

APPLICATION FOR FEDERALLY
ENFORCEABLE STATE OPERATING
PERMIT
SOIL VAPOR EXTRACTION (SVE) SYSTEM
WITH REGENERATIVE THERMAL
OXIDIZER (RTO)

Roxana Illinois
Source ID 119090AAO

Permit Application Number 11060036

Prepared for
Shell Oil Products U.S.

April 11, 2012

Prepared by



URS Corporation
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St. Louis, MO 63110
(314) 429-0100
Project #21562735

TABLE OF CONTENTS

SECTION 1	Project Summary and Requested Permit Limits
SECTION 2	Illinois EPA Application Forms and Supporting Documentation
Forms	
200-CAAPP	Application for CAAPP Permit
215-CAAPP	Hazardous Air Pollutant Emission Summary
220-CAAPP	Process Emission Unit
232-CAAPP	Storage Tank
260-CAAPP	Air Pollution Control Equipment
260B-CAAPP	Air Pollution Control Equipment – Afterburner
287-CAAPP	Incorporate by Reference
292-CAAPP	Fee Determination for CAAPP Permit
296-CAAPP	Compliance Certification
299-CAAPP	Listing of Significant Activities
Figures	
Figure 1	Facility Location Map
Figure 2	SVE Process Diagram
Exhibits	
Exhibit 220-6a	RTO HAPs Emissions
Exhibit 220-6b	RTO Other Volatile Organic Matter (VOM) Emissions
Exhibit 220-5	Potential RTO Criteria Pollutants Emissions
Exhibit 232-1	Soil Vapor Extraction System Calculated Storage Tank Emissions
Exhibit 200-A	Emissions Totals
Exhibit 200-B	Soil Vapor Extraction System Process Description

Shell Oil Products US (SOPUS) installed a soil vapor extraction system at the Roxana Site in 2011 as shown in **Figure 1** (Source ID 119090AAO/Permit Application Number 11060036). The system uses a 15 horsepower (hp) blower/motor to pull vacuum from extraction wells located in the Village of Roxana and at the WRB Refining LP Wood River Refinery located in Roxana, Illinois to extract soil vapor. The system is equipped with two 240-gallon knockout tanks, a regenerative thermal oxidizer (RTO) unit, two water pumps, and two 629-gallon storage tanks, as shown in **Figure 2**.

The blower will develop the vacuum necessary to extract and convey the soil vapor to the two knockout tanks, where the soil vapor and condensate/water will be separated. The vapor will then be conveyed by vacuum to the RTO unit for destruction of hydrocarbon constituents. The hydrocarbon destruction efficiency range for the RTO is between 96 - 99 percent. The condensate/water is conveyed by water pumps to holding tanks for subsequent transport and treatment/discharge. The holding tanks for the condensate/water consist of two stainless steel above-ground storage tanks (AST). The tanks are approximately four feet in diameter and six feet in length with a maximum capacity of 629 gallons. The tanks will be kept under ambient conditions and will not be pressurized. Each tank is equipped with a two-inch diameter vent that vents to the atmosphere.

The SVE with RTO has been designed to automatically shut down in the event of system malfunctions. If the RTO malfunctions, the vacuum will be cut off and the entire system will shut down.

Hazardous Air Pollutant (HAP) and other Volatile Organic Matter (VOM) Emissions

Based on flow and constituent data collected during the start-up and shake-down period conducted in January and February 2012 the maximum potential hazardous air pollutants (HAPs) emission rate is calculated at 9.40E-01 tons per year (tons/yr) (**Exhibit 220-6a**). The maximum combined emission rate for all other volatile organic matter (VOM) is calculated at 2.06 tons/yr (**Exhibit 220-6b**). Other criteria pollutant emissions (those associated with combustion) will be less than major source thresholds. **Exhibit 220-5** provides the potential criteria pollutant emissions. Condensate/water has not been generated during the operation of the SVE System; however, there is a potential that condensate/water containing VOM can accumulate in the storage tanks from SVE operations. Groundwater data collected from the Roxana Interim Groundwater Program were utilized to calculate potential emissions from the two 629-gallon

storage tanks. The estimated potential emissions from the condensate/water tanks is calculated at 3.06E-07 lbs/yr (**Exhibit 232-1**). Combined emissions estimates from the SVE system (RTO and condensate/water storage tanks) for VOM are included in **Exhibit 200-A**.

Requested Permit Conditions

SOPUS respectfully requests that the operating permit for the SVE system contain the following conditions.

- Annual VOM emissions shall not exceed 24.9 tons per year.
- Annual emissions of any one HAP shall not exceed 7.9 tons per year.
- Annual total HAP emissions shall not exceed 19.9 tons per year.

These requested limits are intended to allow for the installation of additional extraction wells, if needed. If additional extraction wells are added, the HAP and VOM inlet mass to the RTO may increase. The requested limits would allow for that possibility without triggering the thresholds that would require special IEPA processing of the permit application.





FOR APPLICANT'S USE

Revision #: _____
 Date: ____ / ____ / ____
 Page ____ of ____
 Source Designation: _____

APPLICATION FOR CAAPP PERMIT (CHECK ONLY ONE) <input checked="" type="checkbox"/> INITIAL APPLICATION <input type="checkbox"/> RENEWAL APPLICATION	FOR AGENCY USE ONLY	
	ID NO.:	
	PERMIT NO.:	
DATE:		

SECTION ONE		SOURCE INFORMATION	
1) SOURCE NAME: Soil Vapor Extraction System			
2) SOURCE ID NO.: 119090AAO		3) DATE FORM PREPARED: 04 / 03 / 2012	

SECTION TWO		INSTRUCTIONS IN BRIEF	
1) COMPLETE THE FOLLOWING FORM WHEN APPLYING FOR AN INITIAL OR RENEWAL CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT.			
2) A REQUEST TO MODIFY A CAAPP PERMIT SHOULD BE COMPLETED USING FORM 271-CAAPP "APPLICATION FOR MODIFICATION TO A CAAPP PERMIT".			
3) THIS FORM PROVIDES APPLICATION AND SOURCE CONTACT INFORMATION TO THE AGENCY AS WELL AS ACTS AS A WORKSHEET FOR QUICKLY ASSESSING WHETHER THE CAAPP APPLICATION IS ADMINISTRATIVELY AND TECHNICALLY COMPLETE.			
4) FESOP REQUESTS SHOULD COMPLETE THIS FORM, MARKING SECTION FOUR APPROPRIATELY.			
5) REFER TO CAAPP 200 INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.			

SECTION THREE		SOURCE AND CONTACT INFORMATION	
SOURCE INFORMATION			
1) SOURCE NAME: Soil Vapor Extraction System		2) DATE FORM COMPLETED: 04/03/2012	
3) SOURCE STREET ADDRESS: WRB Refinery Near Intersection of Chaffer & 8th Streets			
4) CITY: Roxana		5) ZIP: 62084	
6) IS THE SOURCE LOCATED WITHIN CITY LIMITS?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
7) TOWNSHIP NAME: Wood River		8) COUNTY: Madison	
		9) TYPICAL NO. OF EMPLOYEES AT THE SOURCE: One to three	
10) ILLINOIS AIR POLLUTION SOURCE ID NO. (IF KNOWN): 119090AAO		11) FEDERAL EMPLOYER IDENTIFICATION NO. (FEIN): 52-2074528	
12) TYPE OF SOURCE AND PRODUCTS PRODUCED: Treatment of contaminated soil vapor. Product is treated exhaust.			

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE _____

FOR APPLICANT'S USE

13) PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CATEGORY: 562910		14) PRIMARY SIC NO.: NA
15a) LATITUDE (DD:MM:SS): 38.8419298		b) LONGITUDE (DD:MM:SS): -90.0763971
16a) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):
17a) COORDINATE METHOD:	b) REFERENCE LOCATION:	c) COORDINATE ACCURACY: Address Level
18) SOURCE ENVIRONMENTAL CONTACT PERSON: Jennifer Mumper		19a) CONTACT PERSON'S TELEPHONE NO.: 314-743-4178
19b) CONTACT PERSON'S E-MAIL ADDRESS: jennifer.mumper@urs.com		

OWNER INFORMATION		
20) NAME: Shell Oil Products US		
21) ADDRESS: 17 Junction Dr., PMB 399		
22) CITY: Glen Carbon	23) STATE: Illinois	24) ZIP: 62034
25) OWNER'S AGENT (IF APPLICABLE): Kevin E. Dyer		

OPERATOR INFORMATION		
26) NAME: URS Corporation		
27) ADDRESS: 1001 Highlands Plaza Drive West		
28) CITY: St. Louis	29) STATE: Missouri	30) ZIP: 63110

BILLING INFORMATION		
31) NAME: Same as owner		
32) ADDRESS:		
33) CITY:	34) STATE:	35) ZIP:

APPLICATION PAGE _____

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36) CONTACT PERSON:	37) CONTACT PERSON'S TELEPHONE NO.:
38) CONTACT PERSON'S E-MAIL ADDRESS:	

APPLICANT INFORMATION			
39) WHO IS THE PERMIT APPLICANT? (CHECK ONE):	<input checked="" type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR	40) ALL CORRESPONDENCE TO: (CHECK ONE)	<input checked="" type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR <input type="checkbox"/> SOURCE
41) ATTENTION NAME AND/OR TITLE FOR WRITTEN CORRESPONDENCE: Kevin Dyer, Principal Program Manager			
42) TECHNICAL CONTACT PERSON FOR APPLICATION: Jennifer Mumper		43) CONTACT PERSON'S TELEPHONE NO.: 314-743-4178	
44) CONTACT PERSON'S E-MAIL ADDRESS: jennifer.mumper@urs.com			

SECTION FOUR		PERMIT STATUS	
WHY IS THE APPLICANT APPLYING FOR A CAAPP PERMIT?			
1	<p>THE POTENTIAL TO EMIT ONE OR MORE CRITERIA AIR POLLUTANT FOR THE SOURCE IS 100 TONS/YEAR OR GREATER? THE POTENTIAL TO EMIT HAZARDOUS AIR POLLUTANTS FOR THE SOURCE IS MORE THAN 10 TONS OF A SINGLE HAZARDOUS AIR POLLUTANT OR 25 TONS OF COMBINED HAZARDOUS AIR POLLUTANTS? CHECK ALL THAT APPLY.</p> <p><input type="checkbox"/> CARBON MONOXIDE (CO) <input type="checkbox"/> NITROGEN OXIDES (NOx)</p> <p><input type="checkbox"/> PARTICULATE 10 MICROMETERS (PM10) <input type="checkbox"/> PARTICULATE MATTER (PART)</p> <p><input type="checkbox"/> PARTICULATE 2.5 MICROMETERS (PM2.5) <input type="checkbox"/> SULFUR DIOXIDE (SO2)</p> <p><input checked="" type="checkbox"/> VOLATILE ORGANIC MATERIAL (VOM) <input checked="" type="checkbox"/> SINGLE HAZARDOUS AIR POLLUTANT</p> <p><input type="checkbox"/> COMBINED HAZARDOUS AIR POLLUTANT <input type="checkbox"/> OTHER (SPECIFY): _____</p>		
		YES	NO
2	THE SOURCE IS AN AFFECTED SOURCE FOR ACID RAIN DEPOSITION.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	THE POTENTIAL TO EMIT AN INDIVIDUAL HAZARDOUS AIR POLLUTANT IS 10 TONS/YEAR OR MORE OF ANY SINGLE HAZARDOUS AIR POLLUTANT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	THE POTENTIAL TO EMIT ALL SOURCE WIDE HAZARDOUS AIR POLLUTANTS IS 25 TONS/YEAR OR MORE OF COMBINED HAZARDOUS AIR POLLUTANTS.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	THE POTENTIAL TO EMIT A HAZARDOUS AIR POLLUTANT IS MORE THAN AN APPLICABLE LOWER THRESHOLD.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	THE SOURCE IS AN AFFECTED SOURCE FOR OZONE DEPLETING SUBSTANCES REGULATED UNDER TITLE 6 OF THE CLEAN AIR ACT.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	THE SOURCE CONTAINS EQUIPMENT OR OPERATIONS SUBJECT TO CERTAIN USEPA EMISSION STANDARDS (NSPS AND NESHAP) FOR WHICH USEPA REQUIRES A CAAPP PERMIT.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	ARE ACTUAL EMISSIONS OF THE SOURCE BELOW THE APPLICABILITY LEVELS FOR A CAAPP PERMIT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	DOES THE APPLICATION CONTAIN PROPOSED PERMIT LIMITATIONS THAT WILL CONSTRAIN THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS OF THE SOURCE WILL FALL BELOW THE LEVELS FOR WHICH A CAAPP PERMIT IS REQUIRED?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	DOES THE APPLICANT HEREBY REQUEST A FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CONSTRAINING THE EMISSIONS AND PRODUCTION OR OPERATION OF THE SOURCE SUCH THAT POTENTIAL EMISSIONS WOULD FALL BELOW APPLICABILITY LEVELS AND THEREBY EXCLUDE THE SOURCE FROM REQUIRING A CAAPP PERMIT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

