Minooka, which is located in Grundy County, Illinois, provides water to a population of approximately 2000 Persons via 646 residential user lines and 7 industrial/business user lines. Additionally, the Village's water distribution system serves two Illinois Department of Transportation rest areas along Interstate 80.

The Village owns and operates a distribution system which consists of two deep wells, various pumps, and concomitant distribution facilities. Well #3 was placed into operation in 1965 and is 1,508 feet deep, and Well #4 was placed into operation in 1973 and is 725 feet deep. (Pet. 5).

As noted by the Board in PCB 85-100, the Petitioner was first advised of the excessive combined radium content of its water by an Agency letter dated September 4, 1984, which reported a radium-226 content of 5.6 pico Curies per liter (pCi/l) and a radium-228 content of 2.8 pCi/l, for a combined total of 8.4 pCi/l. This total exceeds the 5 pCi/l combined radium standard by 3.4 pCi/l. The water sample analysis of an annual composite of four consecutive quarterly samples (or the average of the analyses of four samples obtained at quarterly intervals) was performed by the USEPA laboratory.

In response to the Board's March 19, 1987 query concerning existence of radium test results more recent than that referred to above, the Village stated that the only more recent sample result is one dated May 5, 1987 performed by Radiation Measurements, Inc. This analysis was not of a distribution system sample, but instead of a sample only from Well No. 3. The radium-226 content was reported as 4.75 pCi/l, and the radium-228 content was reported as 4.2 pCi/l, resulting in a combined radium content of 8.95 pCi/l. (The Agency additionally reports that a composite of four distribution system samples taken on June 18, 1984, September 11, 1984, May 14, 1986, and July 22, 1986, distribution system showed the concentration of gross alpha to be 10±4 pCi/l, and that the sample is being held for combined radium analysis. The Agency does not have any other analyses for radium other than the September 14, 1984, analysis.)

By letter dated October 4, 1984, the Agency notified the Village of Minooka that its public water supply was being placed on restricted status because the Petitioner's water supply exceeded the maximum allowable concentration for combined radium-226 and radium-228. The system will remain on restricted status absent grant of variance or achievement of compliance.

The purpose of the short-term variance granted in PCB 85-100 was to allow the Village time to continue investigation of the existence and feasibility of compliance options, and to develop a compliance plan and timetable "with increments of progress".

The Village reports that by January 1, 1986, it had secured the services of Engineering Enterprises, Inc., a consultant specializing in civil and sanitary engineering, to determine the best methods to bring the Village water system into compliance. With the aid of the consultant, the Village attempted to locate sites within the vicinity where water could be drawn from shallow aquifers which could be blended with the present water supply in order to reduce the radium levels in the public water system. The Village identified one site near the DuPage River. Results of two tests commissioned by the Village demonstrated that the water quality at this location was acceptable (Pet., Exh. 1-3). Engineering Enterprises provided Petitioner with an evaluation of its water works system on June 24, 1986, recommend-

ing the Village develop a shallow aquifer supply through two new wells at the test site location; a copy of this report was sent to the Agency on June 25, 1986 (Pet., Exh. 3A - 3A-9).

Based on the favorable test results and in order to secure the appropriate site, the Village purchased lot 173 in Bonita Vista Subdivision, Unit 11, on October 23, 1986, for \$15,000 (Pet., Exh. 4). Petitioner also retained the services of Engineering Enterprises, Inc. on September 22, 1986, to continue professional engineering services for the proposed water supply system improvements. These include the development of a completed water supply system, consisting of two wells to be known as Well No. 6 and Well No. 7, a pump house facility, an iron removal plant building, and the extension of necessary water mains and plumbings to connect the new proposed Well No. 6 and Well No. 7 with existing Well No. 3 and Well No. 4 (Pet., Exh. 6).

Engineering Enterprises, Inc. prepared specification for the water supply system improvements, and the Village of Minooka advertised for bids for construction of such improvements. (Pet., Exh. 7). Two contractors submitted bids which were received on October 24, 1986. The low bid resulted in a contract proposal dated November 10, 1986, by Wehling Well Works, Inc. for \$51,984 which would result in the drilling, completing, developing, testing, and installation of two 16-inch diameter water wells approximately 50 feet deep at the location purchased by the Village of Minooka (Pet., Exh. 8). On November 20, 1986, the Agency issued a permit for the drilling and developing and testing of Wells No. 6 and No. 7 to a depth of approximately 50 feet. The permit is restricted to the drilling only of the wells and it cannot proceed past the drilling until supplemental plans and specifications have been completed for the wells themselves (Pet., Exh. 9).

