# BEFORE THE POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

VILLAGE OF CARLOCK,	)	
Petitioner	)	
v.	)	PCB No. 2015 - 110
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent	) )	

# NOTICE OF FILING

 TO: Illinois Environmental Protection Agency Division of Legal Counsel #21 PO Box 19276 Springfield, IL 62794-9276

PLEASE TAKE NOTICE that I have filed with the Office of the Clerk of the Pollution Control Board the Petition for Setback Exception of the Village of Carlock, a copy of which is herewith served upon you.

Respectfully Submitted,

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Patrick B. McGrath

McGrath Law Office, P.C. Attorney for Village of Carlock 113 S. Main St., P.O. Box 139 Mackinaw, Illinois 61755 (309) 359-3461 Electronic Filing - Received, Clerk's Office : 12/12/2014 - \* \* \* PCB 2015-110 \* \* \*

#### CERTIFICATE OF SERVICE

I, Patrick B. McGrath, certify that I have served the attached Petition for Setback Exception by first-class mail, upon the following persons:

Illinois Environmental Protection Agency Division of Legal Counsel #21 PO Box 19276 Springfield, IL 62794-9276

Illinois Pollution Control Board Clerk's Office James R. Thompson Center 100 W. Randolph, Suite 11-500 Chicago, IL 60601

Village of Carlock James M. Larimore 304 South Perry Carlock, IL 61725

Pátrick B. McGrath

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V.	)	PCB No
	)	
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent	)	

# PETITION FOR SETBACK EXCEPTION

NOW COMES Petitioner, Village of Carlock, by and through its attorney Patrick B. McGrath of McGrath Law Office, P.C., and pursuant to Section 14.2(c) of the Illinois Environmental Protection Act ("Act") and Part 106 of the Board's Procedural Rules (35 Ill.Adm.Code § 106.300, *et. seq.*), hereby petitions the Illinois Pollution Control Board ("Board") to grant the Village of Carlock an exception from the community water supply well setback requirements in Section 14.2 of the Act. In support of its Petition, the Village of Carlock states as follows:

- 1. The purpose of this petition is to request an exception to the setback requirement in 415 ILCS 5/14.2(a) requiring a minimum 200 feet separation between a potential route (as defined at 415 ILCS 5/3.350) and two community water wells, pursuant to the requirements of 415 ILCS 5/14.2(c).
- 2. Village owns property located at 300 South Perry Street, Carlock, Illinois 61725, McLean County PIN 06-32-333-001 and the adjoining Southeast Hill Street right-of-way ("Subject Property"). Village is currently constructing a new water treatment plant on the Subject Property as well as a Septic System to serve the new water treatment plant. The Village also proposes to connect the new maintenance building and office located on property leased from the Norfolk and Southern Railroad (Part of PIN 06-32-503-002) on the North side of Southeast Hill Street across from Subject Property to the Septic System.
- 3. The water treatment plant is being constructed to address violations of the arsenic maximum contaminant level (MCL) as required to comply with Administrative Order Docket No. 1100107 issued on December 5, 2012 by the U.S. Environmental Protection Agency. Compliance with said Order is required by September 30, 2014 to provide better drinking water to their customers.
- 4. The Village has two community water supply wells located on the Subject Property as shown on Exhibit A. Well No. 1 is located approximately 116 feet from the perimeter of the Septic System, or 58% of the 200 feet setback required. Well No. 2 is located approximately 142 feet from the perimeter of the Septic System, or 71% of the 200 feet setback required. These

two wells are the only wells potentially impacted by the construction of the Septic System. Exhibit A attached hereto depicts the relevant improvements.