APPLICATION PAGE _____

SECTION FIVE		SUMMARY OF APPLICATION CONTENT CHECKLIST			
<p>COMPLETE THE FOLLOWING TABLE, ANSWERING YES, NO, OR N/A AS APPROPRIATE. ANSWERING "NO" TO ANY OF THE BELOW, EXCEPT ITEM 33 OR 34, MAY RESULT IN THE ILLINOIS EPA REQUESTING ADDITIONAL INFORMATION, OR POSSIBLY DEEMING THE APPLICATION TO BE INCOMPLETE.</p> <p>IF THE APPLICANT CHOOSES TO INCORPORATE BY REFERENCE DATA PREVIOUSLY SUBMITTED, SELECT THAT COLUMN APPROPRIATLY AND INCLUDE A COMPLETED "INCORPORATION BY REFERENCE" FORM 287-CAAPP.</p>		INFORMATION PROVIDED			INCORPORATE BY REFERENCE
		YES	NO	N/A	
1)	DOES THE APPLICATION INCLUDE A TABLE OF CONTENTS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2)	DOES THE APPLICATION INCLUDE A COMPLETE PROCESS DESCRIPTION FOR THE SOURCE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3)	DOES THE APPLICATION INCLUDE A PLOT PLAN AND/OR MAP DEPICTING THE AREA WITHIN ONE-QUARTER MILE OF THE SOURCE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4)	DOES THE APPLICATION INCLUDE A PROCESS FLOW DIAGRAM(S) SHOWING ALL EMISSION UNITS AND CONTROL EQUIPMENT, AND THEIR RELATIONSHIP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5)	DOES THE APPLICATION INCLUDE THE APPROPRIATE, COMPLETED FORMS FOR ALL INDIVIDUAL EMISSION UNITS AND AIR POLLUTION CONTROL EQUIPMENT, LISTING ALL APPLICABLE REQUIREMENTS AND PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6)	DOES THE APPLICATION INCLUDE CALCULATIONS TO THE EXTENT THEY ARE RELATED TO AIR EMISSIONS (E.G., FOR POLLUTANT EMISSION RATES, FUELS, RAW MATERIALS USAGE, OR CONTROL EQUIPMENT EFFICIENCY)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7)	DOES THE APPLICATION INCLUDE A COMPLETED "LISTING OF SIGNIFICANT ACTIVITIES" FORM 289-CAAPP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8)	DOES THE APPLICATION INCLUDE A COMPLETED "INCORPORATION BY REFERENCE" FORM 287-CAAPP.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9)	DOES THE APPLICATION INCLUDE A COMPLETED "HAZARDOUS AIR POLLUTANT EMISSION SUMMARY" FORM 215-CAAPP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10)	DOES THE APPLICATION INCLUDE A COMPLETED "FEE DETERMINATION FOR CAAPP PERMIT" FORM 292-CAAPP? (NOTE: ANNUAL FEES WILL BE BASED UPON INFORMATION CONTAINED IN THIS FORM.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11)	DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT" FORM 293-CAAPP?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12)	DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE-ADDENDUM FOR NONCOMPLYING EMISSION UNITS" FORM 294-CAAPP FOR ONE OR MORE NONCOMPLIANT EMISSION UNITS FOR WHICH ISSUANCE OF A CAAPP PERMIT IS REQUESTED?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13)	DOES THE APPLICATION INCLUDE A COMPLETED "COMPLIANCE CERTIFICATION" FORM 296-CAAPP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14)	DOES THE APPLICATION INCLUDE A COMPLETED "LISTING OF INSIGNIFICANT ACTIVITIES" FORM 297-CAAPP?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15)	DOES THE APPLICATION INCLUDE A COMPLETED "FUGITIVE EMISSION" FORM 391-CAAPP?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16)	DOES THE APPLICATION INCLUDE A COMPLIANCE ASSURANCE MONITORING PLAN (FORM 464-CAAPP) PURSUANT TO 40 CFR PART 64?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17)	HAS THE APPLICANT REGISTERED A RISK MANAGEMENT PROGRAM FOR ACCIDENTAL RELEASES PURSUANT TO SECTION 112(R) OF THE CLEAN AIR ACT AS AMENDED IN 1990 OR INTENDS TO COMPLY WITH THIS REQUIREMENT IN ACCORDANCE WITH ITS COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18)	HAS THE APPLICANT SUBMITTED A FUGITIVE PARTICULATE MATTER OPERATING PROGRAM PURSUANT TO 35 IAC 212.309?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19)	HAS THE APPLICANT SUBMITTED A PM10 CONTINGENCY MEASURE PLAN PURSUANT TO 35 IAC 212.700?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20)	HAS THE APPLICANT SUBMITTED AN EPISODE ACTION PLAN PURSUANT TO 35 IAC 244.141 FOR THE FACILITIES FOR WHICH ACTION PLANS ARE REQUIRED (SEE 35 IAC 244.142)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21a)	HAS THE APPLICANT SUBMIT A REQUEST FOR A PERMIT SHIELD FOR THE ENTIRE SOURCE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21b)	IF NO, DOES THE APPLICATION CONTAIN A REQUEST FOR A PERMIT SHIELD FOR SPECIFIC ITEMS ONLY, IN ACCORDANCE WITH THE INSTRUCTIONS FOR A CAAPP PERMIT?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22)	IF THIS IS A RENEWAL APPLICATION, WAS THE APPLICATION SUBMITTED IN A TIMELY MANNER, I.E., NOT LATER THAN 9 MONTHS BEFORE THE EXPIRATION DATE OF THE EXISTING CAAPP PERMIT PURSUANT TO SECTION 39.5(5)(N) OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT AND 35 IAC 270.301(D).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

APPLICATION PAGE _____

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SECTION FIVE SUMMARY OF APPLICATION CONTENT CHECKLIST - CONTINUED

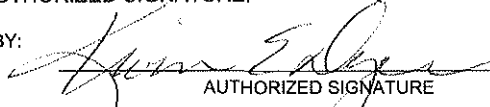
COMPLETE THE FOLLOWING TABLE, ANSWERING YES, NO, OR N/A AS APPROPRIATE. ANSWERING "NO" TO ANY OF THE BELOW, EXCEPT ITEM 34 OR 35, MAY RESULT IN THE ILLINOIS EPA REQUESTING ADDITIONAL INFORMATION, OR POSSIBLY DEEMING THE APPLICATION TO BE INCOMPLETE. IF THE APPLICANT CHOOSES TO INCORPORATE BY REFERENCE DATA PREVIOUSLY SUBMITTED, SELECT THAT COLUMN APPROPRIATLY AND INCLUDE A COMPLETED "INCORPORATION BY REFERENCE" FORM 287-CAAPP.		INFORMATION PROVIDED			INCORPORATE BY REFERENCE
		YES	NO	N/A	
23)	DOES THE APPLICATION INCLUDE AN EARLY REDUCTION DEMONSTRATION FOR HAZARDOUS AIR POLLUTANTS (HAP) PURSUANT TO SECTION 112(I)(5) OF THE CLEAN AIR ACT AS AMENDED IN 1990?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24)	DOES THE APPLICATION REQUEST TO UTILIZE THE OPERATIONAL FLEXIBILITY PROVISIONS AND INCLUDE THE INFORMATION REQUIRED FOR SUCH USE?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25)	DOES THE APPLICATION ADDRESS OTHER MODES OF OPERATION FOR WHICH A PERMIT IS BEING SOUGHT?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
26)	DOES THE APPLICATION INCLUDE ALL REASONABLY ANTICIPATED OPERATING SCENARIOS FOR WHICH A PERMIT IS BEING SOUGHT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27a)	DOES THE APPLICATION CONTAIN TRADE SECRET INFORMATION?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27b)	IF YES, HAS SUCH INFORMATION BEEN MARKED AND CLAIMED, AND TWO SEPARATE COPIES OF THE APPLICATION SUITABLE FOR PUBLIC INSPECTION BEEN SUBMITTED IN ACCORDANCE WITH APPLICABLE REGULATIONS?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
28a)	DOES THE APPLICANT HEREBY REQUEST OPERATION DURING A MALFUNCTION, CONSISTENT WITH 35 IAC 201.149?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28b)	DOES THE APPLICANT HEREBY REQUEST OPERATION DURING A BREAKDOWN, CONSISTENT WITH 35 IAC 201.149?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28c)	DOES THE APPLICANT HEREBY REQUEST OPERATION DURING A STARTUP, CONSISTENT WITH 35 IAC 201.149?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28d)	IF YES TO ANY OF 28a-c, DOES THE APPLICATION INCLUDE INFORMATION SPECIFIED IN 35 IAC 201.261 (CONTENTS OF REQUEST FOR PERMISSION TO OPERATE DURING A MALFUNCTION, BREAKDOWN OR STARTUP)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
29)	DOES THE APPLICATION INCLUDE A PROPOSED DETERMINATION OF MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO SECTION 112(G) OR (J) OF THE CLEAN AIR ACT AS AMENDED IN 1990?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30)	DOES THE APPLICATION ADDRESS APPLICABLE RULES AND STANDARDS OF 40 CFR 60 NEW SOURCE PERFORMANCE STANDARD (NSPS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
32)	DOES THE APPLICATION ADDRESS APPLICABLE RULES AND STANDARDS OF 40 CFR 61 NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
33)	DOES THE APPLICATION ADDRESS APPLICABLE RULES AND STANDARDS OF 40 CFR 63 NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP) FOR SOURCE CATEGORIES?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
34)	HAS THE APPLICANT RETAINED A COPY OF THIS APPLICATION AT THE SOURCE? (NOTE: IF TRADE SECRET INFORMATION IS NOT BEING SUBMITTED, THEN ONLY THE ORIGINAL APPLICATION NEED BE INITIALLY SUBMITTED, HOWEVER, THE ILLINOIS EPA MAY REQUEST UP TO 4 COPIES OF THE FINAL APPLICATION PRIOR TO PUBLIC NOTICE.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35)	DOES THE APPLICATION INCLUDE AN ELECTRONIC FILE OF THE APPLICATION (E.G., CD, DVD, ETC.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY: 
 AUTHORIZED SIGNATURE

Principal Program Manager
 TITLE OF SIGNATORY

Kevin E. Dyer
 TYPED OR PRINTED NAME OF SIGNATORY

4, 11, 12
 DATE

APPLICATION PAGE



FOR APPLICANT'S USE	
Revision #:	_____
Date:	____ / ____ / ____
Page	_____ of _____
Source Designation:	_____

HAZARDOUS AIR POLLUTANT (HAP) EMISSION SUMMARY	FOR AGENCY USE ONLY
	ID NO.:
	PERMIT NO.:
	DATE:

SECTION ONE	SOURCE INFORMATION
1) SOURCE NAME: Soil Vapor Extraction System	
2) SOURCE ID NO.: 119090AAO	3) DATE FORM PREPARED: 04 / 03 / 2012

SECTION TWO	INSTRUCTIONS IN BRIEF
1)	COMPLETE THIS FORM FOR HAZARDOUS AIR POLLUTANT (HAP) INFORMATION FOR THE ENTIRE SOURCE. SECTIONS FOUR, FIVE, AND SIX MAY BE COPIED AS NEEDED FOR ADDITIONAL EMISSION UNITS OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL WITH THE APPROPRIATE EMISSION UNIT DESIGNATION.
2)	A NATURAL MINOR SOURCE FOR HAPS IS A SOURCE WHOSE POTENTIAL TO EMIT HAZARDOUS AIR POLLUTANTS IS LESS THAN THE CRITERIA FOR A MAJOR SOURCE OF HAP EMISSIONS WITHOUT REQUIRING SPECIFIC OPERATIONAL RESTRICTIONS. THE HAP MAJOR SOURCE CRITERIA ARE LISTED IN NUMBER ONE OF SECTION THREE BELOW.
3)	A SYNTHETIC MINOR SOURCE FOR HAP S IS A SOURCE WHOSE POTENTIAL TO EMIT HAZARDOUS AIR POLLUTANTS IS GREATER THAN THE CRITERIA FOR A MAJOR SOURCE OF HAP EMISSIONS, HOWEVER THE SOURCE IS ABLE TO REQUEST OPERATIONAL RESTRICTIONS WHICH WILL LIMIT THE SOURCE EMISSIONS BELOW THE APPLICABLE CRITERIA. THE HAP MAJOR SOURCE CRITERIA ARE LISTED IN NUMBER ONE OF SECTION THREE BELOW. A SYNTHETIC MINOR SOURCE STATUS MAY BE USED TO AVOID CERTAIN RULE APPLICABILITY (E.G., NESHAP APPLICABILITY).
4)	A MAJOR SOURCE HAPS IS A SOURCE WHOSE POTENTIAL TO EMIT HAPS IS GREATER THAN THE CRITERIA FOR A MAJOR SOURCE OF HAP EMISSIONS AND THE SOURCE IS UNABLE OR UNWILLING TO REQUEST OPERATIONAL RESTRICTIONS WHICH WILL LIMIT THE SOURCE EMISSIONS BELOW THE APPLICABLE CRITERIA. THE HAP MAJOR SOURCE CRITERIA ARE LISTED IN NUMBER ONE OF SECTION THREE BELOW. A MAJOR SOURCE OF HAPS IS REQUIRED TO OBTAIN A CAAPP PERMIT.
5)	NATURAL OR SYNTHETIC MINOR STATUS MUST BE ESTABLISHED BEFORE THE FIRST REGULATORY COMPLIANCE DATE OF A REGULATION OF CONCERN IN ORDER TO ENSURE THE REGULATION WILL NOT BE APPLICABLE. A SOURCE WHICH IS A MAJOR FOR HAPS PAST THE COMPLIANCE DATE FOR AN APPLICABLE REGULATION MUST COMPLY WITH THE REGULATION.
6)	INCLUDE EMISSIONS OF HAPS AT ACTIVITIES PROPOSED TO BE INSIGNIFICANT PURSUANT TO 35 IL. ADM. CODE 201.210 AND 201.211.
7)	FOR THE PURPOSES OF ESTABLISHING WHETHER AN EMISSION UNIT QUALIFIES AS AN INSIGNIFICANT ACTIVITY AND PROVIDING EMISSION DATA FOR AN EMISSION UNIT IN A CAAPP APPLICATION, AN APPLICANT MAY PRESUME THAT AN EMISSION UNIT DOES NOT EMIT AN AIR POLLUTANT LISTED AS HAZARDOUS PURSUANT TO SECTION 112(B) OF THE CLEAN AIR ACT IF IT MEETS THE REQUIREMENTS OF 35 IAC 201.209. IF UTILIZING THIS PROVISION, THE APPLICANT WILL NEED TO COMPLETE THE SUPPLEMENTAL FORM 215A-CAAPP, "EMISSION UNIT WHICH DOES NOT EMIT A HAZARDOUS AIR POLLUTANT".
8)	REFER TO 215-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

