

Buddy Garcia, *Chairman*  
Larry R. Soward, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Glenn Shankle, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

January 11, 2008

TO: All Persons on Mailing List

RE: **TCEQ Docket No. 2007-1738-UIC; Permit No. WDW 394.** Consideration of an aquifer exemption for **Corsicana Technologies, Inc.**

The above-referenced matter is scheduled to be considered by the Texas Commission on Environmental Quality on **February 13, 2008** at **9:30 A.M.** in Room 201S, Building E, 12100 Park 35 Circle, Austin, Texas.

Should you need any additional information, please contact Paul Munguía at the Texas Commission on Environmental Quality, Office of the Chief Clerk, (512) 239-3300.

Sincerely,

A handwritten signature in cursive script, appearing to read "LaDonna Castañuela".

LaDonna Castañuela  
Chief Clerk

LDC/pm

Buddy Garcia, *Chairman*  
Larry R. Soward, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Glenn Shankle, *Executive Director*



TEXAS  
COMMISSION  
ON ENVIRONMENTAL  
QUALITY

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHIEF CLERKS OFFICE

*Protecting Texas by Reducing and Preventing Pollution*

January 9, 2008

LaDonna Castañuela, Chief Clerk  
Office of the Chief Clerk  
Texas Commission on Environmental Quality  
P.O. Box 13087, Mail Code 105  
Austin, Texas 78711-3087

Re: TCEQ Docket No. 2007-1738-UIC  
Application by Corsicana Technologies, Inc. for Aquifer Exemption

Dear Ms. Castañuela:

Enclosed for filing, please find the original and eleven copies of the Executive Director's Response to Public Comment and a draft order in the above-referenced matter. If you have any questions, please do not hesitate to contact me at 239-0612.

Sincerely,

A handwritten signature in cursive script that reads "Don Redmond".

Don Redmond  
Staff Attorney  
Environmental Law Division

Enclosure

**TCEQ DOCKET NO. 2007-1738-UIC**

**APPLICATION BY** § **BEFORE THE**  
**CORSICANA TECHNOLOGIES, INC.** § **TEXAS COMMISSION ON**  
**FOR AQUIFER EXEMPTION** § **ENVIRONMENTAL QUALITY**

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**EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT**

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The Executive Director (ED) of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on an aquifer exemption application and Executive Director's preliminary decision.

As required by Title 30 TEX. ADMIN. CODE (TAC) § 55.253, before an application is approved, the ED prepares a response to all timely comments. The TCEQ held a public meeting on June 21, 2007 at Corsicana's City Annex West Room. There were two (2) persons that gave oral comments. *See Commenters List*. This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this application or the review process please call the TCEQ Office of Public Assistance at 1-800-687-4040. General information about the TCEQ can be found at our website at [www.tceq.state.tx.us](http://www.tceq.state.tx.us).

**BACKGROUND**

**Description of Proposed Aquifer Exemption**

The aquifer exemption is for Corsicana Technologies Inc.'s (CTI) Class I injection well authorized under TCEQ Permit No. WDW394. The well is located in CTI's facility on the south side of Texas Highway 31 East, and approximately 4,000 feet east of Interstate 45 within the city of Corsicana in Navarro County. The applicant currently operates a chemical manufacturing facility which produces primary, tertiary and quaternary amines. These amines are used in a variety of industrial applications, namely mining, road building, lubrication, and fuel additives. Wastes are generated on-site and are nonhazardous ammonia waste waters containing salts, polysulfides, amines and alcohols. The aquifer exemption is required before CTI can operate WDW394 to dispose of permitted plant waste because the permitted injection zone contains groundwater with 8500 mg/l total dissolved solids (TDS).

TCEQ rules in 30 TAC § 331.2(97) define an underground source of drinking water as an aquifer or portion of an aquifer that supplies drinking water for human consumption; or in which the groundwater contains fewer than 10,000 mg/l TDS; and which is not an exempted aquifer. Under 30 TAC § 331.5, no permit may be allowed where an injection well causes or allows the movement of fluid that would result in the pollution of an underground source of drinking water. Thus, CTI's permitted injection zone must be designated as an exempt aquifer and excluded from classification as an underground

source of drinking water in order for CTI to use the well for injection of wastewater.

