

ILLINOIS POLLUTION CONTROL BOARD

November 7, 2005

SANGAMON VALLEY FARM	)	
SUPPLY,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 06-43
	)	(Water Well Setback Exception)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY and	)	
VILLAGE OF SAYBROOK, ILLINOIS,	)	
	)	
Respondents.	)	

**HEARING OFFICER ORDER**

Petitioner is directed to file written responses to the following questions with the Clerk of the Board no later than 14 days before hearing.

**Questions for Sangamon Valley Farm Supply  
Pertaining to the Petition Received 9-19-2005  
and  
Agency Recommendation Received 10-11-2005**

**(Docket PCB 2006-43)**

**35 IAC 106.310 (b)**

1. Since the Illinois Environmental Protection Agency (Agency) in its recommendation has identified two additional well setbacks that are impacted by the petition, would you please provide a revised economic analysis for options designed to meet the Class I groundwater standards within the minimum setback zones.
2.
  - a. Do groundwater-monitoring results indicate the hydrocarbon plume is continuing to migrate closer to the community water supply (CWS) Well #3?
  - b. Could you please describe how the plume is migrating in relation to the other two CWS wells?
3.
  - a. What method will SVFS use to prevent the lateral migration of the contaminant plume during the injections?
  - b. Exh. M letter from Regenesys suggests a "barrier-based design along either side of the street." Exh. M at 2. Please describe how barriers will be created between Well #3 and the plume?

- c. Could you please describe if you have plans to use barriers between the plume and the other two CWS wells.
4. As mentioned in the Agency's Recommendation on page 7, to demonstrate the effectiveness of ORC injections, could you please provide more recent monitoring results to demonstrate ORC injections have been effective at this site.
5. Exh. E Letter from the Agency dated 2-27-2003, shows that modifications were made to SVFS's High Priority Corrective Action Plan. Modifications required additional soil and groundwater sampling analysis prior to implementing another round of ORC injections. "These additional samples will demonstrate whether the contamination beneath the neighboring properties had been remediated below the Tier I Remediation Objectives." Exh. M, Att. A. Has such additional sampling been done to show the status of contamination beneath the neighboring properties?
6.
  - a. How many series of ORC injections are planned after the second followup round of injections?
  - b. How long is the waiting period before more follow-up injections would be planned?
  - c. What criteria would SVFS use to determine if additional rounds of injections were needed?
  - d. For how many consecutive quarters, with no exceedences of the groundwater standards or 35 IAC 742 remediation objectives, does SVFS plan to go before discontinuing groundwater remediation efforts?
  - e. Please describe SVFS's monitoring plan to ensure adequate rounds of quarterly sampling to detect contaminant rebound which might occur several months or year after the injections?
7. The Agency Recommendation states, "The BAT [Best Available Technology] to address concerns about ORC, is groundwater monitoring." Ag. Rec. at 7.
  - a. Could you please develop a monitoring plan and schedule for the continuing remediation?
  - b. In your monitoring plan, could you include how you will demonstrate the ORC injections are having the desired effects and not creating unintentional negative impacts to the aquifer and CWS wells?
  - c. Could you indicate your monitoring parameters for the monitoring wells and the CWS wells, such as: contaminants of concern, oxidation-reduction potential, pH, dissolved oxygen, nitrate, total and dissolved iron, sulfate, methane, chemical oxygen demand, and manganese?
  - d. Will your monitoring program also include quarterly raw water monitoring for the CWS wells as suggested by the Agency? Ag. Rec. at 10.
  - e. In your schedule, could you show milestones such as timeframes for injections, groundwater sampling, and compliance with the groundwater standards and 35 IAC 742 Remediation Objectives?

8. Once groundwater remediation efforts have achieved compliance with the groundwater standards and 35 IAC 742 remediation objectives, do you foresee any problems with having the setback exception expire?

**35 IAC 106.310(c)**

9. Page 11 of the petition indicates, “The closest edge of the current contaminant plume to the community water supply well is approximately 115 feet east of the municipal well.” (Pet. at 11.) The petition on page 3 also states, “...a portion of the current shallow groundwater contamination had migrated to within approximately 75 feet of the existing community water supply well ... .” (Pet. at 3.)
  - a. Would you please clarify how close to all three CWS wells contamination was found.
  - b. Regarding Well #3, the petition on page 11 states that “55 to 60 injection locations appear to be within the setback of the municipal well.” Exh. C & D show previous injection locations. Could you please provide a similar diagram showing the possible locations for the second round of follow-up injections?
  - c. What will be the distance between the CWS wells and the closest injection point?
  - d. Would you please indicate what maximum alternative setback would be utilized, i.e., how far from the CWS wells was/will the nearest injection be located?