SECTION THREE		HAZARDOUS AIR POLLUTANT STATUS	
1) DOES THE SOURCE HAVE THE POTENTIAL TO EMIT, IN THE AGGREGATE, THE FOLLOWING? CHECK ALL THAT APPLY.			
I) 10 TONS PER YEAR OR MORE OF ANY INDIVIDUAL HAZARDOUS AIR POLLUTANT.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO
II) 25 TONS PER YEAR OR MORE OF ANY COMBINATION OF HAZARDOUS AIR POLLUTANTS.	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
III) SUCH LESSER QUANTITY AS ESTABLISHED BY RULE WHICH CLASSIFIES THE SOURCE AS MAJOR FOR HAZARDOUS AIR POLLUTANTS.	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
IV) EMISSIONS OF HAZARDOUS AIR POLLUTANTS WHICH EQUAL OR EXCEED A POLLUTANT SPECIFIC CAAPP APPLICABILITY LEVEL AS ESTABLISHED BY USEPA RULE SUCH THAT THE SOURCE IS REQUIRED TO OBTAIN A CAAPP PERMIT SOLELY FOR THIS REASON (I.E., HAP EMISSIONS BELOW THE CAAPP APPLICABILITY THRESHOLDS SPECIFIED IN ITEMS (I), (II) & (III) ABOVE, BUT STILL REQUIRED TO OBTAIN A CAAPP PERMIT PURSUANT TO A REGULATORY REQUIREMENT, E.G., NESHAP)?	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
2) CHOOSE ONE OF THE FOLLOWING FIVE CHOICES FOR THE SOURCE'S HAZARDOUS AIR POLLUTANT STATUS BY SELECTING "YES". SELECT "NO" FOR ALL OTHERS.			
I) IS THE SOURCE A NATURAL MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS? IF "YES" COMPLETE SECTION 4 AND ATTACH A POTENTIAL TO EMIT ANALYSIS FOR THE SOURCE. THE ANALYSIS MUST INCLUDE CALCULATIONS AND ANY NECESSARY SUPPORTING DOCUMENTATION AND ASSUMPTIONS WHICH JUSTIFY THE SOURCE'S TRUE MINOR STATUS.	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
II) DOES THE SOURCE REQUEST TO BE CONSIDERED A SYNTHETIC MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS AND ACCEPT THAT THE EMISSIONS OF HAPS FROM THE SOURCE SHALL BE LESS THAN 5 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 12.5 TONS/YEAR FOR ALL HAPS COMBINED? IF "YES" COMPLETE SECTIONS 4, AND PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
III) DOES THE SOURCE REQUEST TO BE CONSIDERED A SYNTHETIC MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS AND ACCEPT THAT THE EMISSIONS OF HAPS FROM THE SOURCE SHALL BE LESS THAN 8 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 20 TONS/YEAR FOR ALL HAPS COMBINED? IF "YES" COMPLETE SECTIONS 4 AND SECTION 5, AND PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input checked="" type="checkbox"/>	YES	<input type="checkbox"/> NO
IV) DOES THE SOURCE REQUEST TO BE CONSIDERED A SYNTHETIC MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS AND ACCEPT THAT THE EMISSIONS OF HAPS FROM THE SOURCE SHALL BE GREATER THAN 8 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 20 TONS/YEAR FOR ALL HAPS COMBINED, BUT LESS THAN 10 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 25 TONS/YEAR FOR ALL HAPS COMBINED? IF "YES" COMPLETE SECTIONS 4, 5, AND 6, AND PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
V) DOES THE SOURCE REQUEST TO BE CONSIDERED A MAJOR SOURCE FOR HAZARDOUS AIR POLLUTANTS? IF "YES" COMPLETE SECTION 4.	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
3) IF "YES" TO THE QUESTIONS AT SECTION THREE QUESTION 2(II) OR 2(III) OR 2(IV) ABOVE, HAS THE SOURCE PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/> NO
	<input type="checkbox"/>	N/A	

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SECTION FOUR**HAZARDOUS AIR POLLUTANT EMISSIONS**

COMPLETE THE FOLLOWING TABLE FOR ALL HAPS. THIS TABLE MUST ALSO INCLUDE EMISSIONS OF HAPS AT ACTIVITIES PROPOSED TO BE EXEMPT PURSUANT TO 35 IAC 201.146 OR INSIGNIFICANT PURSUANT TO 35 IAC 201.210 OR 201.211 UNLESS THOSE EMISSION UNITS DO NOT EMIT A HAP PURSUANT TO 35 IAC 201.209. IF UTILIZING THIS PROVISION, THE APPLICANT WILL NEED TO COMPLETE FORM 215A-CAAPP, "EMISSION UNIT WHICH DOES NOT EMIT A HAZARDOUS AIR POLLUTANT."

EMISSION UNIT DESIGNATION	NAME OF HAP EMITTED	CHEMICAL ABSTRACT SERVICE (CAS) NUMBER	TYPICAL EMISSIONS (TONS/YR)	MAXIMUM EMISSIONS (TONS/YR)	POTENTIAL EMISSIONS (TONS/YR)	APPLICABLE STANDARD(S)
Exhaust from RTO	See Exhibit 220-6A		See Exhibit 220-6A	See Exhibit 220-6A	See Exhibit 220-6A	
Exhaust from RTO	Total HAPs		See Exhibit 220-6A	19.9	19.9	

APPLICATION PAGE

Printed on Recycled Paper
215-CAAPP

13 of 67

Page 3 of 5

SECTION FIVE		HAP TESTING TO VERIFY MINOR SOURCE STATUS		
¹ EMISSION UNIT DESIGNATION	² NAME OF PREDOMINANT HAPS EMITTED	³ HAP TESTING METHODOLOGY	⁴ HAP TESTING FREQUENCY	⁵ HAP TESTING RATIONALE
Exhaust from RTO	See Exhibit 220-6A	Exhaust Sampling at Stack	1 per month	Permit 11060036 Requirement

- 1 LIST THOSE EMISSION UNIT(S) AT THE SOURCE WHICH CONTRIBUTE AT LEAST 1.0 TON/YEAR FOR AN INDIVIDUAL HAP OR 2.5 TONS/YEAR FOR ALL HAPS COMBINED.
- 2 PREDOMINANT HAPS ARE THOSE CONSTITUENT HAP EMISSIONS WHICH CONTRIBUTE GREATER THAN 25% OF THAT EMISSION UNIT'S HAP CONTRIBUTION.
- 3 LIST THE SOURCE'S SUGGESTED HAP TESTING METHODOLOGY: 1) STACK TEST (LIST METHOD), 2) STANDARD TEST METHOD (EXPLAIN), 3) RELEVANT NSPS OR NESHAP TEST METHODOLOGY WHICH TESTS FOR HAPS (EXPLAIN), 4) MANUFACTURE'S HAP TESTING (EXPLAIN), 5) OTHER (EXPLAIN)
- 4 LIST THE SOURCE'S SUGGESTED HAP TESTING FREQUENCY.
- 5 EXPLAIN THE RATIONALE AND ADEQUACY OF THE SUGGESTED TESTING.

APPLICATION PAGE _____

Printed on Recycled Paper
215-CAAPP

SECTION SIX

**PROCESS AND EMISSIONS LIMITATIONS FOR SOURCES REQUESTING
HAP LIMITS GREATER THAN 8/20 TONS/YEAR BUT LESS THAN 10/25 TONS/YEAR**

LIMITATIONS SHALL BE TOTALED SUCH THAT THE SOURCE HAP EMISSIONS WILL BE LIMITED TO LESS THAN 10 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 25 TONS/YEAR FOR ALL HAPS COMBINED.

EMISSION UNIT DESIGNATION	¹ PROCESS LIMITATIONS	² HAP CALCULATION METHODOLOGY	³ HAP EMISSION LIMITATIONS	⁴ RECORDKEEPING

- 1 LIST THE SOURCE'S SUGGESTED PROCESS LIMITATIONS WHICH WILL CONSTRAIN THE PROCESS'S HAP EMISSIONS. PROCESS LIMITATIONS INCLUDE PRODUCTION LIMITS, FUEL USAGE LIMITS, OPERATING RESTRICTIONS, ETC.
- 2 LIST THE SOURCE'S SUGGESTED HAP CALCULATION METHODOLOGY: 1) STACK TEST, 2) STANDARD TEST METHOD (EXPLAIN), 3) MANUFACTURE'S HAP TESTING, 4) MATERIAL BALANCE, 5) EMISSION FACTOR, 6) OTHER (EXPLAIN).
- 3 LIST THE SOURCE'S SUGGESTED HAP EMISSION LIMITATIONS WHICH WILL LIMIT THE SOURCE TO LESS THAN 10 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 25 TONS/YEAR FOR ALL HAPS COMBINED.
- 4 LIST THE SOURCE'S SUGGESTED RECORDKEEPING NEEDED TO DOCUMENT THE PROCESS AND EMISSION LIMITATIONS.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
 P.O. BOX 19506
 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE	
Revision #:	_____
Date:	____ / ____ / ____
Page	_____ of _____
Source Designation:	_____

PROCESS EMISSION UNIT DATA AND INFORMATION	FOR AGENCY USE ONLY
	ID NUMBER:
	EMISSION POINT #:
	DATE:

SOURCE INFORMATION	
1) SOURCE NAME: Soil Vapor Extraction System	
2) DATE FORM PREPARED: 04/03/2012	3) SOURCE ID NO. (IF KNOWN): 119090AAO

GENERAL INFORMATION	
4) NAME OF EMISSION UNIT: Soil Vapor Extraction System	
5) NAME OF PROCESS: Extracted Vapor Control	
6) DESCRIPTION OF PROCESS: RTO Control System	
7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED: Treatment of soil vapor.	
8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT: Regenerative Thermal Oxidizer	
9) MANUFACTURER OF EMISSION UNIT (IF KNOWN): See Form 260	
10) MODEL NUMBER (IF KNOWN): See Form 260	11) SERIAL NUMBER (IF KNOWN): See Form 260
12) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)	a) CONSTRUCTION (MONTH/YEAR): See Form 260
	b) OPERATION (MONTH/YEAR): See Form 260
	c) LATEST MODIFICATION (MONTH/YEAR): None
13) DESCRIPTION OF MODIFICATION (IF APPLICABLE): None	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE _____

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220-CAAPP

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14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? YES NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

RTO control system

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? YES NO

IF YES, COMPLETE AND ATTACH FORM 203-CAAPP, "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

When control is not in operation. The equipment that creates the source does not operate.

OPERATING INFORMATION

18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 220-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.

19a) MAXIMUM OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
b) TYPICAL OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
20) ANNUAL THROUGHPUT	DEC-FEB(%): 25	MAR-MAY(%): 25	JUN-AUG(%): 25	SEP-NOV(%): 25

MATERIAL USAGE INFORMATION

21a) RAW MATERIALS	MAXIMUM RATES		TYPICAL RATES	
	LBS/HR	TONS/YEAR	LBS/HR	TONS/YEAR
Contaminated Soil Vapor				
@ 2,500 scfm				

21b) PRODUCTS	MAXIMUM RATES			TYPICAL RATES		
	LBS/HR		TONS/YEAR	LBS/HR		TONS/YEAR
Treated Soil Vapor (exhaust from RTO)						

21c) BY-PRODUCT MATERIALS	MAXIMUM RATES			TYPICAL RATES		
	LBS/HR		TONS/YEAR	LBS/HR		TONS/YEAR
None						

FUEL USAGE DATA		
22a) MAXIMUM FIRING RATE (MILLION BTU/HR): 2.8	b) TYPICAL FIRING RATE (MILLION BTU/HR): 2.8	c) DESIGN CAPACITY FIRING RATE (MILLION BTU/HR): 2.8
d) FUEL TYPE: <input checked="" type="checkbox"/> NATURAL GAS <input type="checkbox"/> FUEL OIL: GRADE NUMBER _____ <input type="checkbox"/> COAL <input type="checkbox"/> OTHER _____ IF MORE THAN ONE FUEL IS USED, ATTACH AN EXPLANATION AND LABEL AS EXHIBIT 220-2.		
e) TYPICAL HEAT CONTENT OF FUEL (BTU/LB, BTU/GAL OR BTU/SCF): 1,050 Btu/scf	f) TYPICAL SULFUR CONTENT (WT %, NA FOR NATURAL GAS): NA	
g) TYPICAL ASH CONTENT (WT %, NA FOR NATURAL GAS): NA	h) ANNUAL FUEL USAGE (SPECIFY UNITS, E.G., SCF/YEAR, GAL/YEAR, TON/YEAR): variable	
23) ARE COMBUSTION EMISSIONS DUCTED TO THE SAME STACK OR CONTROL AS PROCESS UNIT EMISSIONS? IF NO, IDENTIFY THE EXHAUST POINT FOR COMBUSTION EMISSIONS:		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

APPLICABLE RULES

24) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
None		

25) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
None		

26) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
None		

27) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
None		

28) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
None		

29) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE? YES NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

30) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? YES NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE -- ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

31) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:
 Compliance with construction permit conditions (monthly and annual emission limits and operation in a manner that provides good air pollution control practice).

32) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:
 Continued operation in compliance with permit conditions (periodic testing of emissions, calculation of monthly and annual emissions, and operation in a manner that provides good air pollution control practice).

