BEFORE THE ILLINOIS POLLUTION CONTROL BOARD ECEIVED

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PAUL JOHNSON, INC.,

Petitioner,

MAR 2 5 2005

PCB No. 05-109

STATE OF ILLINOIS (Water Well Setback of htte pt for board

**ILLINOIS ENVIRONMENTAL** PROTECTION AGENCY and CITY OF WATERMAN, ILLINOIS,

Respondents.

NOTICE OF FILING

Tom Difasio To:

> Director of Public Works Village of Waterman

Kevin E. Buick Counsel for Village of Waterman Cliff, Foster, Corneille & Buick

Lynn Dunaway **Charles Gunnarson** Illinois Environmental Protection Agency Public Water Supplies - Field Operation Headquarters

Bradley P. Halloran **Hearing Officer** Illinois Pollution Control Board

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the Petitioner's Post-Hearing Brief, a copy of which is herewith served upon you.

Respectfully submitted,

BAKER & McKENZIE

March 25, 2005 Richard M. Saines **BAKER & McKENZIE** 130 East Randolph Drive, Suite 3500 Chicago, Illinois 60601 (312) 861-8000

THIS FILING IS SUBMITTED ON RECYCLED PAPER

# BEFORE THE POLLUTION CONTROL OF THE STATE OF ILLINOIS

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Control Board

PAUL JOHNSON INC.,	)		2000	
Petitioner,	) )	1	STATE OF ILLINOIS Pollution Control Boar	
<b>v.</b>	) PCB No. 05-109			
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and	) )			
CITY OF WATERMAN, ILLINOIS,			•	
Respondent.	<b>)</b>	·;		

## PETITIONER'S POST HEARING BRIEF

NOW COMES the Petitioner, Paul Johnson, Inc. ("PJI"), by and through its attorneys, Baker & McKenzie, and pursuant to Part 101 of the Board's Procedural Rules (35 Ill. Adm. Code § 101.612(a)), hereby submits its Post Hearing Brief in the above matter. In support hereof, PJI states as follows:

#### **BACKGROUND**

As expressed in PJI's Petition, PJI is seeking this waiver from the setback requirements in Section 14.2 of the Act to enable PJI to remediate existing shallow groundwater contamination. The shallow groundwater located within the setback zone of the Waterman, Illinois community water supply well is contaminated with hydrocarbons, most likely residues from former underground storage tanks ("USTs") used to store fuel for vehicles. The preferred clean up method is the use of direct push technology (i.e. Geoprobe) to inject microbes, nutrients, and oxygen release compound ("ORC") directly into the plume of impacted groundwater (referred to herein as "in-situ bioremediation").

On March 8, 2005, PJI participated in a hearing on its Petition, along with the Illinois EPA, Village of Waterman and Illinois Pollution Control Board's ("Board") technical representative. During the hearing, PJI presented its technical consultant, Mr. Steven Swenson of Clayton Group Services, Inc., to explain and enter into the record additional data and materials shared amongst the parties subsequent to the filing of the Petition and to address any questions from the parties and/or the public. As noted by the hearing officer, Mr. Halloran, no members of the public were in attendance at the hearing. (March 8, 2005 Transcript of Proceedings ("Tr.") at 3.)

The Board, through its technical consultant, submitted a series of questions on March 7, 2005, which Mr. Swenson addressed on the record at hearing. PJI also requested that it be allowed to provide additional information in a post hearing brief, if appropriate, in response to the Board's questions. (Tr. at 18.) PJI has reviewed the hearing transcript and believes that the questions raised by the Board, Village of Waterman and Illinois EPA were addressed at hearing and that there are no outstanding concerns by the parties. To be sure, PJI offers the following additional response to one of the Board's questions.

#### II. RESPONSE TO BOARD QUESTION

One of the Board's pre-filed questions related whether PJI had discussed with the Village of Waterman a contingency plan in the event that the municipal well showed contamination as a result of the use of in-situ bioremediation to clean up the existing shallow groundwater contamination. (Tr. at 34.) Mr. Swenson indicated that PJI had not discussed such a contingency plan. *Id.* PJI indicated that it would be willing to take reasonable additional measures within the context of the ongoing Leaking Underground Storage Tank ("LUST") clean up efforts at the site. (Tr. at 42-45.)

PJI believes that the likelihood of contaminating the municipal well as a result ofusing in-situ bioremediation is remote for the reasons expressed in its Petition and at hearing. Namely, the existing contamination is located in the shallow groundwater, within approximately 10 to 15 feet of the surface, whereas the municipal well draws water from a depth of approximately 400 feet. (Tr. at 37.) In addition, there does not appear to be a hydraulic connection between to the two aquifers, as demonstrated by: (1) no evidence of hydrocarbon contamination from the existing municipal well monitoring data (Tr. at 30-31.); and (2) the lithology of the impacted area, which evidences a layer of shale in between the shallow and deep aquifers. (Tr. at 15-16; Hearing Ex. 2.)<sup>1</sup>

Nonetheless, to address the Board's concern, PJI is proposing as an additional measure to install a monitoring well between the area of currently impacted groundwater and the municipal well. The proposed monitoring well will allow PJI to monitor the groundwater quality between the treatment area and the municipal well. This would enable PJI to identify any bioremediation constituents that would migrate beyond the treatment area prior to impacting the municipal well.

The monitoring well would be sampled and analyzed for the presence of hydrocarbon degrading bacteria, dissolved oxygen, ammonia, nitrate-nitrite, and orthophosphate prior to the first treatment to establishment background groundwater quality. Following the first treatment, the monitoring well would be sampled on a monthly basis for hydrocarbon degrading bacteria, dissolved oxygen, ammonia, nitrate-nitrite, and ortho-phosphate for a period of three months following the final treatment. The analytical results of the groundwater samples would be submitted to the Illinois EPA and the Village of Waterman on a monthly basis.

At hearing, the Village of Waterman engineer noted that the Village had installed a new well located approximately 1500 feet North/Northwest (and away from the existing contamination) of the current municipal well at issue. According to the Village engineer, the well logs for this new well did not evidence a shale layer, but rather approximately 95 feet of clayey material between the surface and the bottom of the well depth. (Tr. at 51, 58; Hearing Ex. 5.)

PJI believes this proposed monitoring well should provide the Village with an early sign of potential future impacts to the municipal well and enable appropriate actions to be taken to in advance of any impacts to the well. PJI reiterates that the use of in-situ bioremediation is intended to clean up existing contamination and thus any risk posed to the municipal well from in-situ bioremediation already exists from the hydrocarbon contamination in the shallow groundwater. (Tr. at 36.) PJI believes the best way to reduce any risk to the Municipal Well is to clean up the contamination.

WHEREFORE, for the foregoing reasons, PJI respectfully requests the Board to grant an exception from the setback requirements contained in Section 14.2 of the Act.

PAUL JOHNSON INC.

One of Its Attorneys

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### **CERTIFICATE OF SERVICE**

I, Richard M. Saines, certify that on March 25, 2005, the attached **Petitioner's Post-Hearing Brief** was served, by first-class mail, upon the following persons:

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