The Village has not, however, entered into contracts for completion of the well development project, although it intends to complete such work before March 30, 1990. The Village asserts that the primary obstacle to the construction is financing. Village had solicited grant funds under the Build Illinois program, which request was under consideration by the Illinois General Assembly at the time of the filing of the petition. Village further asserts that if, however, such funds are not readily available, the Village is prepared, if necessary, to sell general obligation bonds for the financing of the project. approximate cost of the project is \$325,000 as of this time pursuant to the information supplied from Engineering Enterprises, Inc. As of the close of April 30, 1986, Smith and Smith, certified public accountants for the Petitioner, presented a financial statement showing that the assessed valuation of all corporate property was \$12,420,426 which would provide the Village with a statutory debt limitation of \$1,071,262. As of

April 30, 1986, the only bonded indebtedness of the Village was \$180,000 leaving a legal debt margin available for the sale of bonded indebtedness of \$891,262 (Pet., Exh. 10). Since the April 30, 1986, financial statement from the certified public accountants, the Village has not sold or marketed any bonds for any corporate purposes and the Village believes that the assessed valuation has risen. The Village is current in all of its debt obligations. The Village believes it can, if necessary, sell municipal bonds for the construction of the water system in order that it can be completed before the date of the proposed extension of the variance.

As Petitioner currently has a population of approximately 2,000 persons, the cost of the estimated \$325,000 in system improvements is approximately \$160 per person without considering interest expense or related bond sales costs in the event such financing must be utilized by the Petitioner. The Village asserts that it has already expended approximately \$20,000 utilizing general revenue funds for the acquisition of a site, the retaining of professional consultants, the testing of water samples, and obtaining construction permits from the Agency. Under these circumstances, the Village believes that denial of variance to allow it additional time to obtain funding and complete necessary construction would impose an arbitrary or unreasonable hardship. In its March 16, 1987, petition, the Village stated:

If the extension of the variance is granted, the Petitioner foresees extending its water mains to serve new residential and manufacturing users. There [are] pending before the Plan Commission inquiries from four separate developers wanting to extend water mains for residential and manufacturing subdivisions. On or before April 1, 1987, there will be on file an application for 75 lots in a single family residential development, and we expect that there will be additional subdivision developments brought to the Plan Commission within the next two or three months, including annexation agreement for more than residential subdivision lots. Minooka situated immediately south of Interstate 80, west of Route 59, and east of Route 47. approximately 15 miles west of Joliet, Will County, Illinois, and there is strong interest by residential developers to plan subdivisions residential construction this Developers inform the community that financing has now become available for such construction and there is a strong demand for new housing

in the area which would be a boost to the local economy. (Pet., par. 13)

As to environmental effects of grant of variance, it is the opinion of Petitioner that granting the extension for the limited time period requested will not cause any significant harm to the environment or to the people served by the potential water main extensions. The Village asserts that, based on its knowledge of the persons who are purchasing residential lots in the subdivisions added to the Village since the initial variance was granted, the persons utilizing the water main extensions presently live in villages which are on the restricted list or suffer similar radium problems as Minooka experiences, and that Minooka is closer to allowable levels of radium-226 and radium-228 than many of the neighboring communities (Pet., par. 27).

As earlier mentioned, the Agency recommends that variance be denied on two grounds. The first is failure to comply with two conditions of the variance in PCB 85-100. Conditions l(b) and l(c) of that variance provided that:

- By January 1, 1986, the Petitioner shall (b) secure professional assistance (either from present staff or an outside consulin investigating tant) compliance options, including a review of the possibility and feasibility of achieving compliance by blending water from shallow wells with that of its deep wells. February 1, 1986, evidence that professional assistance has been secured shall be submitted to the Agency's Division of Public Water Supplies, FOS, 2200 Churchill Road, Springfield, Illinois 62706.
- As expeditiously after identification of feasible compliance method practicable, but no later than January 1, the Petitioner shall submit program (with increments of progress) for bringing its system into compliance with radiological quality standards to Division Agency's of Public Water Supplies, Permit Section, at Churchill Road, Post Office Box 19276, Springfield, Illinois 62794-9276. Village of Minooka shall adhere to all timetables contained in this compliance program.