TESTING, MONITORING, RECORDKEEPING AND REPORTING

33a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
VOM	as req by permit	as req by permit	as req by permit
HAP	as req by permit	as req by permit	as req by permit
Hr of operation	as req by permit	as req by permit	as req by permit
Exhaust Flow	as req by permit	as req by permit	as req by permit
Nat Gas Use	as req by permit	as req by permit	as req by permit

33b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
VOM	Rec test results	Env Scientist	Env Scientist
HAP	Rec test results	Env Scientist	Env Scientist
Hr of operation	Log	Operator	Env Scientist
Exhaust Flow	Rec test results	Env Scientist	Env Scientist
Nat Gas Use	Monthly bills	Env Scientist	Env Scientist

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS? YES NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND SUBMITTAL TO THE AGENCY UPON REQUEST? YES NO

IF NO, EXPLAIN:

34a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

Testing of exhaust in accordance with permit conditions.

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED (E.G., VOM EMISSIONS TO ATMOSPHERE)?
VOM and HAP emissions (as required by permit).

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., IN STACK MONITOR 3 FEET FROM EXIT):
Samples taken from stack monitoring port.

34d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? YES NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:
All monitoring requires laboratory analysis

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? YES NO

IF NO, EXPLAIN:
There are no monitors. Laboratory follows a standard QA/QC procedure

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION? YES NO

IF NO, EXPLAIN:
There are no monitors.

35) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 220-4:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
		Summarized in	applic.	text

36) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
Condition 10 of	construction permit	

(37)EMISSION INFORMATION

REGULATED AIR POLLUTANT		<input type="checkbox"/> ¹ ACTUAL EMISSION RATE <input type="checkbox"/> ¹ UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			² PERMITTED EMISSION RATE		
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	³ OTHER TERMS	³ OTHER TERMS	⁴ DM	⁵ RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)	
CARBON MONOXIDE (CO)	MAXIMUM:						()			0.00745	lb/MMBtu	0.05
	TYPICAL:						()					
LEAD	MAXIMUM:						()					
	TYPICAL:						()					
NITROGEN OXIDES (NO _x)	MAXIMUM:						()			0.10	lb/MMBtu	0.62
	TYPICAL:						()					
PARTICULATE MATTER (PART)	MAXIMUM:						()			0.0824	lb/MMBtu	0.51
	TYPICAL:						()					
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:						()					
	TYPICAL:						()					
SULFUR DIOXIDE (SO ₂)	MAXIMUM:						()			0.6	lb/MMBtu	3.70
	TYPICAL:						()					
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:						()			8 lb/hr	lb/MMBtu	24.9
	TYPICAL:						()					
OTHER, SPECIFY:	MAXIMUM:						()					
	TYPICAL:						()					
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	5.00	21.9	0.3 GR/DSCF		1	6.0 (LBS/HR)	212.321	26.28	5.5 LBS/HR		22
	TYPICAL:	4.00	14.4	0.24 GR/DSCF		4	5.5 (LBS/HR)	212.321	19.80			

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-5.

- ¹CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.
- ²PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
- ³PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
- ⁴DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
- ⁵RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

APPLICATION PAGE _____

(38) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

		<input type="checkbox"/> ¹ ACTUAL EMISSION RATE <input type="checkbox"/> ¹ UNCONTROLLED EMISSION RATE				ALLOWABLE BY RULE		
			POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	³ OTHER TERMS	⁴ DM	⁵ RATE OR STANDARD	APPLICABLE RULE
NAME OF HAP EMITTED	² CAS NUMBER							
Any single HAP		MAXIMUM:					0.79 tons / month	Permit
		TYPICAL:						
Any combination HAP		MAXIMUM:					1.9 tons / month	19.9 tons / year
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
		MAXIMUM:						
		TYPICAL:						
<i>EXAMPLE:</i>		MAXIMUM:	10.0	1.2		2	98% by wt control device	CFR 61
<i>Benzene</i>	71432	TYPICAL:	8.0	0.8		2	leak-tight trucks	61.302(b),(d)

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

¹PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.
²CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
³PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).
⁴DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).
⁵RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:

Stack

40) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

Stack

41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

<100 feet

42) DISCHARGE HEIGHT ABOVE GRADE (FT):

30.5

43) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

not known

44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA. 30 inches

45) EXIT GAS FLOW RATE

a) MAXIMUM (ACFM):

b) TYPICAL (ACFM):

10000

10000

46) EXIT GAS TEMPERATURE

a) MAXIMUM (°F):

b) TYPICAL (°F):

200

200

47) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

vertical

48) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

NAME

FLOW DIAGRAM DESIGNATION

a) RTO Control System

Regenerative Thermal Oxidizer

b)

c)

d)

e)

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

49a) LATITUDE:

b) LONGITUDE:

50) UTM ZONE:

b) UTM VERTICAL (KM):

c) UTM HORIZONTAL (KM):



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
 P.O. BOX 19506
 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE

Revision #: _____
 Date: ____ / ____ / ____
 Page _____ of _____
 Source Designation: _____

STORAGE TANK DATA AND INFORMATION	FOR AGENCY USE ONLY
	ID NUMBER: _____
	EMISSION POINT #: _____
	DATE: _____

NOTE: THIS INFORMATION FORM MUST BE COMPLETED FOR ANY TANK USED IN THE STORAGE OF AN ORGANIC LIQUID OR ANY MATERIALS CONTAINING HAZARDOUS AIR POLLUTANTS. FOR TANKS USED FOR PURPOSES OTHER THAN STORAGE, SUCH AS MIXING TANKS, DAY TANKS, PROCESS TANKS, ETC., PLEASE COMPLETE FORM 220-CAAPP.

SOURCE INFORMATION	
1) SOURCE NAME: Soil Vapor Extraction System	
2) DATE FORM PREPARED: 04/03/2012	3) SOURCE ID NO. (IF KNOWN): 119090AAO

GENERAL INFORMATION	
4) TANK DESIGNATION: Storage Tank	
5) FLOW DIAGRAM DESIGNATION OF TANK: 629 Gal. Water Storage Tank	
6) MANUFACTURER OF TANK (IF KNOWN): The Tank Shop Inc.	
7) SERIAL NUMBER (IF KNOWN): D-621036 / D-621035	
8) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS TANK (ACTUAL OR PLANNED)	a) CONSTRUCTION (MONTH/YEAR): 01/2012
	b) OPERATION (MONTH/YEAR): 01/2012
	c) LATEST MODIFICATION (MONTH/YEAR): None
9) DESCRIPTION OF MODIFICATION (IF APPLICABLE): NA	
10) DOES THE TANK HAVE MORE THAN ONE MODE OF OPERATION? (E.G., IS THERE MORE THAN ONE PRODUCT STORED IN THE TANK?) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS APPLICATION (NOTE: A SEPARATE FORM 232-CAAPP MUST BE COMPLETED FOR EACH MODE):	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE _____

Printed on Recycled Paper
232-CAAPP

FOR APPLICANT'S USE

11) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS TANK, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

None

12) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., PRODUCTION VARIATION, ETC.):

None

TANK INFORMATION

13) TANK CAPACITY (SPECIFY BARRELS OR GALLONS): 629 gallons

14) TANK DIAMETER OR WIDTH (FT): 4.2 15) TANK HEIGHT (FT): 4.2 16) TANK LENGTH (FT): 6

17) TANK SHAPE (CHECK ONE):
 CYLINDRICAL HORIZONTAL
 OTHER; SPECIFY: _____

18) OUTSIDE COLOR OF TANK (CHECK ONE):
 WHITE SILVER
 OTHER; SPECIFY: Blue

19) TANK CONDITION (CHECK ONE):
 GOOD FAIR POOR

20) TANK LOCATION (CHECK ONE):
 UNDERGROUND ABOVEGROUND

21) TANK TYPE (CHECK ONE):
 FIXED ROOF PRESSURE
 EXTERNAL FLOATING ROOF INTERNAL FLOATING ROOF
 VARIABLE VAPOR SPACE; SPECIFY VOLUME EXPANSION CAPACITY (bbl): _____
 OTHER; SPECIFY: _____

22) VENT VALVE INFORMATION:

TYPE OF VENT	NUMBER OF VENTS	PRESSURE SETTING (PSIG)	DISCHARGE VENTED TO (ATMOSPHERE, FLARE, VAPOR CONTROL, ETC.)
COMBINATION			
PRESSURE			
VACUUM			
OPEN	1	Ambient	Atmosphere

THE INFORMATION IN ITEMS 23 AND 24 BELOW NEED ONLY BE PROVIDED IF READILY AVAILABLE

23a) LATITUDE: _____ b) LONGITUDE: _____

24a) UTM ZONE: _____ b) UTM VERTICAL (KM): _____ c) UTM HORIZONTAL (KM): _____

APPLICATION PAGE _____

MATERIAL STORED AND THROUGHPUT INFORMATION

25) CHEMICAL NAME OF MATERIAL STORED: Condensate from soil vapor extraction system (water with small amounts of contamination)	
26) CAS NO. (IF KNOWN):	27) DENSITY (LB/CU.FT.): 62.3 (LB/GALLON):
28) VAPOR PRESSURE AT 70 DEGREES FAHRENHEIT (PSIA): 0.363	29) MOLECULAR WEIGHT (LB/LB-MOLE):
30) VAPOR PRESSURE AT MAXIMUM STORAGE TEMPERATURE (PSIA): 0.363	
31) METHOD USED TO DETERMINE VAPOR PRESSURE PURSUANT TO 35 ILL. ADM. CODE 215.108, 218.109-111, OR 219.109-111: <input type="checkbox"/> ASTM D2879-86 <input checked="" type="checkbox"/> PUBLISHED LITERATURE, LIST: AP-42 _____ _____ <input type="checkbox"/> OTHER; SPECIFY: _____	
32) STORAGE TEMPERATURE	
MINIMUM (DEGREES FAHRENHEIT): Ambient	MAXIMUM (DEGREES FAHRENHEIT): Ambient
33) THROUGHPUT	
GAL/DAY: 75	GAL/YR: 27,375
BBLS/DAY:	BBLS/YR:
34) MAXIMUM FILL RATE (GAL/HR): Variable	
35) IS A PERMANENT SUBMERGED LOADING PIPE USED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
36) IS A VAPOR BALANCE LINE USED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
37) IS ANY OTHER VAPOR LOSS CONTROL DEVICE USED (OTHER THAN VAPOR BALANCE)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, COMPLETE "AIR POLLUTION CONTROL EQUIPMENT -- DATA AND INFORMATION," (FORM 260-CAAPP), AS PART OF THIS APPLICATION.	
38) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE PRECEDING INFORMATION, MATERIAL STORAGE INFORMATION AND THROUGHPUT DATA WERE BASED AND LABEL AS EXHIBIT 232-1.	

APPLICABLE RULES

39) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATIONS(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS TANK (E.G., VOM, IAC 218.121(a), PRESSURE TANK):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
		None

40) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS TANK:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
		None

41) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS TANK:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
		None

42) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS TANK:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
		None

43) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS TANK:

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
		None

44) DOES THE TANK QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE? YES NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 232-2, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

45) IS THE TANK IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS?: YES NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE -- ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

46) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

No applicable requirements.

47) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

No applicable requirements

TESTING, MONITORING, RECORDKEEPING AND REPORTING

48a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
None			

b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
None			

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS?

YES NO

IF NO, EXPLAIN:

There are no applicable requirements

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND/OR SUBMITTAL TO THE AGENCY UPON REQUEST?

YES NO

IF NO, EXPLAIN:

49a) DESCRIBE ANY EMISSION MONITORS USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

None

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED (E.G., TEMPERATURE)?

None

49c) DESCRIBE THE LOCATION OF EACH MONITOR:

Not applicable

d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? YES NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

Not applicable

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? YES NO

IF NO, EXPLAIN:

Not applicable

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED TANK IS IN OPERATION? YES NO

IF NO, EXPLAIN:

Not applicable

50) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 232-3:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
None				

51) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
None		

(52)EMISSION INFORMATION

REGULATED AIR POLLUTANT		<input type="checkbox"/> ¹ ACTUAL EMISSION RATE <input type="checkbox"/> ¹ UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			² PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	³ OTHER TERMS	³ OTHER TERMS	⁴ DM	⁵ RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:						()				
	TYPICAL:						()				
LEAD	MAXIMUM:						()				
	TYPICAL:						()				
NITROGEN OXIDES (NO _x)	MAXIMUM:						()				
	TYPICAL:						()				
PARTICULATE MATTER (PART)	MAXIMUM:						()				
	TYPICAL:						()				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:						()				
	TYPICAL:						()				
SULFUR DIOXIDE (SO ₂)	MAXIMUM:						()				
	TYPICAL:						()				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:	Not	applicable				()			No applicable	requirements
	TYPICAL:						()				
OTHER, SPECIFY:	MAXIMUM:						()				
	TYPICAL:						()				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	5.00	21.9	0.3 GR/DSCF		1	6.0 (LBS/HR)	212.321	26.28	5.5 LBS/HR	22
	TYPICAL:	4.00	14.4	0.24 GR/DSCF		4	5.5 (LBS/HR)	212.321	19.80		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 232-4.

- ¹CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.
- ²PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
- ³PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
- ⁴DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)
- ⁵RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

APPLICATION PAGE _____

(53) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		<input type="checkbox"/> ¹ ACTUAL EMISSION RATE <input type="checkbox"/> ¹ UNCONTROLLED EMISSION RATE				ALLOWABLE BY RULE	
NAME OF HAP EMITTED	² CAS NUMBER	POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	³ OTHER TERMS	⁴ DM	⁵ RATE OR STANDARD	APPLICABLE RULE
		MAXIMUM:				No applicable requirements	
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
<i>EXAMPLE:</i>		MAXIMUM:	10.0	1.2	2	98% by wt control device	CFR 61
Benzene	71432	TYPICAL:	8.0	0.8	2	leak-tight trucks	61.302(b),(d)

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 232-5.

