



July 12, 2006

Mr. J. M. Mike Apple, Director
Tennessee Department of Environment and Conservation
Division of Solid Waste Management
L & C Tower, 5th Floor
401 Church Street
Nashville, Tennessee 37243-1535

**Re: Request for Class 3 Permit Modification
Final Remedy for Cypress Creek Residential Areas
Velsicol Chemical Corporation, Memphis Facility
Facility ID No. TND 00 701 4664
Permit No. THHW-109**

Dear Mr. Apple:

This is a Request for a Class 3 Modification of Velsicol's Hazardous Waste Permit No. TNHW-109 according to Tennessee Department of Environment and Conservation (TDEC) rule 1200-1-11-.07(9)(c)5, Permit Modification at the Request of the Permittee. The modification is primarily for the purpose of defining the Final Remedy for Corrective Measures to be performed at residential properties along Cypress Creek. This Request also includes some minor administrative modifications.

The requested modifications are described or provided in the following enclosures:

- Description of Proposed Final Remedy Requirements for Residential Properties along Cypress Creek.
- Modified RCRA Subtitle C Site Identification Form, to change the Site Contact Person to Mr. Steve Wallace and to change the date that True Specialty Corporation became the Site's Legal Owner to 10/1/2005.
- Modified Contingency Plan to change the Emergency Coordinator to Mr. Ali Toutio.



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Velsicol plans to issue a Public Notice on July 15, 2006, which will start the required 60-day public comment period, and to hold a Public Meeting as part of that public comment process on August 10. A copy of the Public Notice is also enclosed.

If you have any questions or require additional information regarding this request, please contact Mr. Gary Hermann at (901) 380-9995, extension 120.

Sincerely,

Velsicol Chemical Corporation

A handwritten signature in black ink, appearing to read "Ron Loving", is written over the typed name.

Ron Loving
Plant Manager

c: Angela Ivory, TDEC
Charles Burroughs, TDEC
Gary Hermann, Memphis Environmental Center
Pat Kitchens, Velsicol
Steve Wallace, Velsicol

Enclosures

003-18/RCRA Permit Mod Req.doc



DESCRIPTION OF PROPOSED FINAL REMEDY
FOR RESIDENTIAL PROPERTIES ALONG CYPRESS CREEK
IN MEMPHIS, TENNESSEE

Scope of Properties to be addressed under this Final Remedy.

- This Final Remedy is applicable to residential properties along Cypress Creek in Memphis, Tennessee where soils have been contaminated by way of Cypress Creek such that the contaminant levels exceed the Remedial Action Level described below.
- Residential Properties include properties with single family and duplex residences, apartment complexes, and small vacant lots in residential neighborhoods that adjacent to single family and duplex residences.
- Residential properties do not include properties that are currently in commercial or industrial use, or large undeveloped properties, unless and until those properties are developed for residential use.

Remedial Action Level (RAL) Used to Identify Properties Where Corrective Measures are to be Performed

- Corrective Measures shall be performed at properties where the Representative Dieldrin concentration is equal to or greater than 2.5 mg/kg on a dry weight basis in Soil Samples (the Identified Properties). This value of 2.5 mg/kg is the Remedial Action Level. The basis of this RAL is provided in the June 29, 2006 revised report entitled *Human Health Risk Assessment and Development of Remedial Action Levels for Cypress Creek Sub-Area III*. A copy of this report is being made available for public review at the Information Repository noted below. Upon TDEC approval of this report, a copy of TDEC's approval letter will be placed into the Information Repository.
- "Representative Dieldrin" means the arithmetic average of two or more Soil Sample test results, where more than one Soil Sample was collected and tested at a property. Where only one Soil Sample has been tested at a property, the one soil sample dieldrin concentration is the Representative Dieldrin level.
- The "Soil Samples" include the shallow (i.e., 0-3 inch, 0-9 inch or 0-12 inch depth) soil samples collected and tested by Velsicol's Memphis Environmental Center, TDEC, and the U.S. Environmental Protection Agency (EPA) and reported in the following documents:

- *Cypress Creek Drainage Channel Investigation and Preliminary Human Health Risk Evaluation*, January 10, 2002
- *Cypress Creek Sub-Area III Investigation*, October 24, 2003
- *Cypress Creek Sub-Area III 2004 Interim Measures Investigation*, January 31, 2005
- *Cypress Creek Sub-Area III 2005 Interim Measures Investigation*, October 28, 2005

Soil Samples also include those tested in other past and future residential property investigations that are approved by TDEC. This includes samples collected from residential properties as part of soil investigations directed and performed by TDEC in Cypress Creek Sub-Area IV during 2005.