The Agency does not contest the Village's assertions that it did indeed perform the compliance-related activities described earlier in this Opinion. However, the Agency notes that its records do not indicate that Petitioner explicitly complied with above condition 1(b) by providing evidence that Petitioner had secured professional assistance to investigate compliance methods, including blending, by February 1, 1986. Petitioner's engineering firm did write to the Agency September 27, 1985, that it was retained as the engineer for Petitioner's water works improvements, but did not say it was investigating compliance options.

The Agency further asserts that Petitioner has not complied with above condition 1(c), i.e., it did not submit a program (with increments of progress) for bringing its system into compliance to the Agency's Division of Public Water Supplies, Permit Section by January 1, 1987. That variance condition required adherence to all timetables contained in that compliance program, so that condition was obviously not complied with. Petitioner did submit with its Petition for Extension of Variance contract documents for the drilling and completion of two wells (Exh. 7), but nothing was submitted for work that is necessary after that work is completed.

In its August 7 response to the Agency's Recommendation, the Village states that "[w]hile Petitioner has not explicitly complied with all of the conditions of the prior variance, Petitioner has proceeded in good faith with all necessary steps to improve water quality standards for the community" (Response, p. 2).

The second basis for the Agency's negative Recommendation is asserted inadequacy in proof of current and future economic hardship. The Agency states that:

The petition does note there are "inquiries" from four separate developers wanting to extend water mains and an application for 75 lots was expected on or before April 1, 1987, with additional developments expected later. Hence, at this time the only known hardship would be a development consisting of 75 lots. No valuation was made for this development or for any other possible development. Petitioner did not allege failure to extend water mains to serve these real and hypothetical developers would impose an arbitrary or unreasonable hardship on Petitioner.

Petitioner is "waiting and seeing" if it can obtain grant funds under the Build Illinois project in the hopes that major expenses can

be avoided (Petition, page 9, paragraph 20). This attitude was criticized by the Board in City of Geneva v. IEPA, PCB 86-225, July 16, 1987, page 17. Minooka should have provided an update on the likelihood of obtaining Build Illinois funds (Rec., pars. 23 and 27).

In response to these assertions, the Village stated:

Petitioner objects to the conclusion made Agency that no arbitrary unreasonable hardship has been shown if the variance is not extended. Failure to grant extension would prohibit any further the development in the community for a period of possibly up to three years and there is only a limited supply of available buildable land in the Village for residential, commercial or industrial development and, in fact, many developers have contacted the Village about building plans which are now being put on the Such building plans have not stream (sic). been made concrete simply because the Village is unable at this time to consider actively such plans due to the prohibition against the extension of water mains. If the Village can not receive development for three or more years, the municipality faces the likelihood of stagnation (Response, p. 2)

Notwithstanding its belief that variance should be denied, the Agency suggested various conditions which should be included in any variance granted by the Board. The Agency itself stated that:

There are substantial mitigating factors here not found in the above [cited] Geneva proceed-For example, Minooka has apparently finalized its compliance plan, substantial steps toward compliance, and is apparently just waiting to find out if it will get Build Illinois funds. Even more important the fact that Petitioner has agreed to drill the wells and install the equipment it believes are necessary to achieve compliance by a date certain, i.e. March 30, 1990 (Petition, paragraphs 20, 26, pages 9, 26). The Agency also notes that this deadline would mean that Minooka would achieve compliance within four and a half years of grant of its first variance.

However, the Agency believes Petitioner should have complied with its prior variance and should not wait and see if it can obtain state funds when it has adequate local bonding authority (Rec., paragraphs 28-29).