¹ PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.
² CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
³ PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).
⁴ DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).
⁵ RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

FLOATING ROOF TANK EQUIPMENT INFORMATION (IF APPLICABLE)

54) FLOATING ROOF TYPE (CHECK ONE): INTERNAL EXTERNAL
 OTHER; SPECIFY: _____

55) PRIMARY SEAL TYPE (CHECK ONE): METALLIC SHOE SEAL LIQUID MOUNTED RESILIENT SEAL VAPOR MOUNTED RESILIENT SEAL
 OTHER; SPECIFY: _____

56) IS THE FLOATING ROOF EQUIPPED WITH A SECONDARY SEAL? YES NO
 IF YES, HOW IS THE SECONDARY SEAL MOUNTED? (CHECK ONE): SHOE RIM
 OTHER; SPECIFY: _____

57) IS THE FLOATING ROOF EQUIPPED WITH A WEATHER SHIELD? YES NO

58) WHAT IS THE AVERAGE WIND SPEED AT THE TANK SITE (MILES/HR)?

59) WHAT IS THE CONDITION OF THE TANK SHELL INTERIOR? (CHECK ONE): LIGHT RUST DENSE RUST GUNITE LINED
 OTHER; EXPLAIN: _____

60) FOR COLUMN SUPPORTED TANKS, COMPLETE THE FOLLOWING:

NUMBER OF COLUMNS	DIAMETER OF EACH COLUMN (FT)

61) FOR INTERNAL FLOATING ROOF TANKS, COMPLETE THE FOLLOWING:

a) WHAT IS THE METHOD OF BONDING FOR THE DECK? BOLTING WELDING
 OTHER; SPECIFY: _____

b) WHAT IS THE TOTAL LENGTH OF ALL DECK SEAMS (FT)?

c) WHAT IS THE DIAMETER OF THE DECK (FT)?

62) FOR INTERNAL FLOATING ROOF TANKS, INDICATE THE NUMBER OF EACH TYPE OF FITTING:

ACCESS HATCH

BOLT COVER,
GASKETED:

UNBOLTED COVER,
GASKETED:

UNBOLTED COVER,
UNGASKETED:

AUTOMATIC GAUGE FLOAT WELL

BOLTED COVER,
GASKETED:

UNBOLTED COVER,
GASKETED:

UNBOLTED COVER,
UNGASKETED:

COLUMN WELL

BUILT-UP COLUMN-SLIDING
COVER, GASKETED:

BUILT-UP COLUMN-SLIDING
COVER, UNGASKETED:

PIPE COLUMN-FLEXIBLE
FABRIC SLEEVE SEAL:

PIPE COLUMN-SLIDING
COVER, GASKETED:

PIPE COLUMN-SLIDING
COVER, UNGASKETED:

LADDER WELL

SLIDING COVER,
GASKETED:

SLIDING COVER,
UNGASKETED:

SAMPLE PIPE OR WELL

SLOTTED PIPE-SLIDING
COVER, GASKETED:

SLOTTED PIPE-SLIDING
COVER, UNGASKETED:

SAMPLE WELL-SLIT FABRIC
SEAL (10% OPEN AREA):

ROOF LEG OR HANGER WELL

ADJUSTABLE:

FIXED:

VACUUM BREAKER

WEIGHTED MECHANICAL
ACTUATION, GASKETED:

WEIGHTED MECHANICAL
ACTUATION, UNGASKETED:

STUB DRAIN

1 INCH DIAMETER:

OTHER (EXPLAIN)

a)

b)

c)



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
 P.O. BOX 19506
 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE

Revision #: _____
 Date: ____ / ____ / ____
 Page _____ of _____
 Source Designation: _____

AIR POLLUTION CONTROL EQUIPMENT DATA AND INFORMATION	FOR AGENCY USE ONLY
	ID NUMBER: _____
	CONTROL EQUIPMENT #: _____
DATE: _____	

THIS FORM MUST BE COMPLETED FOR EACH AIR POLLUTION CONTROL EQUIPMENT. COMPLETE AND PROVIDE THIS FORM IN ADDITION TO THE APPLICABLE ADDENDUM FORM 260-A THROUGH 260-K. A SEPARATE FORM MUST BE COMPLETED FOR EACH MODE OF OPERATION OF AIR POLLUTION CONTROL EQUIPMENT FOR WHICH A PERMIT IS BEING SOUGHT.

SOURCE INFORMATION	
1) SOURCE NAME: Soil Vapor Extraction System	
2) DATE FORM PREPARED: 04/03/12	3) SOURCE ID NO. (IF KNOWN): 119090AAO

GENERAL INFORMATION	
4) NAME OF AIR POLLUTION CONTROL EQUIPMENT AND/OR CONTROL SYSTEM: Regenerative Thermal Oxidizer	
5) FLOW DIAGRAM DESIGNATION OF CONTROL EQUIPMENT AND/OR CONTROL SYSTEM: Regenerative Thermal Oxidizer	
6) MANUFACTURER OF CONTROL EQUIPMENT (IF KNOWN): Anguil Environmental Systems, Inc.	
7) MODEL NUMBER (IF KNOWN): RTO-100	8) SERIAL NUMBER (IF KNOWN): 15736
9) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EQUIPMENT (ACTUAL OR PLANNED)	a) CONSTRUCTION (MONTH/YEAR): 01/12
	b) OPERATION (MONTH/YEAR): 01/12
	c) LATEST MODIFICATION (MONTH/YEAR):
10) BRIEFLY DESCRIBE MODIFICATION (IF APPLICABLE): NA	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE _____

FOR APPLICANT'S USE

11) LIST ALL EMISSION UNITS AND OTHER CONTROL EQUIPMENT DUCTING EMISSIONS TO THIS CONTROL EQUIPMENT:

NAME	DESIGNATION OR CODE NUMBER
Soil Vapor Extraction System	SVE

12) DOES THE CONTROL EQUIPMENT HAVE MORE THAN ONE MODE OF OPERATION? YES NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE AIR POLLUTION CONTROL EQUIPMENT FORM 260-CAAPP MUST BE COMPLETED FOR EACH MODE):

13) IDENTIFY ALL ATTACHMENTS TO THIS FORM RELATED TO THIS AIR POLLUTION CONTROL EQUIPMENT (E.G., TECHNICAL DRAWINGS):
None

OPERATING SCHEDULE

14) IDENTIFY ANY PERIOD WHEN THE CONTROL EQUIPMENT WILL NOT BE OPERATING DUE TO SCHEDULED MAINTENANCE AND/OR REPAIRS WHEN THE FEEDING EMISSION UNIT(S) TO THIS CONTROL EQUIPMENT IS/ARE IN OPERATION:

None

15a) IDENTIFY ANY PERIODS DURING OPERATION OF THE FEEDING EMISSION UNIT(S) WHEN THE CONTROL EQUIPMENT IS/ARE NOT USED:

None

b) IS THIS CONTROL EQUIPMENT IN OPERATION AT ALL OTHER TIMES THAT THE FEEDING EMISSION UNIT(S) IS/ARE IN OPERATION? YES NO

IF NO, EXPLAIN AND PROVIDE THE DURATION OF THE CONTROL EQUIPMENT DOWNTIME:

APPLICABLE RULES

16) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.207(b)(1), 81% OVERALL & 90% CONTROL DEVICE EFF.):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
See Permit 11060036		

17) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
See Permit 11060036		

18) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
See Permit 11060036		

19) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
See Permit 11060036		

20) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
See Permit 11060036		

APPLICATION PAGE

COMPLIANCE INFORMATION

21) IS THE CONTROL SYSTEM IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS?

YES NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE -- ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

22) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Initial sampling of exhaust stream.

23) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Periodic sampling of exhaust stream as required by the permit.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

24a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
See Permit			
11060036			

24b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
See Permit			
11060036			

c) IS COMPLIANCE OF THE CONTROL EQUIPMENT READILY DEMONSTRATED BY REVIEW OF THE RECORDS?

YES NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND/OR SUBMITTAL TO THE AGENCY UPON REQUEST?

YES NO

IF NO, EXPLAIN:

25a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

Periodic sampling and lab analysis as required by the permit.

b) WHAT OPERATING PARAMETER(S) IS(ARE) BEING MONITORED (E.G., COMBUSTION CHAMBER TEMPERATURE)?

Combustion chamber temperature

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., EXIT OF COMBUSTION CHAMBER):

Exit of combustion chamber

25d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? YES NO
 IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:
 Combustion chamber temperature

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? YES NO
 IF NO, EXPLAIN:

f) IS EACH MONITOR OPERATED AT ALL TIMES THE CONTROL EQUIPMENT IS IN OPERATION? YES NO
 IF NO, EXPLAIN:

26) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 260-1:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
NA				

27) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
See Permit 11060036		

CAPTURE AND CONTROL

28) DESCRIBE THE CAPTURE SYSTEM USED TO CONTAIN, COLLECT AND TRANSPORT EMISSIONS TO THE CONTROL EQUIPMENT. INCLUDE ALL HOODS, DUCTS, FANS, ETC. ALSO INCLUDE THE METHOD OF CAPTURE USED AT EACH EMISSION POINT. (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 260-2):

A system of pipes brings the contaminated vapor, under negative pressure to the mixing box (also under negative pressure) which is hard piped to the inlet of the RTO.

29) ARE FEATURES OF THE CAPTURE SYSTEM ACCURATELY DEPICTED IN THE FLOW DIAGRAM CONTAINED IN THIS APPLICATION?

YES NO

IF NO, A SKETCH SHOWING THE FEATURES OF THE CAPTURE SYSTEM SHOULD BE ATTACHED AND LABELED AS EXHIBIT 260-3:

30) PROVIDE THE ACTUAL (MINIMUM AND TYPICAL) CAPTURE SYSTEM EFFICIENCY, CONTROL EQUIPMENT DESTRUCTION/REMOVAL EFFICIENCY, AND THE OVERALL REDUCTION EFFICIENCY PROVIDED BY THE COMBINATION OF THE CAPTURE SYSTEM AND CONTROL EQUIPMENT FOR EACH REGULATED AIR POLLUTANT TO BE CONTROLLED. ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH THESE EFFICIENCIES WERE BASED AND LABEL AS EXHIBIT 260-4:

a) CONTROL PERFORMANCE:

	REGULATED AIR POLLUTANT	CAPTURE SYSTEM EFFICIENCY (%)		CONTROL EQUIPMENT EFFICIENCY (%)		OVERALL REDUCTION EFFICIENCY (%)	
		(MIN)	(TYP)	(MIN)	(TYP)	(MIN)	(TYP)
i	VOM	100	100	96	97	96	97
ii	HAP	100	100	96	97	96	97
iii							

iv. EXPLAIN ANY OTHER REQUIRED LIMITS ON CONTROL EQUIPMENT PERFORMANCE SUCH AS OUTLET CONCENTRATION, COOLANT TEMPERATURE, ETC.:

Combustion chamber temperature. If the high temperature point is reached, the entire system shuts down, and contaminated vapors are not drawn from the wells feeding the RTO.

b) METHOD USED TO DETERMINE EACH OF THE ABOVE EFFICIENCIES (E.G., STACK TEST, MATERIAL BALANCE, MANUFACTURER'S GUARANTEE, ETC.) AND THE DATE LAST TESTED, IF APPLICABLE:

EFFICIENCY DETERMINATION METHOD	DATE LAST TESTED
CAPTURE: If the system is not running there are no contaminated vapors to	
CONTROL: capture or control.	
OVERALL: Sampling and lab testing of RTO exhaust as required by permit.	

c) REQUIRED PERFORMANCE:

	REGULATED AIR POLLUTANT	CAPTURE SYSTEM EFFICIENCY (%)	CONTROL EQUIPMENT EFFICIENCY (%)	OVERALL REDUCTION EFFICIENCY (%)	APPLICABLE RULE
i	See Permit				
ii	11060036				
iii					

iv. EXPLAIN ANY OTHER REQUIRED LIMITS ON CONTROL EQUIPMENT PERFORMANCE SUCH AS OUTLET CONCENTRATION, COOLANT TEMPERATURE, ETC.:

Combustion chamber temperature. If the high temperature point is reached, the entire system shuts down, and contaminated vapors are not drawn from the wells feeding the RTO.

(31)EMISSION INFORMATION

REGULATED AIR POLLUTANT		¹ ACTUAL EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			² PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	³ OTHER TERMS	³ OTHER TERMS	⁴ DM	⁵ RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:										
	TYPICAL:						()				
LEAD	MAXIMUM:						()				
	TYPICAL:						()				
NITROGEN OXIDES (NOx)	MAXIMUM:						()				
	TYPICAL:						()				
PARTICULATE MATTER (PART)	MAXIMUM:						()				
	TYPICAL:						()				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:						()				
	TYPICAL:						()				
SULFUR DIOXIDE (SO2)	MAXIMUM:						()				
	TYPICAL:						()				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:						()			8.0 lb/hr	24.9
	TYPICAL:						()				
OTHER, SPECIFY:	MAXIMUM:						()				
	TYPICAL:						()				
EXAMPLE: PARTICULATE MATTER	MAXIMUM:	5.00	21.9	0.3 GR/DSCF		1	6.0 (LBS/HR)	212.321	26.28	5.5 LBS/HR	22
	TYPICAL:	4.00	14.4	0.24 GR/DSCF		4	5.5 (LBS/HR)	212.321	19.80		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 260-5.

¹ PROVIDE CONTROLLED EMISSIONS (E.G., THE EMISSIONS THAT WOULD RESULT AFTER ALL CONTROL AND CAPTURE EFFICIENCIES ARE ACCOUNTED FOR).

² PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

³ PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)

⁴ DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)

⁵ RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

APPLICATION PAGE _____

(32) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		¹ ACTUAL EMISSION RATE				ALLOWABLE BY RULE	
NAME OF HAP EMITTED	² CAS NUMBER	POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	³ OTHER TERMS	⁴ DM	⁵ RATE OR STANDARD	APPLICABLE RULE
Any Single HAP		MAXIMUM:				See Permit 11060036	
		TYPICAL:					
Any combination of HAPs		MAXIMUM:				See Permit 11060036	
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
		MAXIMUM:					
		TYPICAL:					
<i>EXAMPLE:</i>		MAXIMUM:	10.0	1.2	2	98% by wt control device leak-tight trucks	CFR 61 61.302(b),(d)
<i>Benzene</i>	71432	TYPICAL:	8.0	0.8	2		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 260-6.

¹ PROVIDE CONTROLLED EMISSIONS (E.G., THE EMISSIONS THAT WOULD RESULT AFTER ALL CONTROL AND CAPTURE EFFICIENCIES ARE ACCOUNTED FOR).
² CAS - CHEMICAL ABSTRACT SERVICE NUMBER.
³ PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).
⁴ DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).
⁵ RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

33) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

Stack

34) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

<100 feet

35) DISCHARGE HEIGHT ABOVE GRADE (FT):

30.5

36) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

Not Known.

37) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.

2.5

38) EXIT GAS FLOW RATE

a) MAXIMUM (ACFM):

b) TYPICAL (ACFM):

2500

39) EXIT GAS TEMPERATURE

a) MAXIMUM (°F):

b) TYPICAL (°F):

200

40) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

vertical

41) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

NAME		FLOW DIAGRAM DESIGNATION
a)	SVE System	SVE Well Field
b)		
c)		
d)		
e)		
f)		
g)		

42) WHAT PERCENTAGE OF THE CONTROL EQUIPMENT EMISSIONS ARE BEING DUCTED TO THIS EXHAUST POINT (%)?

100

43) IF THE PERCENTAGE OF THE CONTROL EQUIPMENT EMISSIONS BEING DUCTED TO THE EXHAUST POINT IS NOT 100%, THEN EXPLAIN WHERE THE REMAINING EMISSIONS ARE BEING EXHAUSTED TO:

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

44a) LATITUDE:

b) LONGITUDE:

45) UTM ZONE:

b) UTM VERTICAL (KM):

c) UTM HORIZONTAL (KM):



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
 P.O. BOX 19506
 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE

Revision #: _____
 Date: ____ / ____ / ____
 Page _____ of _____
 Source Designation: _____

SUPPLEMENTAL FORM AIR POLLUTION CONTROL EQUIPMENT AFTERBURNER (260B)	FOR AGENCY USE ONLY
	ID NUMBER: _____
	CONTROL EQUIPMENT#: _____
DATE: _____	

DATA AND INFORMATION	
1) FLOW DIAGRAM DESIGNATION OF AFTERBURNER: Regenerative Thermal Oxidizer	
2) FUEL USED IN BURNERS: <input checked="" type="checkbox"/> NATURAL GAS <input type="checkbox"/> FUEL OIL; NUMBER: _____ <input type="checkbox"/> OTHER, SPECIFY: _____	
3) BURNERS PER AFTERBURNER: 1 AT 2.8 (MILLION BTU/HR, EACH)	
4) MINIMUM COMBUSTION CHAMBER TEMPERATURE (DEGREES FAHRENHEIT): 1550	
5) IS A CATALYST USED?: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, CATALYST MATERIAL: _____	
6) EXPECTED FREQUENCY OF CATALYST REPLACEMENT: NA	7) DATE CATALYST WAS LAST REPLACED (MONTH/YEAR): /
8) EXPLAIN DEGRADATION OR PERFORMANCE INDICATOR CRITERIA DETERMINING CATALYST REPLACEMENT: NA	
9a) IS A HEAT EXCHANGER USED?: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DESCRIBE: Ceramic bed	
b) HEAT EXCHANGER SURFACE AREA (FT ²):	c) AVERAGE THERMAL EFFICIENCY (%):
10) DESCRIBE METHOD OF GAS MIXING USED: 	
11) RANGE OF RETENTION TIME: TO (SEC)	12) COMBUSTION CHAMBER LENGTH (FEET): 23.5

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE _____

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260B-CAAPP

FOR APPLICANT'S USE

13) COMBUSTION CHAMBER CROSS SECTIONAL AREA (SQUARE FEET):		13.6
14) INLET EMISSION STREAM PARAMETERS:		
	MAX	TYPICAL
PRESSURE (mmHG):		variable
HEAT CONTENT (BTU/SCF):		variable
OXYGEN CONTENT (%):		variable
MOISTURE CONTENT (%):		variable
ARE HALOGENATED ORGANICS PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
ARE PARTICULATES PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
ARE METALS PRESENT?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
15) AFTERBURNER OPERATING PARAMETERS:		
	DURING MAXIMUM OPERATION OF FEEDING UNIT(S)	DURING TYPICAL OPERATION OF FEEDING UNIT(S)
COMBUSTION CHAMBER TEMPERATURE (DEGREES FAHRENHEIT):	1800	1550 - 1800
INLET GAS TEMPERATURE (DEGREES FAHRENHEIT):	ambient	ambient
INLET FLOW RATE (SCFM):	10000	10000
EFFICIENCY (VOM REDUCTION):	96 to 99 (%)	96 to 99 (%)
EFFICIENCY (OTHER; SPECIFY CONTAMINANT: <u>volatile HAP</u>):	96 to 99 (%)	96 to 99 (%)
16) FOR THERMAL AFTERBURNERS, IS THE COMBUSTION CHAMBER TEMPERATURE CONTINUOUSLY MONITORED AND RECORDED?		
		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
17) FOR CATALYTIC AFTERBURNERS, IS THE TEMPERATURE RISE ACROSS THE CATALYST BED CONTINUOUSLY MONITORED AND RECORDED?		
		<input type="checkbox"/> YES <input type="checkbox"/> NO
18) IS THE VOM CONCENTRATION OF EXHAUST MONITORED AND RECORDED?		
		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
19) IS THE OPERATION OF THE AFTERBURNER DISCONTINUED DURING THE NON-OZONE SEASON (SEPTEMBER 1 TO MAY 31)?		
		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



FOR APPLICANT'S USE

Revision #: _____
 Date: ____ / ____ / ____
 Page _____ of _____
 Source Designation: _____

CAAPP APPLICATION INCORPORATION BY REFERENCE	FOR AGENCY USE ONLY
	ID NO.:
	PERMIT NO.:
	DATE:

SECTION ONE	SOURCE INFORMATION
1) SOURCE NAME: Soil Vapor Extraction System	
2) SOURCE ID NO.: 119090AAO	3) DATE FORM PREPARED: 04 / 03 / 2012

SECTION TWO	INSTRUCTIONS IN BRIEF
1) COMPLETE THIS FORM IF THE APPLICANT REQUESTS TO UTILIZE INFORMATION PROVIDED IN A PRIOR CAAPP APPLICATION. INCORPORATION BY REFERENCE MAY BE IN FULL OR IN PART OF THE APPLICATION. THE MATERIAL INCORPORATED MUST REMAIN CORRECT, CURRENT, AND COMPLETE.	
2) COMPLETE SECTION THREE IF THE APPLICANT REQUESTS TO INCORPORATE AN ENTIRE APPLICATION. COMPLETE SECTION FOUR IF THE APPLICANT REQUESTS TO INCORPORATE ONLY PORTIONS OF AN APPLICATION. IN EITHER CASE, IDENTIFY AND DESCRIBE THE ITEM TO BE INCORPORATED (E.G., STEAM PLANT, NOX CONTROL SYSTEM, TANKS 32-38, ETC.) AND THE PAGE NUMBERS IN THIS APPLICATION WHERE THE INCORPORATED PAGES WILL BE PLACED, AND FOR PARTIAL INCORPORATIONS THE PAGE NUMBERS FROM THE APPLICATION TO INCORPORATE FROM.	
3) UTILIZE A PLACEHOLDER IN THE APPLICATION NOTING THE INCORPORATION BY REFERENCE.	
4) BE SURE THE PORTIONS OF THE 200-CAAPP WHICH ADDRESS INCORPORATIONS BY REFERENCE CORRECTLY REFLECT THE INFORMATION CONTAINED ON THIS FORM.	
5) THE ILLINOIS EPA ENCOURAGES APPROPRIATE USE OF INCORPORATION BY REFERENCE, WHICH GENERALLY INCLUDES THOUGHTFULLY INCORPORATING LARGE GROUPS OF INFORMATION (E.G., STEAM PLANT) TO FACILITATE THE PERMITTING PROCESS FOR THE PERMITTEE AND THE ILLINOIS EPA.	
6) REFER TO 287-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.	

SECTION THREE	INCORPORATE ALL MATERIAL FROM A PRIOR APPLICATION	
IS THE APPLICANT REQUESTING TO INCORPORATE AN ENTIRE APPLICATION(S)?		
		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
IF YES, COMPLETE THE FOLLOWING:		
	DESCRIPTION OF MATERIAL TO BE INCORPORATED	APPLICATION
		PAGE NOs IN THIS APPLICATION
1	Application for Construction and Operating Permit - Soil Vapor Extraction System with Regenerative Thermal Oxidizer	No.: 11060036 DATE: 06/05/2011
2		No.: DATE:
3		No.: DATE:
4		No.: DATE:

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

APPLICATION PAGE _____

FOR APPLICANT'S USE

5		NO.:	
		DATE:	
6		NO.:	
		DATE:	
7		NO.:	
		DATE:	
8		NO.:	
		DATE:	

SECTION FOUR INCORPORATE A PRIOR PARTIAL APPLICATION

IS THE APPLICANT REQUESTING TO INCORPORATE A PARTIAL APPLICATION(S)?

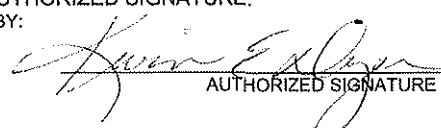
YES NO

IF YES, COMPLETE THE FOLLOWING:

	DESCRIPTION OF ITEM TO BE INCORPORATED	APPLICATION	PAGE NOs TO INCORPORATE	PAGE NOs IN THIS APPLICATION
1		NO.:		
		DATE:		
2		NO.:		
		DATE:		
3		NO.:		
		DATE:		
4		NO.:		
		DATE:		
5		NO.:		
		DATE:		
6		NO.:		
		DATE:		
7		NO.:		
		DATE:		
8		NO.:		
		DATE:		

SECTION FIVE SIGNATURE BLOCK

I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION, INCLUDING THOSE MATERIALS INCORPORATED BY REFERENCE, ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:
 BY: 
 AUTHORIZED SIGNATURE
 Principal Program Manager
 TITLE OF SIGNATORY
 Kevin E. Dyer
 TYPED OR PRINTED NAME OF SIGNATORY
 4, 11, 12
 DATE



FOR APPLICANT'S USE

Revision #: _____
 Date: ____ / ____ / ____
 Page ____ of ____
 Source Designation: _____

FEE DETERMINATION FOR CAAPP SOURCE	FOR AGENCY USE ONLY
	ID NO.:
	PERMIT NO.:
DATE:	

SECTION ONE	SOURCE INFORMATION
1) SOURCE NAME: Soil Vapor Extraction System	
2) SOURCE ID NO.: 119090AAO	3) DATE FORM PREPARED: 04 / 03 / 2012

SECTION TWO	INSTRUCTIONS IN BRIEF
1) COMPLETE THIS FORM TO DETERMINE THE PERMIT FEE ESTABLISHED BY THE CAAPP PERMIT.	
2) THE EMISSION LEVELS STATED IN SECTION FOUR, WHICH ARE ONLY USED FOR THE PURPOSE OF PERMIT FEE DETERMINATION, WILL BECOME PERMIT SPECIAL CONDITIONS IN THE CAAPP PERMIT.	
3) THE ILLINOIS EPA DOES NOT REQUIRE PAYMENT WITH THIS APPLICATION. WHEN YOU ARE BILLED MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS AT THE TOP OF THIS FORM. DO NOT SEND CASH. ON THE CHECK MEMO LINE, PLEASE LIST "CAAPP OPERATING PERMIT FEE; ID NO. XXXXXXXX", REPLACE THE Xs WITH YOUR SOURCE ID NUMBER.	