The above noted documents are being made available for review by the public at an Information Repository, which is being established at the following location:

- Hollywood Branch of the Memphis Public Libraries & Information Center
1530 N. Hollywood St.
Memphis, Tennessee 38108
Phone: 901-323-6201

The documents are also available at the following public agency offices:

- Tennessee Department of Environment and Conservation
Memphis Field Office
Suite E-645 Perimeter Park
2510 Mount Moriah Road
Memphis, Tennessee 38115
Contact: Mr. Philip Davis at 901-368-7939
- Tennessee Department of Environment and Conservation
Division of Solid Waste Management
L&C Tower, 5th Floor
401 Church Street
Nashville, Tennessee 37243
Contact: Mr. Charles Burroughs at 615-532-0863
- Memphis-Shelby County Health Department
Bureau of Environmental Health Services
814 Jefferson Avenue
Memphis, Tennessee 38105
Contact: Mr. Norman LaChapelle at 901-544-7582

Corrective Measure Design Criteria

The methods and criteria to be used by the Permittee in performing the Corrective Measures at the Identified Properties follow:

- Install a protective clean soil barrier with a minimum thickness of 15 inches over contaminated soil that exceeds the RAL. The soil barrier thickness (i.e., 15 inches) may include sod. This will generally, but not always, require removal of a like thickness of contaminated soil in order to provide appropriate final grades that consider stormwater drainage and other land features.
- Install a marker between the contaminated soil and the installed protective soil barrier (i.e., at the bottom of the excavation) to indicate the depth of the protective soil barrier. Orange plastic construction fencing, or similar materials approved by TDEC that will be long lasting and visible if uncovered, will be used as the marker.
- Where more than one soil sample was used in evaluating human health risks at a property, only the portion of the property represented by samples that exceed the RAL will require Corrective Measures.
- Permittee may elect to perform additional surface soil testing and may use the results of that testing to more precisely determine the portions of properties that will require installation of the protective soil barrier. Such additional soil testing will be performed under TDEC oversight.
- Permittee may elect to perform additional soil testing of the soils left in place below the bottom of the excavation and marker to determine if the contaminant levels exceed the RAL. Such additional soil testing will be performed under TDEC oversight.
- Place, compact and prepare the protective soil barrier to re-establish landscape vegetation.
- At properties where the land to be remediated has steep surface slopes, the site restoration design will include erosion control features such as terraces, gentle surface slopes or hard surfacing, to minimize stormwater erosion of the protective soil barrier.
- Re-establish landscape vegetation, including placement of new sod on disturbed areas and planting of replacement trees, shrubs and other plants in accordance with site restoration plans developed with input from the property owner.
- Excavated contaminated soil will be trucked to the Permittee's properties at 1199 Warford Street in Memphis for consolidation utilizing the Area of Contamination

(AOC) policy as described in the EPA Region 4 guidance document entitled *Management of Contaminated Media*, dated September, 1999. Permittee has the option of performing subsequent management for treatment and disposal of the contaminated soil, subject to TDEC approval. Requirements for the design and operation of the Consolidation Area are presented in the following section.