The requested exemption would apply to the lowermost portion of the Woodbine formation from a depth of 2,920 to 3,000 feet, seen on the electric log of WDW394. The entire Woodbine section is at depth of 2,550 to 3,000 feet. The areal extent would be a 5,000 foot radius from WDW394 wellbore, which would encompass approximately 1,800 acres in Navarro County. WDW394 was drilled in May 2005, to a total depth of 3,115 feet. The well coordinates are latitude 32° 05' 44" north, and longitude 96° 25' 32" west.

The requirements for exempting an aquifer are provided in 30 TAC § 331.13. An aquifer or portion of an aquifer may be designated as an exempted aquifer, if it does not presently serve as a source of drinking water for human consumption and until the exempt status is removed, it will not serve in the future as a source of drinking water for human consumption because of certain conditions identified in 30 TAC § 331.13(c)(2). The request by CTI to exempt a portion of the Woodbine Formation meets the criteria in 30 TAC 331.13(c) because:

1. The Woodbine Formation is not currently, nor has ever been, a source of drinking water for human consumption within a radius of 15 miles from the CTI facility. [30 TAC § 331.13(c)(1)]
2. The Woodbine Formation is geothermal energy bearing with production capability. [30 TAC § 331.13(c)(2)(A)]
3. The Woodbine Formation containing the proposed exempt sand has a thickness (30 feet) and depth (2,960 feet below ground) which make recovery of water for drinking water purposes economically or technologically impractical. [30 TAC § 331.13(c)(2)(B)]
4. The Woodbine Formation is contaminated with hydrocarbons such that it would be economically or technologically impractical to render that water fit for human consumption. [30 TAC § 331.13(c)(2)(C)]

CTI's request for an aquifer exemption meets the State and Federal criteria for exempted aquifers. If the designation of the aquifer exemption is approved by the commission, the Executive Director will prepare the submission of an Underground Injection Control program revision to the United States Environmental Protection Agency (EPA). The designation of an exempted aquifer is not final until approved by EPA as part of the delegated Underground Injection Control Program.

### **Procedural Background**

CTI submitted an application for an aquifer exemption on June 1, 2006. The Notice of Public Meeting on Aquifer Exemption for this application was published on May 31, June 7, and June 14, 2007 in the *Corsicana Daily Sun*. The TCEQ held a public meeting for the aquifer exemption on June 21, 2007 in the City of Corsicana. The Notice of the

aquifer exemption was published on September 6, 2007 in the *Corsicana Daily Sun*. The public comment period ended on October 6, 2007.

### **Access to Rules, Laws and Records**

Secretary of State website: [www.sos.state.tx.us](http://www.sos.state.tx.us)

TCEQ Website: [www.tceq.state.tx.us](http://www.tceq.state.tx.us)

Commission records on CTI are available for viewing and copying at the Corsicana Public Library, 100 north 12<sup>th</sup> Street, Corsicana, Texas 75110.

### **Commenters List:**

1. Ms. Connie Standridge – City Manager for City of Corsicana
2. Mr. Lee McCleary – Director of Business Development for City of Corsicana

### **Comments and Responses**

#### **COMMENT No. 1:**

Both Ms. Stanridge and Mr. McCleary gave oral comments at the public meeting that they approved CTI's efforts to obtain an aquifer exemption for the purposes of allowing WDW394 to begin disposal operations.

#### **RESPONSE No. 1:**

The Executive Director has noted these comments in support of the aquifer exemption application.

**CHANGES MADE IN RESPONSE TO COMMENT**

No changes to the recommendation on the aquifer exemption have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

Glenn Shankle  
Executive Director

Robert Martinez, Director  
Environmental Law Division

By Don Redmond

Don Redmond, Staff Attorney

Environmental Law Division

State Bar No. 24010336

P.O. Box 13087, MC 173

Austin, Texas 78711-3087

512-239-0612

REPRESENTING THE  
EXECUTIVE DIRECTOR OF THE  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

\*\* DRAFT \*\*

TCEQ DOCKET NO. 2007-1738-UIC

APPLICATION BY CORSICANA  
TECHNOLOGIES, INC. FOR AN  
AQUIFER EXEMPTION

§  
§  
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BEFORE THE  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

AQUIFER EXEMPTION ORDER

The Texas Commission on Environmental Quality (TCEQ) finds that:

