

**Posted: 06/14/2012**

## **OPERATOR TRAINING ENFORCEMENT, NEW FORMS, AND DEF**

The note below was sent to compliance inspectors along with the attached memo on operator training. All UST professionals should be aware of our Class A/B/C Operator Training requirements, which is why we are making this available to all UST professionals and not just compliance inspectors. Please also use our latest installation and registration forms that have been changed to reflect the operator training requirements. They are posted on our website: <http://www.iowadnr.gov/InsideDNR/RegulatoryLand/UndergroundStorageTanks/USTForms.aspx>

### ***Third-party Compliance Inspectors and Field Offices***

The attached memo explains our plan for enforcement for those who are not yet trained as Class A, B, or C UST operators. The deadline for operator training was 12/31/2011, but we continue to discover sites that are not yet trained. You may discover sites without designated Class A/B and C (if appropriate) operators during compliance inspections and audits. Let Paul or me know if you have any questions.

### ***Installers***

What you need to know about operator training is that an owner/operator must have designated A/B and C (if appropriate) operators before they can dispense petroleum or hazardous substance tanks. The new forms have been changed to reflect this requirement, and are attached.

### ***DEF***

Another item we have been getting a lot of questions about is whether we regulate Diesel Exhaust Fluid (DEF). DEF is one technology to reduce nitrogen oxide emissions from heavy-duty diesel engines as required by EPA. DEF is not at this time a regulated substance, however, we strongly recommend to owners and UST professionals that they install the UST system according to the DNR's technical standards in Chapter 135, including secondary containment.

In a September 22, 2009 memo, EPA determined that while DEF may contain trace amounts of ammonia, which is a regulated hazardous substance, it would fall under the de minimis (meaning about minimal things) exclusion, and therefore, not regulated. This is not to say that the non-regulated status of DEF will not be revisited in the future, or that it is here to stay as a technology for reducing emissions from diesel engines. We strongly recommend to owners and installers that when a DEF tank is installed, it is installed according to Iowa UST requirements.

So, in the future, if DEF becomes regulated or if the contents of the DEF tank change to a petroleum product, the tank will be compliance. The DNR would register the tank as a Non-regulated DEF tank. Therefore, if a DEF tank is to be installed, a completed [Notification of Installation form](#) (Form #542-0104), [148 form](#) (Form #542-3266), and [Installation Inspection Checklist](#) should be submitted to the UST Section.

EPA and tank manufacturers expect “USTs storing DEF will be both compatible and secondarily contained. International standards for DEF set strict requirements for compatibility in order to avoid product contamination caused by materials in the storage tank system degrading into the DEF and also to prevent releases due to corrosion. Further, manufacturers recommend that underground DEF tank systems use secondary containment technologies with interstitial monitoring. EPA expects that owners and operators of DEF USTs will generally follow these industry, manufacturer, and international standards for the storage of DEF in USTs” (EPA Memo, 22 September 2009). We had this memo on our website at one time, and will make it available again.

The Iowa DNR also expects its licensed UST professionals to follow these standards for compatibility and prevention.

Let us know if you have any questions or comments about the above topics.

Questions, contact Tom Collins, [tom.collins@dnr.iowa.gov](mailto:tom.collins@dnr.iowa.gov) or at 515.281.8879 or Paul Nelson, [paul.nelson@dnr.iowa.gov](mailto:paul.nelson@dnr.iowa.gov) or at 515.281.8779



# STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR  
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
ROGER L. LANDE, DIRECTOR

To: UST Field Offices and Third-Party Compliance Inspectors  
From: Tom Collins/Paul Nelson  
Re: UST Class A/B/C Operator Training Enforcement  
Date: 4 March 2012

The operator training deadline was December 31, 2011. Every regulated UST facility had to have at least one trained Class A and Class B operator. Unstaffed retail marketing facilities and non-retail UST facilities must have a trained Class A and Class B operator. Staffed retail marketing facilities must also have a trained Class C operator.

The 2012 tank management fee application required the name of the class A and B operators, date of training and name of trainer or vendor. The DNR UST Section is tracking Class A and B operator information. If the information was not provided with payment for the tank tags, we withheld the tags until training was completed. However, since there were several operators who did not have training, we decided to release their tags to get them out and on the tanks. Next week, letters will be sent to owners and operators who have not yet submitted documentation of training. They will be given 10 days to comply. If documentation is not submitted in the time allowed, we will enforce a delivery prohibition.

There will continue to be a need for operator training at UST facilities due to personnel changes and turnover. A list of approved training vendors is provided on the UST Section's website:  
<http://www.iowadnr.gov/portals/idnr/uploads/ust/opvendors.pdf?amp;tabid=672>.

For immediate training, web-based training is always available. Classroom-based operator training may be available periodically. Check the UST Section website for classroom schedules. UST Section forms have been changed to reflect the training requirement, e.g., proof of training is required before tank tags can be issued (148 or Registration form) or before a new owner can operate (Change of Ownership form).

Operator training certificates for Class A/B/C must be readily available at each facility during the inspection [135.4(11)a, b,c]. Emergency contact information and emergency procedures must also be prominently displayed at the site [135.4(6)f], and readily available to Class C operators, i.e., at the counter where the Class C operator oversees the dispensing of petroleum products. If the facility does not have the DNR's emergency procedures form, they must have something similar. Unstaffed facilities are required by fire code (NFPA 30A) to post emergency instructions and contacts in the dispenser area. The DNR's emergency procedures are in a *3/2010 UST Memo* on our website:  
<http://www.iowadnr.gov/InsideDNR/RegulatoryLand/UndergroundStorageTanks/USTOwnersOperators/USTTraining.aspx>.