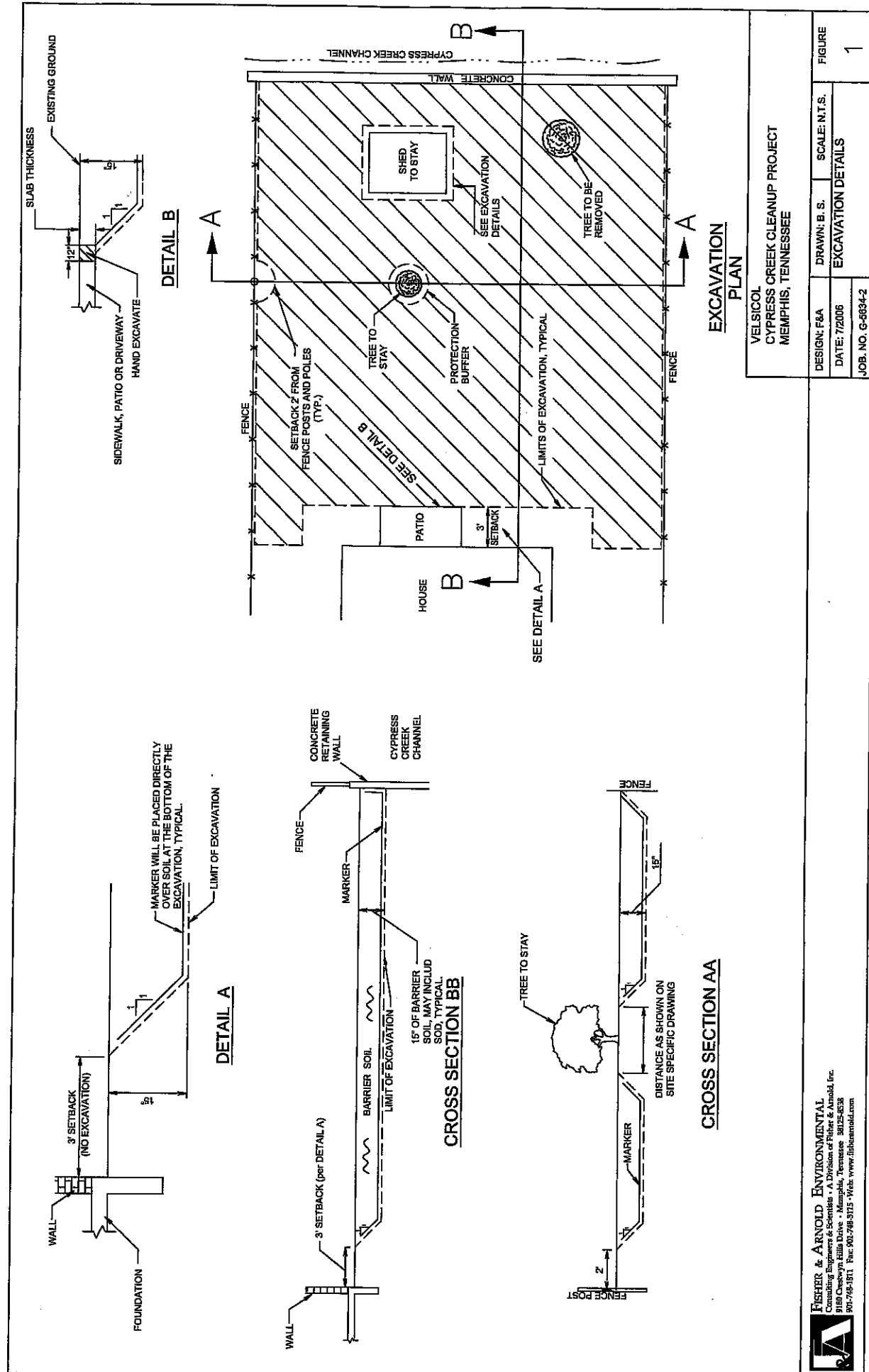
- Permittee will adhere to applicable regulations regarding methods of transporting contaminated soil via truck over public roadways.
- Perform periodic air monitoring at properties where contaminated soils are excavated to provide a measure of impacts and to provide a basis for implementing dust control measures. Watering is expected to be the primary dust control method, but other suitable methods may be used.
- Requirements for excavation setbacks from building foundations, trees and other site features, and the related protective soil barrier placement, are indicated on *Figure 1*. The building set-backs are necessary to prevent damage to structures and foundations and to avoid removing soil containing termiticides that have been applied to protect the structures. Set backs used around trees and large shrubs that are not removed (e.g. such that the trees and/or shrubs and their roots are not injured by soil excavation or soil cover) will be established by a qualified landscape designer or horticulturist.
- A copy of the May 19, 2006 *Corrective Measures Study Report for Cypress Creek Sub-Area III* (as revised on June 28, 2006), which presents an evaluation of the corrective measure design criteria, was approved by TDEC on July 11, 2006. Copies of the report and TDEC's approval letter are being placed in the Information Repository.
- If unusual site conditions are encountered during the pre-design site investigation and/or during soil excavation work, which impact the excavation and clean barrier soil placement work, Permittee may, upon TDEC review and approval, modify certain of the excavation and/or backfill requirements from those specified above.
- Prepare and submit a Corrective Measures Completion Report after completion of the work at the residential properties. TDEC will review the reports to determine if Permittee completed the Corrective Measures in accordance with Permit requirements. TDEC's approval of the Corrective Measures Completion Reports will confirm that the Permittee has completed the Final Remedy for each Identified Property.

Consolidation Area

- Construct, operate and maintain one or more soil consolidation cells to provide for controlled human contact with the contaminated soil and to prevent releases to the environment by wind or stormwater erosion.
- The consolidation cell design will be provided to TDEC for review and approval prior to construction.
- The consolidation cells will be located on the Permittee's properties at 1199 Warford St. in Memphis. These properties include the manufacturing plant site and an approximately 14-acre outlying property, which is located to the west of the manufacturing plant site.
- Permittee may elect to add oxygen release compound (ORC) to the soil as it is placed into the consolidation area.
- Upon completion of the filling phase, install a cover that is designed to minimize rainwater infiltration into and through the contaminated soil. The cover will be composed of compacted soil and/or a membrane liner, as approved by TDEC.
- Inspect the Consolidation Area(s) on a monthly basis and maintain a log to document the inspections.
- Maintain a secure fence around the Consolidation Area(s) and control access. The fence and security systems currently used for the main manufacturing plant site is considered to be adequate for soil consolidation cells constructed within the fenced area.

Inclusion of Interim Measures Performed by Permittee During 2005

- The remedial methods and criteria used by the Permittee in performing the Interim Measures at 1978 Edward Ave., 1984 Edward Ave., and 2478 Vollintine Cove during 2005 meet or exceed the preceding Corrective Measure Design Criteria. Therefore, the Permittee's Interim Measures work at those properties will be considered to fulfill these Final Remedy requirements upon TDEC approval of the Permittee's Interim Measures Completion Report on the corrective action work that has been completed at those properties.



FISHER & ARNOLD ENVIRONMENTAL
 Consulting Engineers & Scientists • A Division of Fisher & Arnold, Inc.
 9180 Cleetwood, Hills Drive • Memphis, Tennessee 38125-6538
 901-765-1511 Fax: 901-748-5715 • Web: www.fishern Arnold.com

DESIGN: F&A	DRAWN: B. S.	SCALE: N.T.S.	FIGURE 1
DATE: 7/20/08	EXCAVATION DETAILS		
JOB NO. G-5634-2			

SEND COMPLETED

FORM TO:
The Appropriate State or
EPA Regional Office.