1. On June 1, 2006, Corsicana Technologies, Inc (CTI) submitted an application to request designation of an exempted aquifer.
2. CTI requests designation of a portion of the Woodbine Formation from a depth of 2,920 to 3,000 feet as seen in the electric log of Class I injection well WDW394. The exemption extends a 5,000 foot radius from the WDW394 wellbore, covering approximately 1,800 acres in Navarro County. A map depicting the extent of the exempted aquifer is attached.
3. The groundwater in the portion of the Woodbine Formation described in Finding #2 contains 8,500 mg/l total dissolved solids (TDS). Because the groundwater TDS concentration is less than 10,000 mg/l, according to 30 TEX. ADMIN. CODE §§ 331.2 and 331.13, this portion of the Woodbine Formation is considered an underground source of drinking water unless it is designated an exempted aquifer.
4. CTI is a chemical manufacturing facility which produces primary, tertiary and quaternary amines. These amines are used in a variety of industrial applications, namely, mining, road building, lubrication, and fuel additives. CTI requests the designation of the exempted aquifer in conjunction with the use of an injection well permitted under TCEQ Permit No. WDW394 for injection of nonhazardous ammonia waste waters containing salts, polysulfides, amines, and alcohols. The Class I injection well is located at CTI's facility on the south side of Texas Highway 31 East, and approximately 4,000 feet east of Interstate 45 within the city of Corsicana in Navarro County. CTI cannot inject into the formation without the aquifer exemption.
5. An exempted aquifer is an aquifer or a portion of an aquifer which meets the criteria for fresh water but has been designated an exempted aquifer by the commission after notice and opportunity for hearing.
6. An aquifer or portion of an aquifer may be designated as an exempted aquifer if the following criteria are met:
  - (1) It does not currently serve as a source of drinking water for human consumption; and
  - (2) Until exempt status is removed according to 30 TAC §331.13(f), it will not in the

**\*\* DRAFT \*\***

future serve as a source for human consumption because:

- (A) It is mineral, hydrocarbon or geothermal energy bearing with production capability;
  - (B) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technically impractical;
  - (C) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or,
  - (D) It is located above a Class III well mining area subject to subsidence or catastrophic collapse.
7. CTI has demonstrated that the portion of the Woodbine Formation described in Finding #2 is not currently, nor has ever been, a source of drinking water for human consumption within a radius of 15 miles from the CTI facility.
  8. CTI has demonstrated with water samples and electric logs that the portion of the Woodbine Formation described in Finding #2 will not serve in the future as a source of drinking water for human consumption because it is contaminated with hydrocarbons and is a source of geothermal energy.
  9. CTI has demonstrated that the portion of the Woodbine Formation described in Findings #2 is situated at a depth (2,900 feet) and has a thickness (30 feet) which makes recovery of water for drinking water purposes economically or technically impractical.
  10. Notice of the aquifer exemption was issued on September 6, 2007, published in *Corsicana Daily Sun*, and mailed to the same recipients required for notice of an injection well permit application.
  11. The notice described the process for submitting comments and requesting a hearing on the aquifer exemption.
  12. A public meeting on the aquifer exemption was held in Corsicana, Texas, City Annex West Room on Thursday, June 21, 2007 from 7:00 - 8:00 p.m. Notice of the public meeting was published in *Corsicana Daily Sun* on May 31, June 7, and June 14, 2007.
  13. The Executive Director of the Texas Commission on Environmental Quality provided a response to all timely public comments on the application.