While this case involves a close judgment call, based on its consideration of all of the facts and circumstances here presented, the Board finds that denial of variance would impose an arbitrary or unreasonable hardship. The Board finds, as it did in PCB 85-100 (pages 4-6), that the risk of adverse health effects to the limited population consuming water delivered by any new water mains will be insignificant. As to the existence of economic hardships flowing from denial of variance, the Board concludes that the Village's allegations concerning lost or deferred construction opportunities are sufficiently concrete to prove such hardship; as the Village notes, firm construction commitments are not, in the usual course, made absent reasonable certainty that services such as drinking water are available. The real issue here is whether the proven hardship here is selfimposed, that is, whether the Village's actions warrant continuation of the construction ban which the restricted status system was designed to impose. To the extent that the Village failed to comply with the strict terms of the paragraph 1(b) notification condition, such violation is de minimus, as the Village did secure professional assistance and timely -- if not completely -- notified the Agency of that fact. The Village is, however, culpable for its failure to let a construction contract and to provide a timetable complete with interim deadlines in violatin of condition l(c). However, given the "substantial mitigating factors" noted by the Agency, the Board will not find that the Village's decision to postpone construction pending determination of availability of Build Illinois fund was made in bad faith and solely for purposes of delay. The Village's commitment to achieve compliance by March 30, 1990, is a major factor in the Board's decision to give the Village the "benefit of the doubt"; failure to honor that commitment will not be taken lightly by this Board.

In summary, variance is granted until March 30, 1990, subject to the conditions outlined below. These conditions are similar to those suggested by the Agency. However, the Agency recommended that construction begin no later than two years from grant of variance September 17, 1988, while another condition would not require submittal of permit applications for the same work until the very day construction is to commence. The Board has resolved this internal inconsistency by moving forward the permit filing deadline and retaining the construction start-up date. If this resolution is unworkable, the parties may seek modification by way of a timely motion for reconsideration.

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

## ORDER

- 1. The Petitioner, the Village of Minooka, is hereby granted variance from 35 Ill. Adm. Code 602.105(a) and from 35 Ill. Adm. Code 602.106(b) but only as they relate to the 5 pCi/l combined radium-226 and radium-228 standard of 35 Ill. Adm. Code 604.301(a), subject to the following conditions.
  - (a) This variance terminates on March 30, 1990, or when analysis pursuant to 35 Ill. Adm. Code 605.105(a) shows compliance with the combined radium standard, whichever comes first;
  - In consultation with the Agency, Petitioner shall 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, shall composite 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) Compliance shall be achieved no later than March 30, 1990;
  - (d) By December 31, 1987, the Petitioner shall complete investigating compliance methods and submit to IEPA, DPWS, a detailed Compliance Report; i) including a plan detailing how compliance shall be achieved within the shortest practicable time, but no later than March 30, 1990 and ii) a report concerning how construction shall be finance;
  - (e) By February 1, 1988, Petitioner shall apply to IEPA, DPWS, Permit Section, for all permits necessary for construction of installations, changes or additions to the Petitioner's public water supply needed for achieving compliance;

- (f) Within three months after each construction permit is issued by IEPA, DPWS, the Petitioner shall advertise for bids, to be submitted within 60 days, from contractors to do the necessary work described in the construction permit. The Petitioner shall accept appropriate bids within a reasonable time. Petitioner shall notify IEPA, DPWS, within 30 days of each action, of: 1) advertisements for bids, 2) names of successful bidders, and 3) whether Petitioner accepted the bids;
- (g) Construction pursuant to said construction permits shall begin within a reasonable time of bids being accepted, but in any case, construction of all installations, changes or additions necessary to achieve compliance with the maximum allowable concentration in question shall begin no later than September 17, 1988, and shall be completed no later than March 30, 1990;
- (h) 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 they relate to the 5 pCi/l combined radium standard;
- (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 Order, whichever occurs first, and every three months thereafter, Petitioner will send to each user of its public water supply as written notice to the effect that Petitioner is not in compliance with the standard in question. The notice shall state the average combined radium content in samples taken since the last notice period during which samples were taken;
- (j) That Petitioner shall take all reasonable measures with its existing equipment to minimize the level of contaminant in question in its finished water; and
- (k) The Petitioner shall provide written progress reports to IEPA, DPWS, FOS every six months concerning steps taken to comply with paragraphs e, f, g and i. Progress reports shall quote each of said paragraphs and immediately below each paragraph state what steps have been taken to comply with each paragraph.
- 2. Within 45 days of the date of this Order, Petitioner shall execute and forward to Wayne L. Wiemerslage, 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

	 <del></del>			
I, (We)			,	hereby
accept and agree to be Order of the Pollution				
1987.				
Petitioner				
Authorized Agent				
Title				
Date				

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1985 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.

IT IS SO ORDERED.

- J. D. Dumelle and B. Forcade dissented.
- I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above/Opinion and Order was adopted on the / Iday of Lenter , 1987, by a vote of

Dorothy M. Gunn, Clerk

Illinois Pollution Control Board