United States Environmental Protection Agency

RCRA SUBTITLE C SITE IDENTIFICATION FORM

1. Reason for
Submittal
(See Instructions
on page 14.)

MARK ALL BOX(ES)
THAT APPLY

Reason for Submittal:

- To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities)
- To provide Subsequent Notification of Regulated Waste Activity (to update site identification information)
- As a component of a First RCRA Hazardous Waste Part A Permit Application
- As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____)
- As a component of the Hazardous Waste Report

2. Site EPA ID
Number (page 15)

EPA ID Number

TINID11010171102141616141

3. Site Name
(page 15)

Name:

Velsicol Chemical Corporation

4. Site Location
Information
(page 15)

Street Address:

1199 Warford Street

City, Town, or Village:

Memphis

State:

Tenn.

County Name:

Shelby

Zip Code:

38108

5. Site Land Type
(page 15)

Site Land Type:

- Private
- County
- District
- Federal
- Indian
- Municipal
- State
- Other

6. North American
Industry
Classification
System (NAICS)
Code(s) for the Site
(page 15)

A.

13121511991

B.

C.

D.

7. Site Mailing
Address
(page 16)

Street or P. O. Box:

Same as item 4

City, Town, or Village:

State:

Country:

8. Site Contact
Person
(page 16)

First Name:

Steve

MI: M

Zip Code:

Last Name:

Wallace

Phone Number:

901-320-0293

Extension:

Email address:

swallace@velsicol.com

9. Operator and
Legal Owner
of the Site
(pages 16 and 17)

A. Name of Site's Operator:

Velsicol Chemical Corporation

Date Became Operator (mm/d/yyyy):

12/12/1986

Operator Type:

- Private
- County
- District
- Federal
- Indian
- Municipal
- State
- Other

B. Name of Site's Legal Owner:

True Specialty Corporation

Date Became Owner (mm/d/yyyy):

10/01/2005

Owner Type:

- Private
- County
- District
- Federal
- Indian
- Municipal
- State
- Other

EPA ID NO: TIN D1101017110121411616141

OMB#: 2050-0034 Expires 11/30/2005

9. Legal Owner (Continued) Address	Street or P. O. Box: <u>10400 W. Higgins Rd., Suite 600</u>
	City, Town, or Village: <u>Rosemont</u>
	State: <u>ILLINOIS</u>
	Country: <u>USA</u>
Zip Code: <u>60018</u>	

10. Type of Regulated Waste Activity
Mark "Yes" or "No" for all activities; complete any additional boxes as instructed. (See instructions on pages 18 to 21.)

A. Hazardous Waste Activities

Complete all parts for 1 through 6.

1. Generator of Hazardous Waste
If "Yes", choose only one of the following - a, b, or c.
- a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.) of non-acute hazardous waste; or
 - b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.) of non-acute hazardous waste; or
 - c. CESQG: Less than 100 kg/mo (220 lbs./mo.) of non-acute hazardous waste

In addition, indicate other generator activities.

- d. United States Importer of Hazardous Waste
- e. Mixed Waste (hazardous and radioactive) Generator

- 2. Transporter of Hazardous Waste
- 3. Treater, Storer, or Disposer of Hazardous Waste (at your site) Note: A hazardous waste permit is required for this activity.
- 4. Recycler of Hazardous Waste (at your site)
- 5. Exempt Boiler and/or Industrial Furnace
If "Yes", mark each that applies.
 - a. Small Quantity On-site Burner Exemption
 - b. Smelting, Melting, and Refining Furnace Exemption
- 6. Underground Injection Control

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste (accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste generated and/or accumulated at your site. If "Yes", mark all boxes that apply:

	Generate	Accumulate
a. Batteries	<input type="checkbox"/>	<input type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>
c. Thermostats	<input type="checkbox"/>	<input type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>
e. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>

2. Destination Facility for Universal Waste
Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

Mark all boxes that apply.

- 1. Used Oil Transporter
If "Yes", mark each that applies.
 - a. Transporter
 - b. Transfer Facility
- 2. Used Oil Processor and/or Re-refiner
If "Yes", mark each that applies.
 - a. Processor
 - b. Re-refiner
- 3. Off-Specification Used Oil Burner
- 4. Used Oil Fuel Marketer
If "Yes", mark each that applies.
 - a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
 - b. Marketer Who First Claims the Used Oil Meets the Specifications

EPA ID NO: TIN D110101711012411616141

OMB#: 2050-0034 Expires 11/30/2005

11. Description of Hazardous Wastes (See instructions on page 22.)

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001	D002	D003	D006	D007	D009	D010
D012	D018	D019	D020	D021	D022	D031
D032	D033	D034	D039	D040	F003	F005

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes.

NA						

12. Comments (See instructions on page 22.)

11 - P028, P051, P059, U036, U130

13. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all operator(s) and owner(s) must sign (see 40 CFR 270.10 (b) and 270.11). (See instructions on page 22.)

