

federal government housing units at the site. (Tr. at 15,20; Pet. at par.9.)¹

Army seeks the instant variance so that it can extend its water mains to serve the 4th U.S. Army Reserve Training Center located north of the plant. (Pet. at par. 12) This site is used by the U.S. Army to conduct weekend and occasional two-week training exercises. (Id.) The proposed extension would serve approximately 200 army personnel on weekends and an additional 200 personnel during several two-week training periods during summer reserve training sessions. (Pet. at pars. 9, 11.) The training site also includes wash houses and maintenance buildings for trucks, cars and tanks and a latrine and shower area. (Pet. at par 12.)

On February 19, 1986, the Agency notified Army of its intent to place the plant on restricted status for exceeding the maximum allowable concentration of combined radium. (Pet. at par. 16; Pet attachment 1.) Army's analysis verified non-compliance with the combined radium standard. (Pet. at par. 19.) In April of 1988, the Agency placed Army on restricted status for violating 35 Ill. Adm. Code 604.301(a).

RELIEF REQUESTED

Army seeks a variance from 35 Ill. Adm. Code 602.105(a) which provides that the Agency shall not grant an operating or a construction permit unless the applicant demonstrates that the public water supply will be constructed, modified or operated so as to not cause a violation of the Illinois Environmental Protection Act. Army seeks a variance from this regulation so that the Agency may legally not deny Army a permit for its proposed main extensions even though Army is in violation of the combined radium standard.

Army also seeks a variance from 35 Ill. Adm. Code 602.106(b) governing restricted status. If Army is granted a variance from the regulation governing issuance of permits, then it should also be removed from the Agency's restricted status list for violating the combined radium standard. Army is not seeking a variance from the combined radium standard itself.

COMPLIANCE PLAN

Army has received \$241,000 in funding for the installation of an ion exchange water softening system to reduce the level of

¹The United States Army owns the Joliet plant. Joliet has been placed on "semi-active status" indicating that private contractors rent the facility from the Army. (Tr. at 13-14.) Honeywell is such a private contractor. Uniroyal is the operating contractor responsible for maintenance and security.

combined radium. (Pet. at par. 22.) The Agency does not object to the use of such a system. (Agency Rec. at par. 18) The U.S. Army has awarded a contract for the design and development of this project (Pet. at par. 22.) The estimated completion date of this water softening system is October 31, 1990 (Pet at par. 1.) Army estimates that compliance can be demonstrated by laboratory analyses by February 28, 1992. (Id.)

Army considered and rejected various alternatives to reducing the level of combined radium. Use of Lake Michigan, the Kankakee River and the Des Plaines River were rejected because of distance. (Pet. at par. 21.) Blending from various wells was rejected because all the deep wells have similar high levels of combined radium. (Id.) Lime softening, which provides moderate radium reduction, was rejected because of sludge disposal problems. (Id.) Reverse osmosis and other lesser used techniques were rejected as being too costly and unproven. (Id.)

HARDSHIP AND ENVIRONMENTAL IMPACT

Army asserts that immediate compliance with the regulations governing issuance of permits and restricted status, insomuch as these regulations involve violations of the combined radium regulation, imposes an arbitrary or unreasonable hardship because Army is unable to proceed with the extension of service to the 4th Army Reserve Training Center. (Pet. at pars. 27-29.)

Concerns of hardship must be balanced against the environmental impact of granting the variance. Water samples show levels of combined radium of 11.8 pCi/l for well #7 and 6.41 pCi/l for the distribution system. (Pet. at par. 19.) The regulation provides that the maximum allowable concentration of combined radium in public water supplies is 5 pCi/l. (35 Ill. Adm. Code 604.301(a).) Army states that the current level of combined radium in its water supply does not pose a risk of significant injury to public health or the environment. (Pet. at par. 24.)

The Agency agrees that denial of the requested variance imposes an arbitrary or unreasonable hardship on Army because new water main extension permits could not be issued. (Agency Rec. at 20-21.) The Agency also agrees that granting the variance would not result in significant injury to the public or the environment. (Id.)

COMPLIANCE WITH FEDERAL LAW

The Agency believes that Army may be granted a variance from 35 Ill. Adm. Code 602.105(a) and 35 Ill. Adm. Code 602.106(b) consistent with the provisions of the Safer Drinking Water Act (42 U.S.C. § 300(f)) and corresponding regulations (40 CFR Part 141) because the requested relief is not a variance from a national primary drinking water regulation. (Agency Rec. at par. 23.) Both parties recognize that Army would still be subject to

a possible enforcement action for violating the combined radium regulation. The Agency notes, however, that if the variance contains a condition that compliance with the combined radium regulation be achieved at the expiration of the variance, it is likely that the USEPA would defer enforcement.