SECTION THREE	FEE RATIONALE				
WHAT IS THE PERMIT STATUS AT THE TIME OF THIS REQUEST? CHECK ONLY ONE BELOW.					
1)	<input type="checkbox"/> INITIAL CAAPP PERMIT	<input type="checkbox"/> RENEWAL CAAPP PERMIT	<input checked="" type="checkbox"/> FESOP INITIAL/RENEWAL		
	<input type="checkbox"/> SIGNIFICANT MODIFICATION	<input type="checkbox"/> MINOR MODIFICATION	<input type="checkbox"/> ADMINISTRATIVE AMENDMENT		
2)	COMPLETE THE BELOW TABLE FOR A NON-INITIAL CAAPP PERMIT. IF THERE IS AN INCREASE/DECREASE IN EMISSIONS, ENTER THE NUMBER(S) FOR THE EMISSIONS CHANGE RATIONALE AS APPROPRIATE.				
	POLLUTANT	INCREASE	DECREASE	NO CHANGE	EMISSIONS CHANGE RATIONALE(S)
	NITROGEN OXIDES (NO _x)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	PARTICULATE MATTER (PART)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	SULFUR DIOXIDE (SO ₂)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	VOLATILE ORGANIC MATERIAL (VOM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	OTHER (SPECIFY)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	OTHER (SPECIFY)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CHANGE RATIONALE:					
1	BUSINESS DECISION (E.G., OPERATING NEEDS, BANKRUPTCY, ETC.).				
2	REMOVAL OR ADDITION OF PROCESSES AT THE SOURCE.				
3	INCLUSION OR REMOVAL OF A CONTROL DEVICE.				
4	CHEMICAL REFORMULATION (E.G., REFORMULATING A COATING FROM HIGH VOM TO A LOW VOM).				
5	FUEL SWITCHING (E.G., COAL TO NATURAL GAS, ETC.).				
6	METHODOLOGY CHANGE (E.G., SWITCHING A PETROLEUM SOLVENT TO AQUEOUS SOLUTION).				
7	CHANGES IN METHOD USED FOR CALCULATIONS (E.G., EMISSION FACTOR CHANGE).				
8	OTHER (DESCRIBE): _____				
9	OTHER (DESCRIBE): _____				

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

APPLICATION PAGE _____

FOR APPLICANT'S USE

SECTION FOUR		FEE DATA				
1) WILL THE SOURCE PAY THE CURRENT MAXIMUM FEE OF \$250,000.00 PER YEAR?						
					<input type="checkbox"/>	YES
IF YES, THE REMAINDER OF THIS FORM DOES NOT NEED TO BE COMPLETED.					<input checked="" type="checkbox"/>	NO
2)	EMISSION UNIT ^A	NITROGEN OXIDES (NO _x) (TONS/YR)	PARTICULATE MATTER (PART) (TONS/YR)	SULFUR DIOXIDE (SO ₂) (TONS/YR)	VOLATILE ORGANIC MATERIAL (VOM) (TONS/YR)	OTHER ^B SPECIFY (TONS/YR)
	RTO	0.62	0.51	3.7	24.9	
3)	SUBTOTAL					
4)	FUGITIVE					
5)	TOTAL	0.62	0.51	3.7	24.9	
6)	GRAND TOTAL ACROSS POLLUTANTS (TONS/YR):					29.73
7)	CALCULATED PERMIT FEE: IF GRAND TOTAL IN ITEM 6 ABOVE IS > 100 TONS/YR THEN MULTIPLY GRAND TOTAL BY \$18.00 AND ENTER, OTHERWISE ENTER \$1,800.00:					\$1,800
8)	MINIMUM PERMIT FEE IS \$1,800.00 PER YEAR. MAXIMUM PERMIT FEE IS \$250,000.00 PER YEAR. IF THE CALCULATED PERMIT FEE IN ITEM 7 ABOVE IS BETWEEN THESE TWO FEE AMOUNTS THEN ENTER HERE, OTHERWISE ENTER THE MINIMUM OR MAXIMUM PERMIT FEE, WHICHEVER IS APPLICABLE. THIS IS THE ACTUAL ANNUAL PERMIT FEE:					

A EMISSION UNIT - PROVIDE THE NAME AND FLOW DIAGRAM DESIGNATION OF THE EMISSION UNIT AS IT APPEARS ON THE DATA AND INFORMATION FORM.
 B OTHER - ANY HAZARDOUS AIR POLLUTANT (HAP) NOT INCLUDED ELSEWHERE, E.G., CHLORINE, HCl, ETC.

APPLICATION PAGE _____



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
 P.O. BOX 19506
 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE	
Revision #:	_____
Date:	____ / ____ / ____
Page	_____ of _____
Source Designation:	Soil Vapor Extraction

COMPLIANCE CERTIFICATION	FOR AGENCY USE ONLY
	ID NUMBER:
	PERMIT #:
DATE:	

AN APPLICATION FOR A CAAPP PERMIT MUST CONTAIN A CERTIFICATION OF COMPLIANCE SIGNED BY A RESPONSIBLE OFFICIAL. THIS FORM MUST BE SUBMITTED WITH THE ORIGINAL CAAPP PERMIT APPLICATION AND UPDATED ON AN ANNUAL BASIS.

SOURCE INFORMATION	
1) SOURCE NAME: Soil Vapor Extraction System	
2) DATE FORM PREPARED: 04/03/2012	3) SOURCE ID NO. (IF KNOWN): 119090AAO
4) CAAPP PERMIT NUMBER (IF KNOWN): Initial Application for FESOP	
5) IS THIS THE FIRST SUBMITTAL OF THIS FORM? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
IF NO, WHAT IS THE REPORTING PERIOD COVERED BY THIS FORM? _____ / _____ / _____ TO: _____ / _____ / _____	

SOURCE COMPLIANCE INFORMATION	
6) DOES THE SIGNATORY OF THIS FORM HEREBY CERTIFY THAT THE SOURCE IS IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
IF NO, EXPLAIN:	
7) PROVIDE THE SCHEDULE FOR SUBMISSION OF COMPLIANCE CERTIFICATION DURING THE PERMIT TERM, E.G., ONCE ANNUALLY IN JANUARY (NOTE THAT SUCH CERTIFICATION MUST BE SUBMITTED NO LESS FREQUENTLY THAN ANNUALLY): Annually in February	
8) INDICATE THE COMPLIANCE STATUS OF THE SOURCE WITH ANY APPLICABLE ENHANCED MONITORING AND COMPLIANCE CERTIFICATION REQUIREMENTS OF THE CLEAN AIR ACT, E.G., NO ENHANCED MONITORING REQUIRED AND IN COMPLIANCE WITH COMPLIANCE CERTIFICATION REQUIREMENTS: NO ENHANCED MONITORING REQUIRED AND IN COMPLIANCE WITH COMPLIANCE CERTIFICATION REQUIREMENTS	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE _____

FOR APPLICANT'S USE

EMISSION UNITS COMPLIANCE INFORMATION

9a) THE FOLLOWING EMISSION UNITS ARE IN COMPLIANCE WITH APPLICABLE REQUIREMENTS SUCH AS EMISSION STANDARDS, EMISSION CONTROL REQUIREMENTS, EMISSION TESTING, COURT REQUIREMENTS, WORK PRACTICES, OR ENHANCED MONITORING, BASED ON THE COMPLIANCE METHODS SPECIFIED BELOW (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-1):

EMISSION UNIT	APPLICABLE RULE	COMPLIANCE DETERMINATION METHOD
RTO	Permit Conditions	Sampling and Testing

9b) LIST THE EMISSION UNITS THAT WERE NOT IN CONTINUOUS COMPLIANCE SINCE THE LAST REPORTING PERIOD, AND THE REASON(S) FOR NONCOMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-2.):

EMISSION UNIT	REASON(S) FOR NONCOMPLIANCE

COMPLIANCE INFORMATION

10) SUMMARY OF METHODS USED TO DETERMINE COMPLIANCE:

a) DESCRIPTION OF TESTING METHODS USED TO DEMONSTRATE COMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-3.):

Samples of exhaust are tested at a laboratory. The results are recorded and evaluated in the manner specified in the permit.

10b) DESCRIPTION OF MONITORING PROCEDURES USED TO DEMONSTRATE COMPLIANCE, INCLUDING ANY ENHANCED MONITORING REQUIREMENTS OF THE ACT (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-4.):

No monitoring is required.

c) DESCRIPTION OF RECORDKEEPING USED TO DEMONSTRATE COMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-5.):

Records of results are kept in an Excel spreadsheet.

10d) DESCRIPTION OF REPORTING USED TO DEMONSTRATE COMPLIANCE (IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 296-6.):

Reporting will be done in conformance with permit requirements.

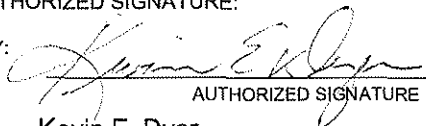
SIGNATURE BLOCK

NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE RETURNED AS INCOMPLETE.

11) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE.

AUTHORIZED SIGNATURE:

BY:



AUTHORIZED SIGNATURE

Principal Program Manager

TITLE OF SIGNATORY

Kevin E. Dyer

TYPED OR PRINTED NAME OF SIGNATORY

4 / 11 / 12

DATE



FOR APPLICANT'S USE	
Revision #:	_____
Date:	____ / ____ / ____
Page	_____ of _____
Source Designation:	_____

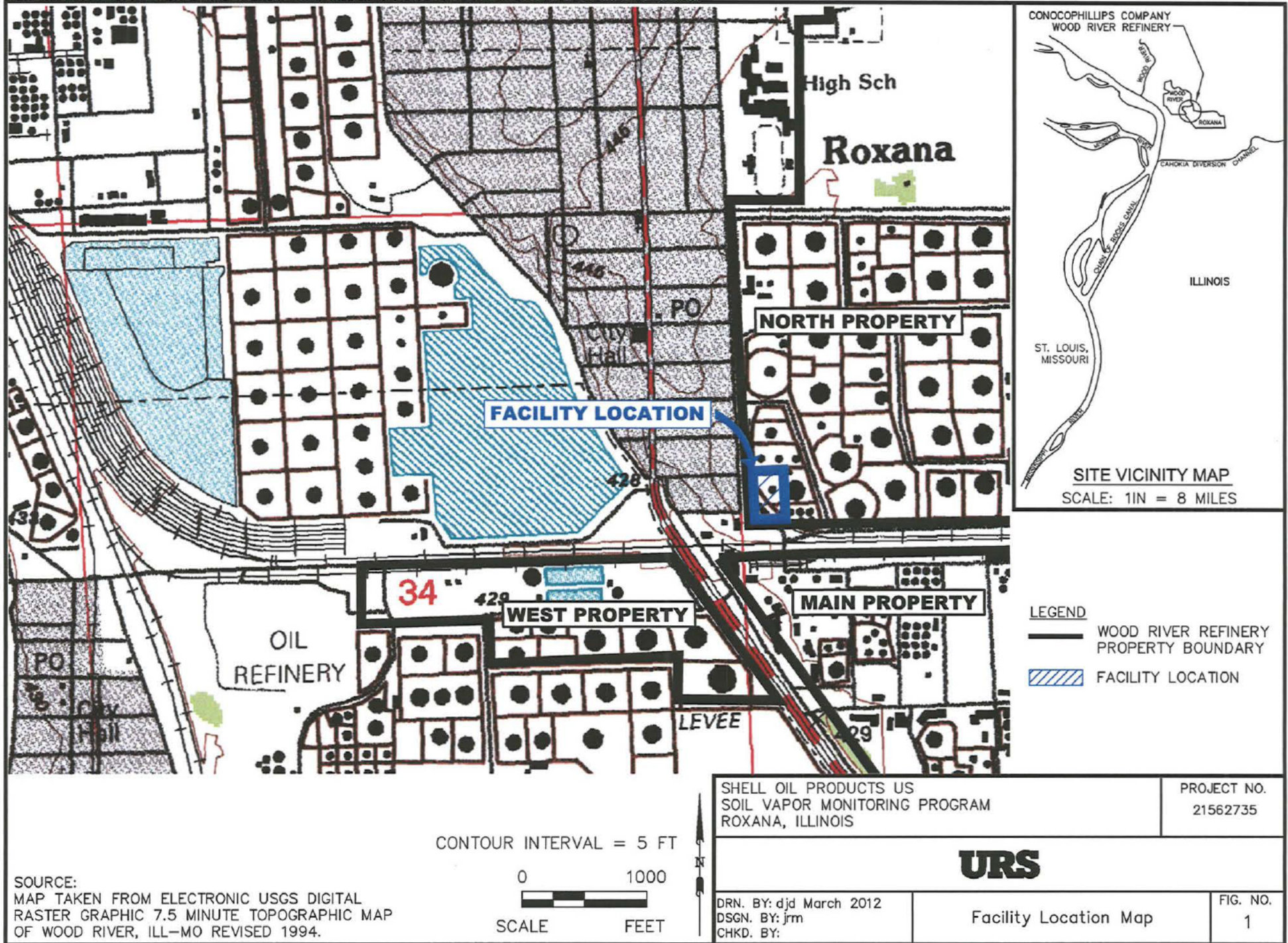
LISTING OF SIGNIFICANT ACTIVITIES	FOR AGENCY USE ONLY
	ID NO.:
	PERMIT NO.:
	DATE:

SECTION ONE	SOURCE INFORMATION
1) SOURCE NAME: Soil Vapor Extraction System	
2) SOURCE ID NO.: 119090AAO	3) DATE FORM PREPARED: 04 / 03 / 2012