**Now, therefore, be it ordered by the Texas Commission on Environmental Quality that:**

**\*\* DRAFT \*\***

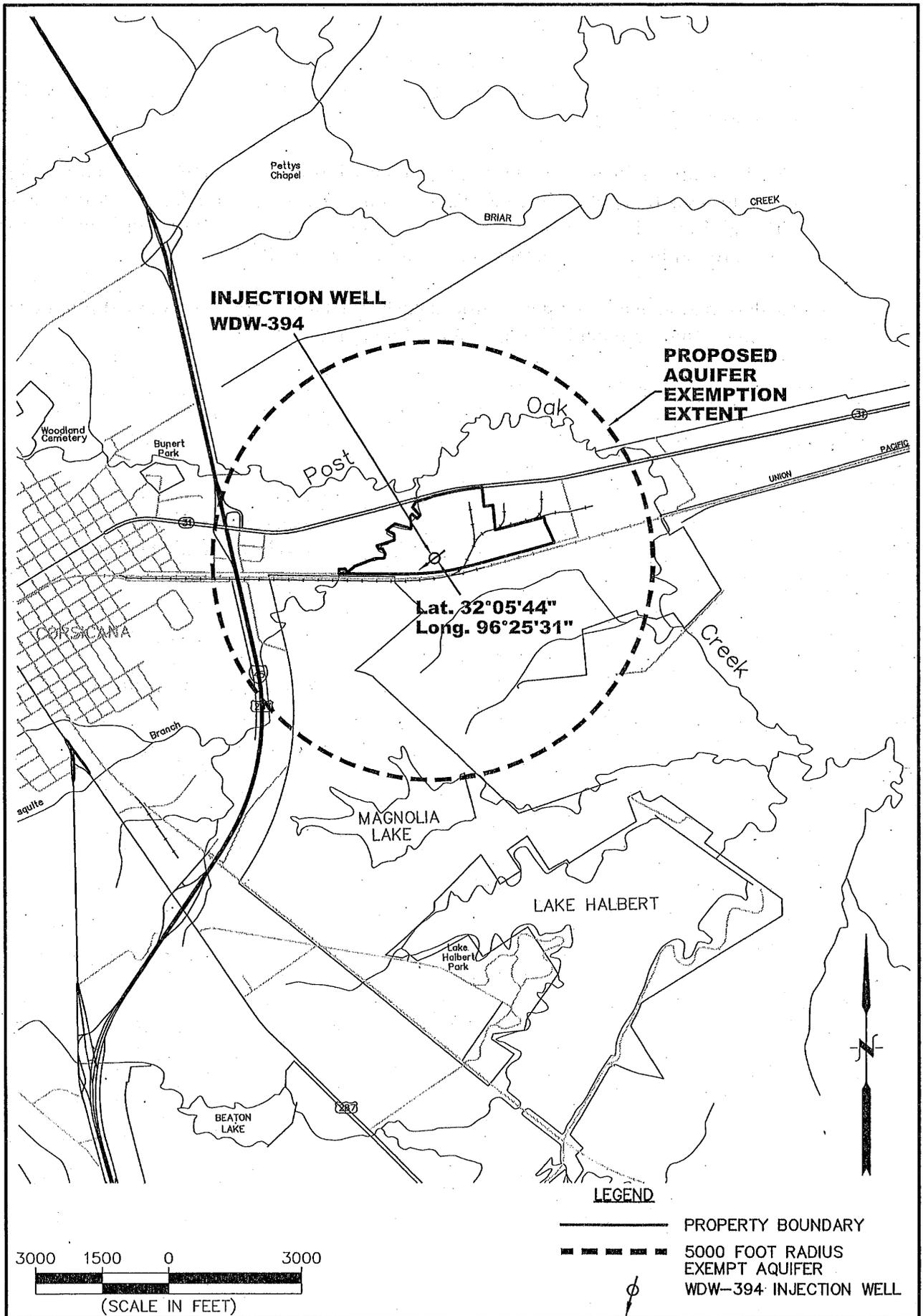
1. The portion of the Woodbine Formation described in Finding #2 be designated as an exempted aquifer under 30 TAC § 331.13(c);
2. The Executive Director of the Texas Commission on Environmental Quality submit a program revision to the United States Environmental Protection Agency (EPA) under 40 CFR §§ 144.7, 146.4, and 145.32 to reflect this aquifer exemption designation for the Underground Injection Control program for the State of Texas; and
3. No designation of an exempted aquifer shall be final until approved by the EPA as part of the delegated Underground Injection Control Program.

Issue Date:

Texas Commission on  
Environmental Quality

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Buddy Garcia, Chairman



**MAILING LIST**  
**CORSICANA TECHNOLOGIES, INC.**  
**DOCKET NO. 2007-1738-UIC; PERMIT NO. WDW 394**

FOR THE APPLICANT:

Tom C. Kowalski, General Manager  
Corsicana Technologies Plant  
P.O. Box 1898  
Corsicana, Texas 75151-1898  
Tel: (903) 874-9500  
Fax: (903) 874-9595

FOR THE EXECUTIVE DIRECTOR:

Donald K. Redmond, Staff Attorney  
Texas Commission on Environmental Quality  
Environmental Law Division, MC-173  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-0600  
Fax: (512) 239-0606