Signature of operator, owner, or an authorized representative	Name and Official Title (type or print)	Date Signed (m/m/dd/yyyy)
<u>Charles R. Hanson</u>	<u>Charles R. Hanson</u> <u>Vice President</u> <u>Environmental, Health & Safety</u>	<u>7/19/06</u>

EPA ID NO: 1TND110171102416141

OMB #: 2050-0034 Expires 11/30/2005

United States Environmental Protection Agency

HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See instructions on page 23)

First Name: Same as Site Contact MI: Last Name: Phone Number: Phone Number Extension:

2. Facility Permit Contact Mailing Address (See instructions on page 23)

Street or P.O. Box: Same as Site Contact
 City, Town, or Village: State: Country: Zip Code:

3. Operator Mailing Address and Telephone Number (See instructions on page 23)

Street or P.O. Box: 10400 W. Higgins Road
 City, Town, or Village: Rosemont
 State: Illinois
 Country: USA Zip Code: 60018 Phone Number: 847-298-9000

4. Legal Owner Mailing Address and Telephone Number (See instructions on page 23)

Street or P.O. Box: 10400 W. Higgins Road
 City, Town, or Village: Rosemont
 State: Illinois
 Country: USA Zip Code: 60018 Phone Number: 847-298-9000

5. Facility Existence Date (See instructions on page 24)

Facility Existence Date (mm/dd/yyyy): 1948

6. Other Environmental Permits (See instructions on page 24)

A. Permit Type (Enter code)	B. Permit Number	C. Description
<u>E</u>	<u>N-053-153</u>	<u>City Sewer Discharge Agreement</u>
<u>E</u>	<u>0367-01TV</u>	<u>MSCHD Air Permit - Incinerator</u>
<u>E</u>	<u>0367-01P</u>	<u>MSCHD Air Permit - Chlorendic Anhydride</u>
<u>E</u>	<u>0367-01B</u>	<u>MSCHD Air Permit - Boiler</u>
<u>E</u>	<u>0367-04B</u>	<u>MSCHD Air Permit - Process Heat</u>

Nature of Business (Provide a brief description; see instructions on page 24)

Velsicol manufactures chemicals including, but not limited to, Hexachlorocyclopentadiene, chlorendic anhydride and muriatic acid.

EPA ID NO: TN D 110101710241614

OMB #: 2050-0034 Expires 11/30/2005

8. Process Codes and Design Capacities (See instructions on page 24) - Enter information in the Sections on Form Page 3.

A. PROCESS CODE - Enter the code from the list of process codes in the table below that best describes each process to be used at the facility. Fifteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), enter the process information in Item 9 (including a description).

B. PROCESS DESIGN CAPACITY - For each code entered in Section A, enter the capacity of the process.

1. AMOUNT - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.

2. UNIT OF MEASURE - For each amount entered in Section B(1), enter the code in Section B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
D79	<u>Disposal:</u> Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	<u>Treatment (continued):</u> Cement Kiln	For T81-T93:
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure in Code Table Below	T86	Blast Furnace	
S01	<u>Storage:</u> Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T87	Smelting, Melting, or Refining Furnace	Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide	
S03	Waste Pile	Cubic Yards or Cubic Meters	T89	Chloride Oxidation Reactor	
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T90	Methane Reforming Furnace	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T91	Pulping Liquor Recovery Furnace	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T92	Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid	
S99	Other Storage	Any Unit of Measure in Code Table Below	T93	Halogen Acid Furnaces	
T01	<u>Treatment:</u> Tank Treatment	Gallons Per Day; Liters Per Day	T94	Other Industrial Furnaces Listed In 40 CFR §260.10	
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	X01	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Ton Per Day; Kilograms Per Hour; Metric Ton Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	X02	Miscellaneous (Subpart X): Open Burning/Open Detonation	Any Unit of Measure in Code Table Below
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour	X03	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour or Gallons Per Day
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X04	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
			X09	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
				Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons.....	G
Gallons Per Hour.....	E
Gallons Per Day.....	U
Liters.....	L
Liters Per Hour.....	H
Liters Per Day.....	V

UNIT OF MEASURE	UNIT OF MEASURE CODE
Short Tons Per Hour.....	D
Metric Tons Per Hour.....	W
Short Tons Per Day.....	N
Metric Tons Per Day.....	S
Pounds Per Hour.....	J
Kilograms Per Hour.....	R
Million Btu Per Hour.....	X

UNIT OF MEASURE	UNIT OF MEASURE CODE
Cubic Yards.....	Y
Cubic Meters.....	C
Acres.....	B
Acre-feet.....	A
Hectares.....	Q
Hectare-meter.....	F
Btu Per Hour.....	I

EPA ID NO: TINID110101711012141161614

OMB #: 2050-0034 Expires 11/30/2005

8. Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	For Official Use Only
	(1) Amount (Specify)	(2) Unit of Measure (Enter code)					
X 1	S	0	2	5 3 3 . 7 8 8	G	0 0 1	
1	S	0	1	19.250	G	0 0 1	
2							
3							
4							
5							
6							
7							
8							
9							
1 0							
1 1							
1 2							
1 3							
1 4							
1 5							

NOTE: If you need to list more than 15 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.