- 5. General facts in support of the exception are as follows:
  - a. The risk of contamination is low due to the existence of clay in the formation of the well driller's log for the community water wells. Attached are Exhibit B and Exhibit C containing the well driller's logs for Well No. 1 and Well No. 2, respectively.
  - b. Well No. 1 has an 8" diameter steel casing pipe which was installed to a depth of 250 feet in 1961. Well No. 2 has an 8" diameter steel casing pipe which was installed to a depth of 245 feet in 1977. Steel casing is very resistant to water intrusion. Since the steel casing pipe was installed 17 feet and 21 feet respectively below the clay layers in the formation, the risk of contamination from seepage from the Septic System is very unlikely.
  - c. Well No. 1 and Well No. 2 supply water from the confined portion of the aquifer which reduces the risk of contamination from the Septic System.
  - d. The Village has a third community water supply well ("Well No. 3") located approximately 1.3 miles southeast of the Village to pump water from the Mahomet aquifer. Well No. 3 was constructed in 2007 and supplies approximately 91% (15,119,100 gallons) of the Village's annual potable water consumption. While Well No. 1 and Well No. 2 are operated monthly, they only provide 9% (1,481,100 gallons) of the Village's annual water consumption which reduces the risk for contamination from the Septic System. These percentages are based on 2013 pumpages as shown on Exhibit D. The first six months of 2014 shows an even greater use of Well No. 3.
  - e. There is not a public sanitary sewer system in the Village.
  - f. The Septic System shall consist of a 1,000 gallon septic tank and a 216 square feet seepage bed with perimeter curtain drain. Refer to Exhibit D for the details of the Septic System.
  - g. Sewage will be received from the water treatment plant and the restroom in the maintenance building and office. Estimated gallons of sewage discharged to the Septic System are 85 gallons per day (gpd), which is considerably less than the typical 300 gpd discharged to a residential septic system.
  - h. As shown on Exhibit A, the Septic System will be located as far away from Well No. 1 and Well No. 2 as possible on the farthest southeast corner of the Subject Property.
  - i. There was an existing septic system on the Subject Property that served the existing water treatment plant and the old maintenance and office building which was demolished for construction of the new water treatment plant and red water filter. The existing septic system was located much closer to Well No. 1 and Well No. 2 and there has been no contamination of these wells from the existing septic system as evidenced by the monthly

bacteriological testing of these wells as required by the IEPA and performed by the Village's Water Superintendent.

- 6. Compliance with the setback requirement poses an arbitrary and unreasonable hardship upon the Village.
  - a. The only alternatives would be to purchase additional property to construct the Septic System on or abandon Well No. 1 and Well No. 2 and construct a new Well No. 4 near Well No. 3 at significant additional cost to the Village.
  - b. The customers are currently facing significant increases to their monthly water bills to repay the approximately \$1,100,000 low interest loan from the IEPA required to construct the new water treatment plant to address compliance with the arsenic MCL. Further, costs to strictly comply with the 200' setback would cause further increases in the monthly water bills for Village residents.
- 7. The following technology controls will be used:
  - a. The installation of the Septic System will be performed under the direction of a licensed installer.
  - b. The Septic System will be maintained and inspected by a licensed wastewater operator on an annual basis.
  - c. The septic tank component of the Septic System will be pumped every year.
  - d. Monthly bacteriological testing of Well No. 1 and Well No. 2 will be performed as required by the IEPA as a control to insure contamination of these wells does not occur.
- 8. The maximum feasible alternate setback will be used:
  - a. As shown on Exhibit A, the Septic System was located as far away from Well No. 1 and Well No. 2 as possible on the farthest southeast corner of the Subject Property.
  - b. The closest edge of the Septic System is approximately 116 feet from Well No. 1 and 142 feet from Well No. 2. The farthest edge of the Septic System is approximately 150 feet from Well No. 1 and 169 feet from Well No. 2.
- 9. The environmental impact to the community water supply wells will be minimized as follows:
  - a. The Septic System will be located as far away from Well No. 1 and Well No. 2 as possible on the farthest southeast corner of the Subject Property. See Exhibit A.
  - b. The risk of contamination is low due to the existence of clay in the formation of the well driller's log for the community water wells. Attached are Exhibit B and Exhibit C containing the well driller's logs for Well No. 1 and Well No. 2, respectively.