Frederick G. Duffy, Permitting Team  
Texas Commission on Environmental Quality  
Waste Permits Division, MC-130  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-6891  
Fax: (512) 239-2007

FOR PUBLIC INTEREST COUNSEL:

Mr. Blas J. Coy, Jr., Attorney  
Texas Commission on Environmental Quality  
Public Interest Counsel, MC-103  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-6363  
Fax: (512) 239-6377

FOR OFFICE OF PUBLIC ASSISTANCE:

Ms. Bridget Bohac, Director  
Texas Commission on Environmental Quality  
Office of Public Assistance, MC-108  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-4000  
Fax: (512) 239-4007

FOR ALTERNATIVE DISPUTE

RESOLUTION:

Mr. Kyle Lucas  
Texas Commission on Environmental Quality  
Alternative Dispute Resolution, MC-222  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-4010  
Fax: (512) 239-4015

FOR THE CHIEF CLERK:

Ms. LaDonna Castañuela  
Texas Commission on Environmental Quality  
Office of Chief Clerk, MC-105  
P.O. Box 13087  
Austin, Texas 78711-3087  
Tel: (512) 239-3300  
Fax: (512) 239-3311

INTERESTED PERSONS:

Leslie A. Jeske, Hydrogeologist  
Solutient Geoscience, Inc.  
4011 Birdwell Dr.  
Tyler, Texas 75703-1605

Lee McCleary  
1501 N. 22<sup>nd</sup> St.  
Corsicana, Texas 75110

Connie Standridge  
200 N 12<sup>th</sup> St.  
Corsicana, Texas 75110-4616

Buddy Garcia, *Chairman*  
Larry R. Soward, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Glenn Shankle, *Executive Director*



TEXAS  
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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

CHIEF CLERKS OFFICE

January 28, 2008

LaDonna Castañuela, Chief Clerk  
Office of the Chief Clerk  
Texas Commission on Environmental Quality  
P.O. Box 13087, Mail Code 105  
Austin, Texas 78711-3087

Re: TCEQ Docket No. 2007-1738-UIC  
Application by Corsicana Technologies, Inc. for Aquifer Exemption

Dear Ms. Castañuela:

Enclosed for filing, please find the original and eleven copies of the Technical Summary and Executive Director's Preliminary Decision in the above-referenced matter. If you have any questions, please do not hesitate to contact me.

Sincerely,

*Don Redmond*

Don Redmond  
Staff Attorney  
Environmental Law Division

Enclosure

## TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

August 2007

### Description of Application

**Applicant:** Corsicana Technologies, Inc. (CTI)

**Location:** The aquifer exemption is for CTI's waste disposal well (WDW394). The well is located in CTI's plant on the south side of Texas Highway 31 East, and approximately 3/4 of a mile east of Interstate 45.

**General:** The applicant currently operates a chemical manufacturing facility which produces primary, tertiary and quaternary amines. These amines are used in a variety of industrial applications, namely, mining, road building, lubrication and fuel additives. Wastes are generated on-site and are nonhazardous. Wastes disposed at this facility include ammonia waste waters containing salts, polysulfides, amines and alcohols.

**Request:** CTI has requested Texas Commission on Environmental Quality (TCEQ) and U.S. Environmental Protection Agency (EPA) approval of an aquifer exemption for the subject disposal well. This exemption is required before CTI can begin injection operations of WDW394. The aquifer exemption would apply to a sand within the Woodbine Formation at a depth of 2,920 to 3,000 feet, as seen on the electric log of WDW394. The areal extent would be a 5,000 foot radius from the WDW394 wellbore, which would encompass approximately 1,800 acres.

**Authority:** Authority, criteria, and procedures for aquifer exemptions are provided by 40 CFR §§ 144.7, 145.32 and 146.4 and 30 TAC § 331.13.

### Technical Information

In May 2005, CTI drilled WDW394 to a total depth of 3,115 feet. The permitted Woodbine sand for disposal operations was logged at 2,960 to 3,000 feet. Ten (10) water samples taken from this interval recorded total dissolved solids (TDS) ranging from 8,390 to 8,730 mg/l. An underground source of drinking water (USDW) is defined as a formation bearing ground water of less than 10,000 mg/l in TDS.