Other Processes (See instructions on page 25 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)

Line Number (Enter #s in sequence with Item 8)	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	D. Description of Process
	(1) Amount (Specify)	(2) Unit of Measure (Enter code)					
X 2	T	0	4	1 0 0 . 0 0 0	U	0 0 1	In-situ Vitrification
				NA			

EPA ID NO: TND 11 007 11 02 4 1 664

OMB #: 2050-0034 Expires 11/30/2005

Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5 a, etc.)

Line Number	A. EPA Hazardous Waste No. (Enter code)		B. Estimated Annual Quantity of Waste		C. Unit of Measure (Enter code)	D. PROCESSES	
	1	D 0	0	1		(1) PROCESS CODES (Enter code)	(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
				1,000,000	P	S 0 1	
2	D 0	0 2	3,500,000		P	S 0 1	
3	D 0	0 3	3,500,000		P	S 0 1	
4	D 0	0 4	<100,000		P	S 0 1	
5	D 0	0 5	<100,000		P	S 0 1	
6	D 0	0 6	<100,000		P	S 0 1	
7	D 0	0 7	<100,000		P	S 0 1	
8	D 0	0 8	<100,000		P	S 0 1	
9	D 0	0 9	<100,000		P	S 0 1	
1 0	D 0	1 0	<100,000		P	S 0 1	
1 1	D 0	1 1	<100,000		P	S 0 1	
1 2	D 0	1 2	<100,000		P	S 0 1	
1 3	D 0	1 3	<100,000		P	S 0 1	
1 4	D 0	1 4	<100,000		P	S 0 1	
1 5	D 0	1 5	<100,000		P	S 0 1	
1 6	D 0	1 6	<100,000		P	S 0 1	
1 7	D 0	1 7	<100,000		P	S 0 1	
1 8	D 0	1 8	1,000,000		P	S 0 1	
1 9	D 0	1 9	1,000,000		P	S 0 1	
2 0	D 0	2 0	<100,000		P	S 0 1	
2 1	D 0	2 1	<100,000		P	S 0 1	
2 2	D 0	2 2	1,000,000		P	S 0 1	
2 3	D 0	2 3	<100,000		P	S 0 1	
2 4	D 0	2 4	<100,000		P	S 0 1	
2 5	D 0	2 5	<100,000		P	S 0 1	
2 6	D 0	2 6	<100,000		P	S 0 1	
2 7	D 0	2 7	<100,000		P	S 0 1	
2 8	D 0	2 8	<100,000		P	S 0 1	
2 9	D 0	2 9	<100,000		P	S 0 1	
3 0	D 0	3 0	<100,000		P	S 0 1	
3 1	D 0	3 1	<100,000		P	S 0 1	
3 2	D 0	3 2	3,500,000		P	S 0 1	
3 3	D 0	3 3	<100,000		P	S 0 1	

EPA ID NO: TN D 007 1024 664

OMB #: 2050-0034 Expires 11/30/2005

Description of Hazardous Wastes (Continued. Use this Additional Sheet(s) as necessary; number as 5 a, etc.)

Line Number	A. EPA Hazardous Waste No. (Enter code)			B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	E. PROCESSES		
	(1) PROCESS CODES		(2) PROCESS DESCRIPTION					
0	D	0	3 4	<100,000	P	S	0 1	E(1)
	D	0	3 5	<100,000	P	S	0 1	
	D	0	3 6	<100,000	P	S	0 1	
	D	0	3 7	<100,000	P	S	0 1	
	D	0	3 8	<100,000	P	S	0 1	
	D	0	3 9	2,000,000	P	S	0 1	
	D	0	4 0	<100,000	P	S	0 1	
	D	0	4 1	<100,000	P	S	0 1	
	D	0	4 2	<100,000	P	S	0 1	
	D	0	4 3	<100,000	P	S	0 1	
	F	0	0 1	<100,000	P	S	0 1	
	F	0	0 2	<100,000	P	S	0 1	
	F	0	0 3	<100,000	P	S	0 1	
	F	0	0 4	<100,000	P	S	0 1	
	F	0	0 5	<100,000	P	S	0 1	
	F	0	2 4	<100,000	P	S	0 1	
	F	0	2 5	<100,000	P	S	0 1	
	F	0	3 9	<100,000	P	S	0 1	
	K	0	0 9	Through K030				
				<100,000	P (ea)	S	0 1	
	K	0	8 3	<100,000	P	S	0 1	
	K	0	8 5	<100,000	P	S	0 1	
	K	0	9 3	Through K 096				
				<100,000	P (ea)	S	0 1	
	K	1	0 3	Through K 118				
				<100,000	P (ea)	S	0 1	
	K	1	3 6	<100,000	P	S	0 1	
	K	1	4 0	<100,000	P	S	0 1	
	K	1	4 9	Through K 151				
				<100,000	P	S	0 1	
	A	L	L	P-Codes				
				<100,000	P (ea)	S	0 1	