**35 IAC 106.310(d)**

10.
  - a. Will other products be injected along with the ORC?
  - b. Besides the ORC, will microbes, nutrients and water also be injected?
  - c. Would you please provide an MSDS for ORC and identify what microbes and nutrients will also be used?
11. Exh. G Letter from the Agency dated 12-20-2004 requires that SVFS’s Corrective Action Plan include “documentation that injection of the chemical, or the impact of the treatment on existing soil and groundwater, will not cause an exceedence of the primary drinking water regulations at 35 Ill. Adm. Code 611 during or after remediation ... .” Exh. G, Att. A. Has such documentation been submitted yet to Agency? Would you please provide a copy for the record here?

**415 ILCS 5/14.2 (b), (c), (d)**

12. The petition refers to the 200-foot setback of the CWS well and focuses its discussion on activities inside a 200-foot radius from the well. Since the 400-foot setback applies to all of the Saybrook CWS wells, please identify how many injections points (previous and proposed) are located within the 400-foot setback zones.

**415 ILCS 5/14.2(c) and 415 ILCS 30/6b**

13. Under the Illinois Water Well Construction Code, 415 ILCS 30/6b, if a well is contaminated, owners and operators of the contamination source or route are responsible

for providing an alternative source of potable water. Based on these requirements, please discuss the contingency planning between SVFS and the Village of Saybrook. As suggested by the Agency, will you be providing a plan for regular meetings with Saybrook water supply personnel? Ag. Rec. at 10.

14.
  - a. Will SVFS work with the Village to do additional sampling of the CWS wells during the injection and follow up periods?
  - b. The Agency expressed concern that the ORC might change the character of the potable groundwater before, during and after drinking water treatment. Ag. Rec. at 9. In order to detect potential impacts, has SVFS made any arrangements with the Village to monitor the CWS wells for components that will be injected via the Geoprobos or for changes in groundwater quality?
  - c. If not, please explain how the Village's current monitoring would be sufficient.
  - d. If testing confirms injected materials, hydrocarbons, or byproducts of the ORC injections are detected in the CWS wells, what will the course of action be?
15.
  - a. What is the population served by CWS Well #3?
  - b. Has SVFS consulted with the Village to determine if another water supply is available besides CWS Well #1, #2, and #3?
  - c. If so, please describe how it compares to CWS Well #3 in terms of quality and quantity and its suitability to serve as a temporary alternate water supply.

**415 ILCS 14.2(c)**

16. Pet. at 12 indicates that a survey was conducted to identify all potable water supply well owners within the setback area of the proposed ORC injection wells. Please provide a copy of the survey, indicating the radius of the survey area from the injection locations, how the survey was conducted, and if any other potable wells were identified.

**415 ILCS 14.2(f)**

17. Please discuss if the county or Village of Saybrook have ordinances that might be more stringent than the prohibitions of 415 ILCS 5/14.2.

Petitioner may contact the hearing officer with any questions or requests for clarification.

IT IS SO ORDERED.

Carol Webb

---

Carol Webb  
Hearing Officer  
Illinois Pollution Control Board  
1021 North Grand Avenue East  
P.O. Box 19274  
Springfield, Illinois 62794-9274  
217/524-8509  
webbc@ipcb.state.il.us

## CERTIFICATE OF SERVICE

It is hereby certified that true copies of the foregoing order were mailed, first class, on November 7, 2005, to each of the persons on the attached service list.

It is hereby certified that a true copy of the foregoing order was hand delivered to the following on November 7, 2005:

Dorothy M. Gunn  
Illinois Pollution Control Board  
James R. Thompson Center  
100 W. Randolph St., Ste. 11-500  
Chicago, Illinois 60601



Carol Webb  
Hearing Officer  
Illinois Pollution Control Board  
1021 North Grand Avenue East  
P.O. Box 19274  
Springfield, Illinois 62794-9274  
217/524-8509  
webbc@ipcb.state.il.us

PCB 2006-043

Joey Logan-Wilkey  
IEPA  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276

PCB 2006-043

Charles J. Northrup  
Sorling, Northrup, Hanna, Cullen & Cochran  
Suite 800 Illinois Building  
607 East Adams, P.O. Box 5131  
Springfield, IL 62705

PCB 2006-043

Mayor Ronald Stauffer  
Village of Saybrook  
234 W. Lincoln Street  
P. O. Box 357  
Saybrook, IL 61770-0357