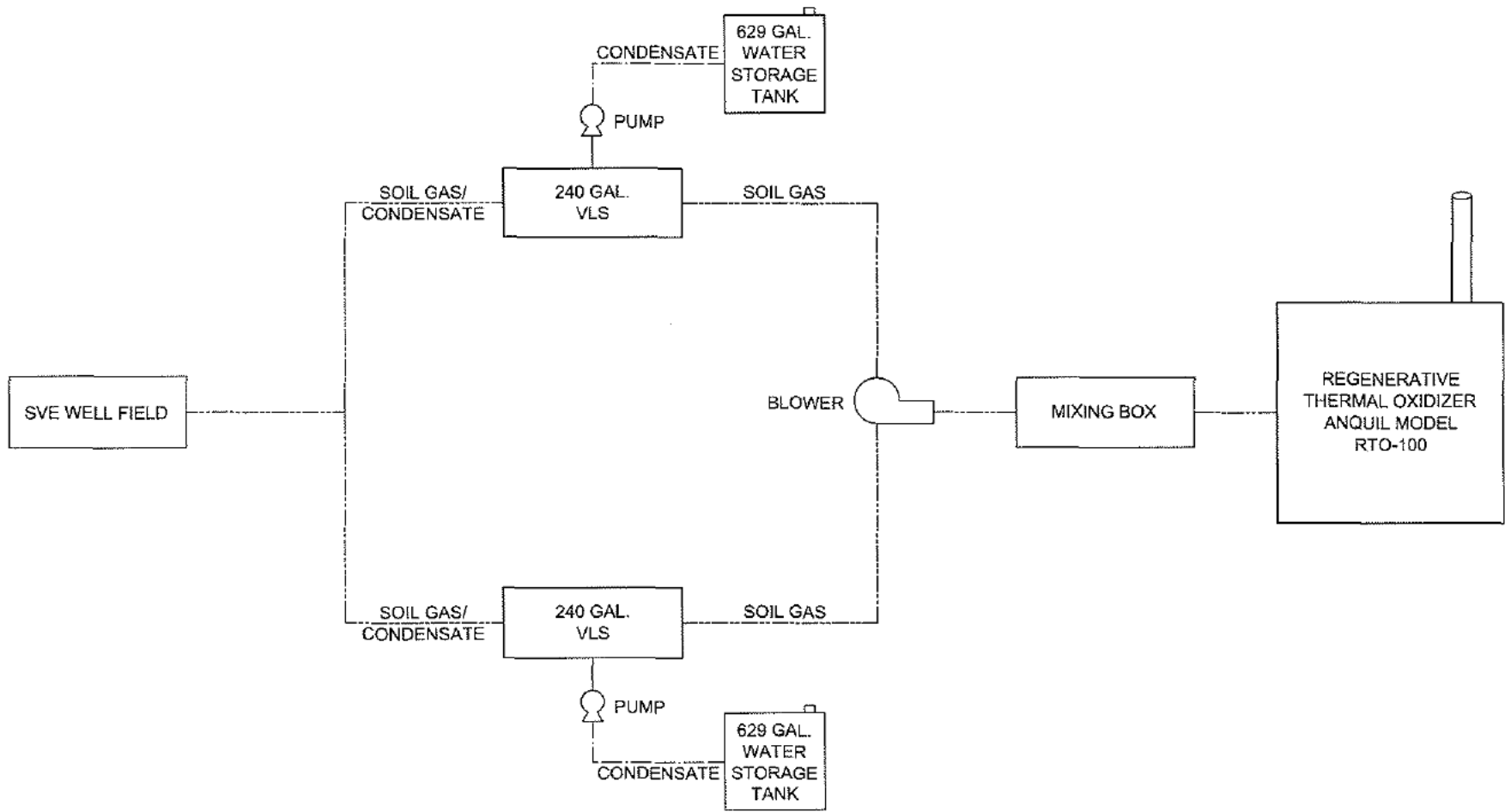
SECTION TWO	INSTRUCTIONS IN BRIEF
1) COMPLETE THE LISTING OF SIGNIFICANT ACTIVITIES AT THIS SOURCE. PROVIDE THE LISTING IN THE ORDER IN WHICH THE EMISSION UNIT(S) OR PROCESS(ES) ARE FOUND IN THE APPLICATION.	
2) EMISSION UNITS MAY BE GROUPED BY ACTIVITY RATHER THAN INDIVIDUALLY LISTED (E.G., TANKS 1-5).	
3) DO NOT INCLUDE INSIGNIFICANT ACTIVITIES IN THIS LISTING; PROVIDE THOSE ACTIVITIES IN THE 297-CAAPP-LISTING OF INSIGNIFICANT ACTIVITIES.	

SECTION THREE			LISTING OF SIGNIFICANT ACTIVITIES		
#	EMISSION UNIT OR PROCESS	AIR POLLUTION CONTROL EQUIPMENT			
1	Soil Vapor Extraction System	RTO			

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.



File: P:\ENVIRONMENTAL\SHELL_OIL_PRODUCT_US\BROOKLYN-ROUTE_111\21562735\ROXANA_1 & A\DRAWINGS\SVE_PROCESS DIAGRAM.DWG Lot1 revised: MAR_26_12 @ 09:59 a.m. by: carl.smith



SHELL OIL PRODUCTS US ROXANA, ILLINOIS		PROJECT NO. 21562735
URS		
DRN. BY:chs March 2012 DSGN. BY:jrm CHKD. BY:sjs	SVE Process Diagram	FIG. NO. 2

**Exhibit 220-6a
RTO HAPs Emissions**

Month	tons/month																Calculated Monthly Total HAPs Emissions	Annual Expected Total HAPs Emissions
	Benzene	Ethylbenzene	Toluene	o-xylene	m,p-xylene	Carbon Disulfide	Methylene Chloride	Hexane	2-Butanone	2,2,4-Trimethylpentane	1,2-Dichloroethane	Trichloroethene	1,2-Dibromoethane (EDB)	Cumene	1,4-Dichlorobenzene	1,2,4-Trichlorobenzene	tons/ month	tons/year
Jan-12	1.71E-04	3.43E-05	1.51E-04	1.61E-05	6.75E-05	1.81E-04	7.46E-05	3.02E-03	4.03E-05	1.71E-03	0.00E+00	0.00E+00	1.61E-05	0.00E+00	2.42E-05	5.44E-05	5.57E-03	6.68E-02
Feb-12	4.47E-03	5.36E-04	1.79E-03	2.55E-04	1.08E-03	1.02E-02	9.00E-04	3.50E-02	5.38E-04	2.07E-02	1.53E-05	2.21E-05	4.58E-04	2.02E-05	3.54E-04	1.56E-03	7.79E-02	9.40E-01

Assumptions:

Month	Exhaust Flow Rate	CF ¹	CF ²	CF ³	Hours Operated	CF ⁴	CF ⁵
	(scfm)	lb/lb - Mole	min/ hour	ft ³ /lb -Mole	hrs/ month	lbs/ ton	hours/ month
Jan-12	10,000	100	60	3.87E+08	13	2000	730
Feb-12	10,000	100	60	3.87E+08	730	2000	730

Notes:

1. The construction permit required additional analysis during startup and shakedown, which happened primarily in February.
2. The February emissions values are based on an average of samples collected between February 1st and February 9th.

CF Conversion Factor

¹ Value obtained from Permit Condition 3.a.

² 60 mins/hr

³ Value obtained from Permit Condition 3.a.

⁴ 2000 lbs/ton

⁵ 730 hours/month

**Exhibit 220-6b
RTO Other Volatile Organic Matter (VOM) Emissions**

Month	Other VOM Total	Calculated Monthly Total Other VOM Emissions	Calculated Monthly Total Other VOM Emissions	Annual Expected Total Other VOM Emissions
	tons/month	tons/month	lbs/ hour ⁵	tons/year
12-Jan	1.70E-01	1.70E-01	4.65E-01	2.04E+00
12-Feb	2.07E-02	2.07E-02	5.66E-02	2.06E+00

Month	Exhaust Flow Rate	CF ¹	CF ²	CF ³	Hours Operated	CF ⁴	CF ⁵
	(scfm)	lb/lb -Mole	min/ hour	ft ³ /lb -Mole	hrs/ month	lbs/ ton	hrs/month
Jan-12	10,000	100	60	3.87E+08	13	2000	730
Feb-12	10,000	100	60	3.87E+08	730	2000	730

Notes:

1. The current operation FESOP required additional analysis during startup and shakedown, which happened primarily in February.
2. The February emissions values are based on an average of samples collected between February 1st and February 9th.

CF Conversion Factor

¹ Value obtained from Permit Condition 3.a.

² 60 mins/hr

³ Value obtained from Permit Condition 3.a.

⁴ 2000 lbs/ton

⁵ 13 hours/month (January 2012), 730 hours/month (February 2012)

**Exhibit 220-5
Potential RTO Criteria Pollutant Emissions**

Maximum Design Rate (MMBtu/hr)	Maximum Fuel Throughput	Units	SO ₂ Emission Factor (lb/MMBtu)	NO _x Emission Factor (lb/MMBtu)	CO Emission Factor (lb/MMBtu)	PM Emission Factor (lb/MMBtu)	Potential SO ₂ Emission Rate (TPY)	Potential NO _x Emission Rate (TPY)	Potential CO Emission Rate (TPY)	Potential PM Emission Rate (TPY)
3.0	3000	SCF/hr	6.00E-01	1.00E-01	7.45E-03	8.24E-02	7.50E-03	1.25E+00	1.01E-01	9.46E-02

Notes:
Emission factor from AP-42 External Combustion Sources, 1.4 Natural Gas Combustion (per manufacturer's recommendation)

Exhibit 232-1

Soil Vapor Extraction System Calculated Storage Tank Emissions

Pollutant	Concentration mg/L	Total Pounds/Year	Total Pounds/Hour
Benzene	1860	1.90E-04	2.17E-08
Ethylbenzene	10	1.02E-06	1.16E-10
Toluene	10	1.02E-06	1.16E-10
Xylenes (Total)	10	1.02E-06	1.16E-10
n-Butylbenzene	50	5.10E-06	5.82E-10
sec-Butylbenzene	50	5.10E-06	5.82E-10
tert-Butylbenzene	50	5.10E-06	5.82E-10
Carbon disulfide	50	5.10E-06	5.82E-10
Carbon tetrachloride	10	1.02E-06	1.16E-10
Chlorobenzene	10	1.02E-06	1.16E-10
Chloroethane	20	2.04E-06	2.33E-10
Chloroform	10	1.02E-06	1.16E-10
Chloromethane	20	2.04E-06	2.33E-10
Cymene (p-isopropyltoluene)	50	5.10E-06	5.82E-10
1,4-Dioxane	250	2.55E-05	2.91E-09
Ethyl methacrylate	50	5.10E-06	5.82E-10
Hexachlorobutadiene	50	5.10E-06	5.82E-10
2-Hexanone (Methyl N-Butyl Ketone)	50	5.10E-06	5.82E-10
Isopropylbenzene (Cumene)	50	5.10E-06	5.82E-10
Methyl tert-Butyl Ether (MTBE)	10	1.02E-06	1.16E-10
Naphthalene	0.271	2.76E-08	3.16E-12
n-Propylbenzene	50	5.10E-06	5.82E-10
1,2,3-Trichlorobenzene	50	5.10E-06	5.82E-10
1,2,4-Trichlorobenzene	50	5.10E-06	5.82E-10
1,1,2-Trichloroethane	10	1.02E-06	1.16E-10
1,2,4-Trimethylbenzene	50	5.10E-06	5.82E-10
1,3,5-Trimethylbenzene	50	5.10E-06	5.82E-10
Vinyl acetate	50	5.10E-06	5.82E-10
Total PAHS	0.15	1.53E-08	1.75E-12
Total HAPS from 629-gallon Storage Tanks:		5.10E-04	5.82E-08
Other VOM Total from 629-gallon Storage Tanks:		1.02E-04	1.16E-08
Total HAPS + VOM from 629-gallon Storage Tanks:		3.06E-07	3.49E-11
Total PAHs from 629-gallon Storage Tanks:		1.53E-11	1.75E-15
Total Emissions from 629-gallon Storage Tanks:		3.06E-07	3.49E-11

**Exhibit 200-A
Potential Emissions Totals**

	tons/year	lbs/hour
Total RTO HAPS:	9.40E-01	1.07E-04
Total RTO VOM:	2.06E+00	2.35E-04
Total RTO HAPs and VOM:	3.00E+00	3.42E-04
Total HAPS from 629-gallon Storage Tanks:	5.10E-04	5.82E-08
Other VOM Total from 629-gallon Storage Tanks:	1.02E-04	1.16E-08
Total HAPS + VOM from 629-gallon Storage Tanks:	3.06E-07	3.49E-11
Total PAHs from 629-gallon Storage Tanks:	1.53E-11	1.75E-15
Total Emissions from 629-gallon Storage Tanks:	3.06E-07	3.49E-11
Combined Emissions (VOM & HAPs) Total from RTO and Storage Tanks:	3.00E+00	3.42E-04

Exhibit 200-B Soil Vapor Extraction System Process Description

SOPUS completed installation of a full-scale soil vapor extraction system at the Roxana Site in January 2012 (**Figure 1**). The system consists of the following:

- Network of soil vapor extraction wells and SVE piping;
- Fifteen horsepower blower/motor (blower) that provides the vacuum to extract the soil vapor;
- Two, 240-gallon vapor liquid separators (VLSs);
- Two, 629-gallon above ground groundwater/condensate tanks and;
- A 10,000 SCFM regenerative thermal oxidizer (RTO) (**Figure 2**).

A steel shipping container, referred to as a conex, has been adapted to house the two VLSs, the vapor extraction blower, and the RTO control system. The conex and RTO are located adjacent to each other on property owned by the WRB Refining, LP, Wood River Refinery (**Figure 1**).

The blower provides the vacuum pressure necessary to extract and convey the soil vapor to one of two vapor liquid separators. The vapors are conveyed by vacuum to the RTO unit for destruction of hydrocarbon constituents. Condensate water, if generated, is conveyed by pumps to one of two stainless steel above ground storage tanks for subsequent transport and disposal. The tanks are approximately four feet in diameter and six feet in length with a maximum holding capacity of 629 gallons. The tanks will be kept under ambient conditions and will not be pressurized. Each storage tank is equipped with a two-inch diameter vent.

Based on flow data and constituent data collected during the start-up and shake-down period conducted in January and February 2012, the maximum potential hazardous air pollutants (HAPs) emission rate is calculated at 9.40E-01 tons per year (tons/yr) (**Exhibit 220-6a**). The maximum combined emission rate for all other volatile organic matter (VOM) is calculated at 2.06 tons/yr (**Exhibit 220-6b**). Other criteria pollutant emissions (those associated with combustion) will be less than major source thresholds. **Exhibit 220-5** provides the potential criteria pollutant emissions. Condensate/water has not been generated during the operation of the SVE System; however, there is potential that condensate/water containing VOM can accumulate in the storage tanks from SVE operations. Groundwater data collected from the Roxana Interim Groundwater Program were utilized to calculate potential emissions from the two 629-gallon storage tanks. The estimated potential emissions from the water/condensate tanks is calculated at 3.06E-07 lbs/yr (**Exhibit 232-1**). Combined emissions estimates from the SVE system (RTO and condensate/water storage tanks) for VOM are included in **Exhibit 200-A**.