Continued

Form

50 of 1

11. Map (See instructions on pages 25 and 26)

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

12. Facility Drawing (See instructions on page 26)

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

13. Photographs (See instructions on page 26)

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

14. Comments (See instructions on page 26)

b.	Permit Type (code)	Permit Number	Description
	R	TNHW-026	Irrigator RCRA Part E
	R	TN-010	RCRA HSWA Permit
	F	0367-01T	MSCHD Air Permit - Storage
	E	0367-04P	MSCHD Air Permits-PCL Tanks
	E	0367-09P	MSCHD Air Permit - Benzyl Alcohol
	E	0367-02P	MSCHD Air Permit - PCL Bottoms
	E	0367-07P	Drumming MSCHD Air Permit - PG
	E	0367-010P	Dicyclopentadiene MSCHD Air Permit - Corrective Action

10.b. Figures in column B are not additive due to the fact that many waste streams carry more than one waste code number. Also, waste code numbers assigned to a given waste stream may change over time as a result of waste re-analyses. All figures in Column B are approximate and are based on the waste codes assigned to waste streams on the date of this application.

CONTINGENCY PLAN

Overview

This Contingency Plan represents procedures and equipment maintained by the Velsicol Chemical Corporation, Memphis, Tennessee, to respond to hazardous situations related to generation, treatment, and storage of hazardous waste.

Responses to the emergencies involving hazardous waste will be supervised by the Emergency Coordinator. The Emergency Coordinator will have the ultimate authority and responsibility for the following:

1. Determining if the emergency involves a spill or release of a "reportable quantity" of material.
2. Assessing the immediate threat to the environment or human health.
3. Determining when to initiate notification procedures to other agencies.
4. Ensuring that the proper clean up equipment and procedures are available.
5. Providing assistance, personnel, and equipment to generate a spill response.

Specific individuals responsible for emergency response are identified in this plan. Specific methods of response to spills, fires, and industrial accidents involving hazardous wastes are given. Emergency and protective equipment are also described.

General Information

The Velsicol Chemical Corporation hazardous waste storage facility is owned by Velsicol Chemical Corporation and is located at 1199 Warford Street, Memphis, Tennessee. Refer to maps and drawings located in Appendix 6-1 for the location of the hazardous waste storage area located inside the plant.

Emergency Coordinators

In an emergency, contact the Emergency Coordinator listed below:

Utilities / Incinerator Supervisor (**Ali Toutio**) Emergency Coordinator:
Office Telephone: (901) 320-0258
Home Telephone: (901) 380-9516
Address: 2418 Genwood Street
Memphis, TN 38134

Plant Manager (**Ron Loving**), Assistant Emergency Coordinator:
Office Telephone: (901) 320-0215
Cell phone: (901) 277-0736
Address: 10220 Mackwood Drive
Lakeland, TN 38002

Shift Supervisor (**Johnny Donald**), Assistant Emergency Coordinator
Office Telephone: (901) 320-0260
Home Telephone: (901) 565-7521
Address: 5111 Aureen Drive
Memphis, TN 38028

These addresses are located in Shelby County and are less than a 20-minute drive from the facility.

The individuals listed as Emergency Coordinators have the authority to commit necessary Velsicol resources and have been trained in emergency response. Authority is also given to stop any plant operation or process needed to ensure that fire, explosions or releases do not occur, reoccur, or spread.

Implementation Criteria

The Contingency Plan must be implemented under the following circumstances:

1. **Fire/Explosion**
 - a. Fire causes releases of toxic fumes;
 - b. Fire spreads beyond area of ignition;
 - c. Fire threatens off-site areas;
 - d. Fire fighting agents result in contaminated run-off;
 - e. Immediate threat of explosion.

2. **Spills/Leaks**
 - a. Fire hazards exist due to spilled material;
 - b. Toxic fumes hazards exists;
 - c. Ground water may be threatened;
 - d. Spill threatens property other than hazardous waste storage building or area;
 - e. Spill threatens surface waters.

3. **Destructive Weather**
 - a. Destructive weather threatens hazardous waste storage areas or buildings;
 - b. Potential for surface contamination.

Emergency Response Procedure

In the event of a potential emergency situation involving hazardous waste, report immediately to the Boiler House Engineer at the boiler house, telephone #222, and give the following information:

- Name of party reporting the fire or emergency;
- Type of fire: grass fire, structural fire, chemical fire, chemical reaction fire, decomposition fire, or electrical fire;
- Exact location of fire or emergency;
- Hang up last;
- The Boiler Engineer will then activate the Emergency Alarm System Notification.