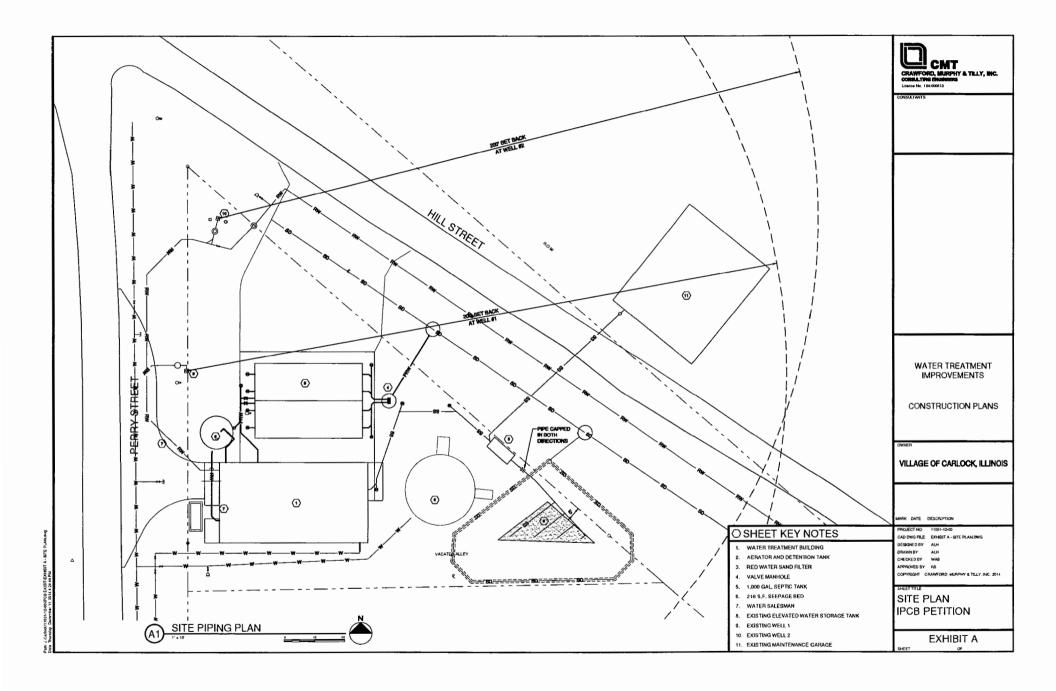
- c. Well No. 1 has an 8" diameter steel casing pipe which was installed to a depth of 250 feet in 1961. Well No. 2 has an 8" diameter steel casing pipe which was installed to a depth of 245 feet in 1977. Steel casing is very resistant to water intrusion. Since the steel casing pipe was installed 17 feet and 21 feet respectively below the clay layers in the formation, the risk of contamination from the Septic System is very unlikely.
- d. Well No. 1 and Well No. 2 supply water from the confined portion of the aquifer which reduces the risk of contamination from the Septic System.
- e. The installation of the Septic System will be performed under the direction of a licensed installer.
- f. The Septic System will be maintained and inspected by a licensed wastewater operator on an annual basis.
- g. Monthly bacteriological testing of Well No. 1 and Well No. 2 will be performed as required by the IEPA as a control to insure contamination of these wells does not occur.

WHEREFORE, based upon the foregoing, the Village requests an exception to the setback requirements of 415 ILCS 5/14.2(a) between the Septic System and community water supply wells, Well No. 1 and Well No. 2, pursuant to the requirements of 415 ILCS 5/14.2(c).

VILLAGE OF CARLOCK

Patrick B. McGrath Its Attorney

McGrath Law Office, P.C. Attorney for Village of Carlock 113 S. Main St., P.O. Box 139 Mackinaw, Illinois 61755 (309) 359-3461 Electronic Filing - Received, Clerk's Office : 12/12/2014 - \* \* \* PCB 2015-110 \* \* \*



#### Page 1 ILLINOIS STATE GEOLOGICAL SURVEY

Municipal Water Supply	Тор	Bottom
black soil	0	2
brown clay	2	10
gray clay	10	63
medium gray sand	63	66
gray clay w/gravel embeded & sand lenses	66	106
med blue sand-some clay	106	109
gray clay	109	113
clean loose sand	113	116
gray clay	116	125
fine to med sand	125	135
med coarse sand-hard	135	139
gray clay-hard	139	180
gray clay w/ sand streaks	180	233
med coarse sand(tight)	233	250
Total Depth Casing: 8" CASING from -3' to 230' Screen: 20' of 8" diameter 30 slot Water from sand & gravel at 230' to 250'. Static level 103' below casing top which is 3' above GL Pumping level 110' when pumping at 110 gpm for 5 hours		250
Owner Address: , Location source: Location from EPA		

