

ILLINOIS POLLUTION CONTROL BOARD
November 18, 2010

IN THE MATTER OF:)
)
PETITION OF CABOT CORPORATION) AS 07-6
FOR AN ADJUSTED STANDARD FROM) (Adjusted Standard – Land)
35 ILL. ADM. CODE PART 738.)
SUBPART B)

ORDER OF THE BOARD (by C.K. Zalewski):

In an October 7, 2010 opinion and order, the Board granted the petition for reissuance of a previous adjusted standard (AS 96-3) filed by Cabot Corporation (Cabot) for its inorganic chemical manufacturing facility, located in Tuscola, Douglas County (Tuscola facility). Cabot manufactures fumed silica dioxide (SiO₂) in its Tuscola facility. The Board granted relief for 21 years, subject to conditions, from the restrictions on underground injection of hazardous wastes codified at 35 Ill. Adm. Code 738.Subpart B to allow Cabot to inject the specified hazardous wastes into Wells #2 and #3 through December 31, 2027. The Board noted that it was granting relief similar to that granted by the United States Environmental Protection Agency (USEPA) as a “federal exemption” allowing concerning underground injection of prohibited wastes at 40 CFR 148.Subpart C. *See* 75 Fed. Reg. 30392 (June 1, 2010). Among other conditions, both the Board and USEPA orders require Cabot to file any petition for extension or reissuance of the relief granted no later than six months before the expiration of the relief, to allow for timely processing of the request.

On November 1, 2010, Cabot filed a motion for reconsideration (Mot.) of the Board’s opinion and order. Cabot seeks correction of a typographical error in condition 2, sentence 2, of the order that would have required Cabot to file a Petition for Reissuance by July 1, 2017, rather than by July 1, 2027. Mot. at 2. The motion recites that the respondent has no objection to this technical correction.

The motion for reconsideration and correction of the typographical error in condition 2, sentence 2, of the order is granted. For the convenience of the parties, the corrected order in its entirety is set out below. For clarity, the October 7, 2010 effective date of the grant of relief is added to condition 1, sentence 2, of the order.

1. The Board grants Cabot Corporation an adjusted standard from the requirements of 35 Ill. Adm. Code 738.110(a) and 738.116 (c)(1) and (c)(2) for the underground injection control Wells # 2 and #3 at its Tuscola facility. Effective October 7, 2010, this adjusted standard from the prohibitions of 35 Ill. Adm. Code 738.110(a) and 738.116 (c)(1) and (c)(2) allows the underground injection disposal of wastes denoted by the waste codes D002, F003, and F039.

2. This adjusted standard terminates on December 31, 2027, the end of the 21-year modeled injection period. Cabot Corporation may petition the Board for reissuance of the adjusted standard beyond that date, provided a new and complete petition and no-migration demonstration is filed with the Board by July 1, 2027;
3. The Board grants this adjusted standard consistent with the USEPA federal exemption approval published at 75 Fed. Reg. 30392-30393 (June 1, 2010).
4. The Board grants this adjusted standard subject to the following conditions. Non-compliance with any of these conditions is grounds for termination of the adjusted standard:
 - A. All regulatory requirements in 35 Ill. Adm. Code 738.123 and 738.124 are incorporated by reference;
 - B. The adjusted standard applies to two existing injection wells, Well #2 and Well #3 located at the Cabot Corporation facility at 700 E. U.S. Highway 36, in the City of Tuscola in Douglas County, Illinois;
 - C. Injection is limited to that part of Upper Franconia, Potosi, Eminence and Oneota formations at depths between 4,442 and 5,400 feet;
 - D. Only wastes denoted by the waste codes D002, F003 and F039 may be injected;
 - E. The concentrations of constituents of the injected waste may not exceed the amounts listed in Table 1-1 below;

Table 1-1
Waste Parameters Limits

Parameters	EPA Code Hazardous Waste	Maximum Permit Limit	Minimum
Hydrochloric Acid	D002	5.5%	
pH	D002	7	
Temperature	--	95°F	32°F
Specific Gravity	--	1.034	
Acetone	F003	47,000 mg/l	
Tetrachloroethylene	F039	1.66 mg/l	
Trichloroethylene	F039	1.66 mg/l	
1,1 Dichloroethylene	F039	2.33 mg/l	
1,2 Dichloroethylene	F039	0.33 mg/l	
Phenol	F039	12,000mg/l	
Methylene Chloride	F039	59 mg/l	
1,1 Dichloroethane	F039	0.33 mg/l	

1,2 Dichloroethane	F039	1.66 mg/l	
Trans 1,2 Dichloroethene	F039	16.5 mg/l	
Cis 1,2 Dichloroethene	F039	11.5 mg/l	
1,1,1 Trichloroethane	F039	33 mg/l	
1,1,2 Trichloroethane	F039	1.66 mg/l	
Vinyl Chloride	F039	0.66 mg/l	
Chloroethane	F039	3.33 mg/l	
Chloroform	F039	0.33 mg/l	
Ethylbenzene	F039	116.5 mg/l	
Xylene (Total)	F039	333.5 mg/l	
Toluene	F039	33 mg/l	
1,1,1,2 Tetrachloroethane	F039	0.33 mg/l	
1,1,2,2 Tetrachloroethane	F039	0.33 mg/l	
Cyanide (Total)	F039	33 mg/l	
Barium	F039	333 mg/l	
Cadmium	F039	1.66 mg/l	
Chromium	F039	16.5 mg/l	

- F. The volume of wastes injected in any month through the wells may not exceed 17,280,000 gallons;
- G. Beginning January 7, 2011, or such other date agreed upon by the IEPA and Cabot, Cabot Corporation shall quarterly submit to Illinois Environmental Protection Agency (IEPA) a report containing a fluid analysis of the injected waste which shall indicate the chemical and physical properties upon which the no-migration petition was based, including the physical and chemical properties listed in Conditions 5 and 6 of this exemption approval;
- H. Beginning January 7, 2011, or such other date agreed upon by the IEPA and Cabot, Cabot Corporation shall annually submit to IEPA a report containing the results of a bottom hole pressure survey (fall-off test) performed on Well #2 and Well #3 (alternating years). The survey shall be performed after shutting in the well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with 35 Ill. Adm. Code 730.168(e)(1). The annual report shall include a comparison of reservoir parameters determined from the fall-off test with parameters used in the approved no-migration petition;
- I. Cabot Corporation shall fully comply with all requirements set forth in Underground Injection Control Permit UIC-011-CC issued by the Illinois Environmental Protection Agency. Cabot must expeditiously apply to the IEPA to modify its current UIC Permit No. UIC-011-CC to reflect USEPA's approval cited in 75 Fed. Reg. 30392-30393 (June 1, 2010) and this adjusted standard;

- J. Reports or other communications required by this adjusted standard must be addressed the IEPA at the address below:

Illinois Environmental Protection Agency

1021 North Grand Avenue East

P.O. Box 19276

Springfield, IL 62794-9276

- K. As provided in 35 Ill. Adm. Code 738.123(b), whenever the Board determines that the basis for approval of a petition may no longer be valid, the Board will require a new demonstration in accordance with 35 Ill. Adm. Code 738.120.
- L. In any action under subsection 35 Ill. Adm. Code 738.124(a)(1), if the Board finds a violation of the Act or Board regulations, the Board may terminate any adjusted standard granted under Section 738.120 as provided by Section 738.124.

IT IS SO ORDERED.

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2008); *see also* 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; *see also* 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on November 18, 2010, by a vote of 4-0.



John T. Therriault, Assistant Clerk
Illinois Pollution Control Board