State and Federal regulations prohibit injection of waste through Class I wells into a USDW. At the location for WDW394 the Woodbine Formation is a USDW. Available geologic data indicates that there are no other suitable injection zones found below the base of the USDW at CTI's site. CTI will need an aquifer exemption to begin injection of plant waste into WDW394. Upon approval of the proposed aquifer exemption by the commission, the executive director will seek the necessary EPA approval of the exemption to complete the aquifer exemption process. The exemption will only be effective after it has been approved by the commission and EPA.

## TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

Page 2

An aquifer or portion of an aquifer may be designated as an exempted aquifer, if it does not presently serve as a source of drinking water for human consumption and until the exempt status is removed, it will not serve in the future as a source of drinking water for human consumption because of certain conditions identified in 30 TAC 331.13(c)(2). The request by CTI to exempt a portion of the Woodbine Formation meets the criteria in 30 TAC 331.13(c) because:

1. The Woodbine Formation is not currently, nor has ever been, a source of drinking water for human consumption within a radius of 15 miles from the CTI facility. [331.13(c)(1)]
2. The Woodbine Formation is geothermal energy bearing with production capability. [331.13(c)(2)(A)]
3. The Woodbine Formation containing the proposed exempt sand has a thickness (30 feet) and depth (2,960 feet below ground) which make recovery of water for drinking water purposes economically or technologically impractical. [331.13(c)(2)(B)]
4. The Woodbine Formation is contaminated with hydrocarbons such that it would be economically or technologically impractical to render that water fit for human consumption. [331.13(c)(2)(C)]

CTI's request for an aquifer exemption meets the State and Federal criteria for exempted aquifers.

### Process for Reaching a Final Decision and Opportunities for Public Participation

The proposed aquifer exemption application will be sent to the Office of the Chief Clerk for public notice. Mailed and newspaper notice of the application and executive director's preliminary decision are provided in accordance with 30 TAC §39.651(d) with instructions for submitting public comments, requesting a public meeting, and requesting a contested case hearing. Written public comments, requests for a public meeting, and requests for a contested case hearing must be submitted to the Office of the Chief Clerk within 30 days from the date of publication of the newspaper notice.

The executive director will consider public comments in making a final decision on this application. The TCEQ will hold a public meeting if the executive director determines that there is a significant degree of public interest in the application or if requested by a local legislator. After the deadline for submitting public comments and hearing requests, the executive director will consider the comments and prepare a response to all relevant and material or significant public comments.

The TCEQ may hold a contested case hearing on the aquifer exemption. A contested case hearing is a legal proceeding similar to a civil trial in a state district court. The TCEQ may grant a contested case hearing on this application if a written hearing request is filed within 30 days from the date of newspaper publication of this notice.

The public notice should include the following language:

“To request a contested case hearing, you must include the following items in your request: your name; address, phone; applicant's name and permit number; the location and distance of your property/activities relative to the facility or activity; a specific description of how you would be adversely affected by the application in a way not common to the general public; and the statement “[I/we] request a contested case hearing.”

If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify an individual member of the group who would be adversely affected by the application or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.”

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If hearing requests are granted, the hearings will be conducted by the State Office of Administrative Hearings. Decisions regarding the Aquifer Exemption may be reconsidered in response to a Motion for Rehearing or a Motion for Reconsideration and by appeal to a District Court in Travis County.

Two (2) public meetings on the proposed operation of waste disposal well WDW394 have already taken place. The first one was on May 14, 2002 for the submitted permit application for the proposed waste disposal well. The second public meeting on June 21, 2007 was requested by CTI specifically for the proposed aquifer exemption.

#### Preliminary Decision

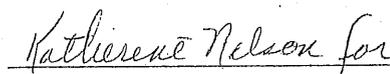
The executive director has made a preliminary decision that the proposed aquifer exemption meets all regulatory requirements. If approved by the commission, the executive director will request EPA's approval of the aquifer exemption. No designation of an exempted aquifer shall be final until approved by the EPA.

Prepared by:



Fred Duffy, Geologist, P.G. #692  
UIC Permits Team  
Industrial and Hazardous Waste  
Permits Section  
Waste Permits Division

Reviewed by:



Ben Knape, P.G., Team Leader  
UIC Permits Team  
Industrial and Hazardous Waste  
Permits Section  
Waste Permits Division