Permit Date:

Permit #:

COMPANY	Layne Western		
FARM	Carlock, City o		
DATE DRIL	<b>LED</b> July 1, 1961	NO. 1	
ELEVATION	780	COUNTY NO. 23806	
LOCATION LATITUDE	1880'N 1700'E S 40.580285	//c <b>LONGITUDE</b> -89.131907	
COUNTY	McLean	API 121132380600	32 - 25N - 1E

**EXHIBIT B** 

Test Hole	Тор	Bottom
SS #61066 (0 - 270')	0	0
fill	0	1
black soil	1	2
brown silty clay w/sand & silt seams	2	11
gray sandy clay w/gravel embedded	11	64
gray sandy clay w/small s & gvl seams	64	102
silty sand w/clay seams	102	104
hard silty clay w/gravel embedded	104	114
sand & gravel	114	117
hard gray silty sandy clay with s seams	117	126
tgt f s/sm gvl mud loss 1/2",mud wt 9.1#	126	131
tgt f sand/coarse gravel with boulders	131	134
hd gry silty sandy clay w/gvl embedded	134	177
gry sty sy cl w/gvl embd,some sm s seams	177	231
s,f/gvl,med,some crs,tgt,mud loss 2.5"	231	246
hard gray silty sandy clay with gvl embd	246	249
sand & gravel	249	251
hard gray silty sandy cl w/gravel embdd	251	270
Total Depth Casing: 8" BAKER-MONITOR from -2' to 5' 8" .322 STEEL from 5' to 231' Screen: 14' of 8" diameter .06 slot Static level 117' below casing top which is 0' above GL Pumping level 143' when pumping at 99 gpm for 3 hours		270

#### Page 1 ILLINOIS STATE GEOLOGICAL SURVEY

Permit Date:

Permit #: 65071

COMPANY	owner	
FARM	Carlock, Village of	
DATE DRILI	LED September 1, 1977 NO. 3-77	
ELEVATION	0 COUNTY NO. 21194	
LOCATION	1823'S line, 1812'W line of SW	
LATITUDE	40.580138 LONGITUDE -89.131499	
COUNTY	McLean API 121132119400	32 - 25N - 1E

NOTE: WELL NO. 2 WAS INSTALLED IN TEST HOLE LOCATION AS DISCUSSED UNDER "TOTAL DEPTH".

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#### Page 2 ILLINOIS STATE GEOLOGICAL SURVEY

Remarks: see logbook for Driller's Log filed Company Sample Study file Sample set # 61066 (0' -		, 1977
Owner Address: , ocation source: Location		
wner	Carlock, Vil	lage of 3-77
COUNTY McLean		32 - 25N - 1E

# VILLAGE OF CARLOCK, ILLINOIS

# SUMMARY OF RAW WATER PUMPED PER VILLAGE WELL

	20	3		2014 (JANU	2014 (JANUARY - JUNE)	
	GALLONS PUMPED	PERCENTAGE OF TOTAL GALONS		GALLONS PUMPED	PERCENTAGE OF TOTAL GALONS PUMPED	
WELL NO. 1	72,000	0.4%		15,000	0.2%	
WELL NO. 2	1,409,100	8.5%		102,300	1.5%	
WELL NO. 3	15,119,100	91.1%		6,597,000	98.3%	
TOTAL GALLONS	16,600,200	100.0%		6,714,300	100.0%	

NOTES:

- 1. PUMPAGE INFORMATION PROVIDED BY THE VILLAGE OF CARLOCK WATER SUPERINTENDENT.
- 2. INFORMATION FOR THE SECOND HALF OF 2014 WAS NOT USED DUE TO START-UP OF THE NEW WATER TREATMENT PLANT INTERRUPTING THE NORMAL USE OF THE WELLS.