Reporting Procedures

1. Reporting Procedures for Spills
2. Classification of Spills
 - A. In-Plant
 - i. Liquid spills, contained and non-contained from vessels, drums or process equipment.
 - ii. Vapor releases, fire, explosion, relief valves, etc.
 - iii. Spills associated with loading or unloading of tank trucks or railcars, or leaking truck/railcars within plant boundaries.
 - B. In Transit (leaking drums, tank truck or railcar outside of plant boundaries)
3. Reporting Procedures
 - A. The Area Production Supervisor or Shift Supervisor is to be notified immediately after a spill has occurred either in-plant or in transit. Phone: (901) 324-4401 ext. 241.
 - B. In case of an in-plant spill, the Area Supervisor or Shift Supervisor will take immediate action to prevent further spill discharge. He or she will then notify one of the following:
 - i. Utilities/Incinerator Supervisor – Ali Toutio, ext. 258.
Home: 901-380-9516.
 - ii. Plant Manager – Ron Loving , ext. 215.
Cell: 277-0736
 - iii. In case of fire or explosion, the Shift Supervisor will also immediately call the following: Memphis Fire Department - 911
 - C. If a liquid spill reaches Cypress Creek, the contacted individual in Section B will notify the following:
 - i. National Response Center: (800) 424-8802.
 - ii. POTW: 353-2392.
 - iii. Shelby County Health Department: 576-7600.
 - iv. Tennessee Division of Water Quality Control: 543-6695.
 - v. Tennessee Emergency Management Agency: (800) 262-3300.
 - D. If a liquid release occurs that impacts off-site, or the liquid release is a RQ, the contacted individual in Section B will notify the following:
 - i. National Response Center: (800) 424-8802.
 - ii. POTW: 353-2392 (only if chemical sewer is affected).
 - iii. Shelby County Health Department: 576-7600.
 - iv. Tennessee Emergency Management Agency: (800) 262-3300.
 - v. DIER Group (Channel 2 on radios) only if off-site impact.

- E. If vapor release occurs that impacts off-site, or the vapor release is a RQ, the contacted person in Section B will notify the following:
 - i. Shelby County Health Department, Air Pollution: 576-7775
 - ii. National Response Center: (800) 424-8802.
 - iii. Tennessee Emergency Management Agency: (800) 262-3300.
 - iii. DIER Group - Channel 2 on Velsicol's radio system.

- F. Information that needs to be supplied by the Area Supervisor when making the initial contact:
 - i. Location of spill.
 - ii. Material spilled.
 - iii. Date, time, and duration of spill.
 - iv. Nature and cause of spill.
 - v. Amount spilled.
 - vi. Action taken to contain and clean up spill.
 - vii. Where spill material went.

Procedure for Handling Small Releases

In the event of a small release (example, small spill), the leak will be immediately stopped and steps taken to clean up the spill. On most liquid spills at the Memphis plant, absorbent pads are used to absorb and clean up with. Personal protective equipment is always used when cleaning up any spill. A determination is made by the supervisor in charge as to whether the material to be cleaned up is hazardous or non-hazardous waste. Material which is known or suspected to be hazardous is drummed into 55-gallon waste drums, labeled and dated.

Identifying Types of Waste

The Emergency Coordinator will determine the exact source of the waste involved in the emergency and determine the type of waste involved and the area threatened.

PUBLIC NOTICE

REQUEST TO MODIFY HAZARDOUS WASTE PERMIT VELSICOL CHEMICAL CORPORATION, MEMPHIS FACILITY

PLEASE TAKE NOTICE that Velsicol Chemical Corporation (VCC), 1199 Warford St., Memphis, Tennessee 38108, as the holder of Hazardous Waste Permit No. TNHW-109, has submitted a request to the Tennessee Department of Environment and Conservation (TDEC) seeking a Class 3 Modification to that Permit. The modification will establish requirements for remediation of environmental contamination at residential properties along Cypress Creek in north central Memphis, Tennessee.

During the sixty (60) day public comment period following the publication of this notice, beginning July 15 and ending September 13, 2006, any interested party may submit written comments on the requested permit modification. Persons wishing to comment are invited to submit comments in writing to TDEC, Attn: Ms. Angela Ivory, L&C Tower, 401 Church Street, Nashville, Tennessee 37243, telephone: (615) 532-9267.

A public meeting will be held at 6:00 p.m. on August 10, 2006 at the Hollywood Community Center at 1560 N. Hollywood St. Memphis, Tennessee 38108. Information on the proposed modification will be presented and opportunities for asking questions and submitting comments to Velsicol and TDEC will be provided at this meeting.

Further information on this matter may be obtained by contacting Angela Ivory of TDEC or Mr. Gary Hermann, Cypress Creek Project Manager, at Velsicol's Memphis Environmental Center: (901) 380-9995, ext. 120.

An Information Repository has been established at the following location, where copies of the modification request and supporting documents may be reviewed and copied:

- Hollywood Branch of the Memphis Public Libraries & Information Center
1530 N. Hollywood St.
Memphis, Tennessee 38108
Phone: 901-323-6201

The documents are also available at the following public agency offices:

- Tennessee Department of Environment and Conservation
Memphis Field Office
Suite E-645 Perimeter Park
2510 Mount Moriah Road
Memphis, Tennessee 38115
Contact: Mr. Philip Davis at 901-368-7939

- Tennessee Department of Environment and Conservation
Division of Solid Waste Management
L&C Tower, 5th Floor
401 Church Street
Nashville, Tennessee 37243
Contact: Mr. Charles Burroughs at 615-532-0863
- Memphis and Shelby County Health Department
814 Jefferson Avenue
Memphis, Tennessee 38105
Contact: Mr. Norman LaChapelle at 901-544-7582

The permittee's compliance history during the life of the permit being modified is available from Ms. Angela Ivory, the TDEC contact person.

NOTICE DATE: July 15, 2006