CONCLUSION

The Board finds that the Army has presented adequate proof that immediate compliance with 35 Ill. Adm. Code 602.105(a) and 35 Ill. Adm. Code 602.106(b) would impose an arbitrary or unreasonable hardship considering the minimal adverse environmental impact of granting the requested relief. Therefore, the variance is granted subject to the following conditions recommended by the Agency. The Board emphasizes that the variance grants relief only with regard to combined radium.

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

ORDER

Petitioner Joliet Army Ammunition Plant is granted a variance from 35 Ill. Adm. Code 602.105(a) and 35 Ill. Adm. Code 602.106(b), but only as these regulations relate to combined radium, subject to the following conditions.

1. The variance begins September 13, 1989 and expires February 29, 1992, or when analysis pursuant to 35 Ill. Adm. Code 605.104(a) shows compliance with the contaminant in question, whichever occurs first;
2. Compliance with the maximum allowable concentration of combined radium shall be achieved no later than February 28, 1992;
3. 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 at locations approved by the Agency. Petitioner shall composite the quarterly samples from 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. The results of the analysis shall be reported within 30 days of receipt of each analysis to:

Compliance Assurance Section
Division of Public Water Supplies
2200 Churchill Road
P.O. Box 19276, IEPA
Springfield, Illinois 62794-9276.

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;

4. No later than July 31, 1989, petitioner shall apply to IEPA, DPWS, Permit Section, for all permits necessary for construction of installations, changes or additions to petitioner's public water supply which are needed for achieving compliance with the maximum allowable concentrations for the standard in question;
5. Within three months after each construction permit is issued by IEPA, DPWS, petitioner shall have awarded contracts to all contractors to do the necessary work described in the construction permit. Petitioner shall notify IEPA, DPWS, within 30 days, of each of the names of the contractors selected;
6. Construction allowed on said construction permits shall begin within a reasonable time of bids being accepted, but in any case, construction of all installations, changes of additions necessary to achieve compliance with the maximum allowable concentration in question shall begin no later than March 1, 1990 and shall be completed no later than November 30, 1990;
7. Pursuant to 35 Ill. Adm. Code 606.201, within three months after the date of this Variance Order, and every three months thereafter, petitioner will send to each household on its public water supply site a written notice to the effect that petitioner has been granted by the Pollution Condition 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 MAC standard in question. Written notices shall also be posted in prominent places on site;
8. Pursuant to 35 Ill. Adm. Code 606.201, within three months after the date of this Order and every three months thereafter, petitioner will send written notices to the effect that it is not in compliance with the standard in questions. Written notices shall be sent to each household on the site. Written notices shall also be posted in prominent places on the site. Notices shall state the average content of the contaminant in

question in samples taken since the last notice period during which samples were taken;

9. Until full compliance is reached, petitioner shall take all reasonable measures with its existing equipment to minimize the level of contaminant in question in its finished drinking water;
10. Petitioner shall provide written progress reports to IEPA, DPWS, FOS every six months concerning steps taken to comply with paragraphs D, E, F, G, H, 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;
11. With in forty five days of the grant of the variance, petitioner shall execute and forward to:

Bobella Glatz
Enforcement Programs
Illinois Environment Protection Agency
2200 Churchill Road
Springfield, Illinois 62894-9276

a certificate of acceptance of this variance by which it agrees to be bound by the terms and conditions contained herein. This variance will be void if Illinois Power Company finalns to execute and forward the certificate within the forty five day period. The forty five day period shall be in abeyance for any period during which the matter is appealed. The form of the certification shall be as follows:

CERTIFICATION

I, (We) _____, having read the Opinion and Order of the Illinois Pollution Control Board in PCB 89-79, dated September 13, 1989, understand and accept the said Opinion and Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

Authorized Agent

Title

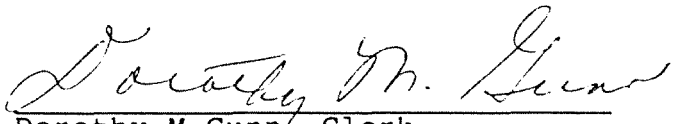
Date

IT IS SO ORDERED.

Board Member B. Forcade dissented and Board Member J.D. Dumelle concurred.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1985, ch. 11-1/2, 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 13th day of September, 1989, by a vote of 6-1.



Dorothy M Gunn, Clerk
Illinois Pollution Control Board