If during your inspection, a facility cannot provide documentation of training, inform the manager or contact person that documentation must be submitted to you within 10 days. If the matter is not resolved in 10 days, notify Paul or me, and we will begin to enforce a delivery prohibition and/or an administrative order. Contact Paul Nelson ([Paul.Nelson@dnr.iowa.gov](mailto:Paul.Nelson@dnr.iowa.gov) or 515.281.8879) or Tom Collins ([Tom.Collins@dnr.iowa.gov](mailto:Tom.Collins@dnr.iowa.gov) or 515.281.8879) to report a failure to comply with operator training requirements.

When Class A/B operator documentation is received, please be sure to send/email a copy to Paul or me so we can enter it on the database.



### Notification of Intent to Install

The licensed installer and the owner or operator must notify the Iowa Department of Natural Resources (DNR) of their intent to install an underground storage tank (UST) or product piping **at least 30 days prior to installation**. This notification requirement applies to all USTs that will contain a petroleum or hazardous substance. Contact the local Fire Department to ensure all the necessary local requirements and permits are met.

All UST systems must meet the technical requirements of 567--Chapter 135.15 (455B) of the Iowa Administrative Code (IAC). **UST systems installed after August 1, 2007 must have secondary containment.** You may request exemption from secondary containment if the system is more than 1,000 feet from a public water distribution system.

After installation of the UST system, you have 30 days to submit a registration form to the DNR along with appropriate fees. A copy of the registration form can be obtained from the DNR UST Section or the DNR's website: <http://www.iowadnr.gov/land/ust/ustprofindex.html>. There is an additional \$250 fee for failing to register a tank within the 30 days after installation is complete.

Proof of financial responsibility to address environmental contamination and third party liability resulting from the operation of the tank system is also required. This is usually in the form of pollution liability insurance certificate. Methods for satisfying the financial responsibility requirement are discussed in 567--Chapter 136 (455B) of the IAC. A copy of your proof of financial responsibility (i.e., a copy of the certificate of insurance) must be submitted before tank tags are issued and the USTs are allowed to operate.

UST FACILITY		
DNR Registered Site? <input type="checkbox"/> Yes <input type="checkbox"/> No	Registration No:	LUST No (if applies):
Site Name:		
Address:		
City:	ZIP:	Phone:
This site is: <input type="checkbox"/> Always Staffed <input type="checkbox"/> Always Unstaffed (card- or key-trol) <input type="checkbox"/> Staffed only during operating hours		
Tank Use: <input type="checkbox"/> Petroleum Retail Sales <input type="checkbox"/> Non-Retail Sales <input type="checkbox"/> Government <input type="checkbox"/> Farm/Residential <input type="checkbox"/> Emergency Power		
Method of Financial Responsibility for USTs (i.e., insurance, self-assurance, etc):		

UST SYSTEM COMPONENTS		
Date of installation:	No of tanks being Installed:	<input type="checkbox"/> Single Wall <input type="checkbox"/> Double Wall
UST System Components to be installed (check one): <input type="checkbox"/> Tanks and Piping <input type="checkbox"/> Tanks Only <input type="checkbox"/> Piping Only		
Contents: <input type="checkbox"/> Petroleum (gasoline, diesel, jet fuel) <input type="checkbox"/> Hazardous Substance: <input type="checkbox"/> Other:		
Overfill Prevention: <input type="checkbox"/> Auto Shutoff <input type="checkbox"/> Alarm at Tank <input type="checkbox"/> Ball Float <sup>1</sup>		
Spill Protection Equipment (Size of Catchment Basin):		

PRODUCT DELIVERY
<input type="checkbox"/> Pressurized <input type="checkbox"/> Suction <input type="checkbox"/> Safer Suction
If pressurized, will piping leak detection feature positive shutdown of submersible turbine pump? <input type="checkbox"/> Yes <input type="checkbox"/> No

<sup>1</sup> Ball float valves may not be installed on suction delivery systems or emergency generator tanks or systems with coaxial vapor recovery, remote fill or that require pumped transfer of product  
 06/2011 cmz

OWNERSHIP OF TANKS			
Owner Name (Corp., Individual, Agency):			
Contact:		Email:	
Street Address:			Phone:
City:	State:	ZIP:	FAX:
Owner Type: <input type="checkbox"/> Private or Corp <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> School <input type="checkbox"/> Indian Trust Land			

SITE OPERATOR			
Name (Corp., Individual, Agency):			
Contact:		Email:	
Street Address:			Phone:
City:	State:	ZIP:	FAX:

STAGE 1 VAPOR CONTROL
Required on all gasoline dispensing facilities exceeding 100,000 gallons average over 30-day period). Identify type of Vapor Control: <input type="checkbox"/> Dual Point <input type="checkbox"/> Single Point <input type="checkbox"/> Manifolded <input type="checkbox"/> Stage 1 not required for this site

IOWA LICENSED INSTALLER			
Name:		License ID No:	
Company:		Email:	
Address:			Phone:
City:	State:	ZIP:	FAX:

MAP OF TANK LOCATION
Provide the tank location plotted on a 1:24,000 scale USGS topographical map <u>or</u> coordinates obtained by a Global Position System (GPS) with 2 meter accuracy. If you want to use another method of showing the location of the tanks, please contact the UST Section.

GPS MEASUREMENT
GPS Unit used:
Accuracy of measurement (meters):
X coordinates in UTM, NAD 27:
Y coordinates in UTM, NAD 27:
Measurement taken at: <input type="checkbox"/> Tank Location <input type="checkbox"/> Other ( <i>describe</i> ):

**Class A and B Operator.** A trained Class A and B operator is required before you can receive fuel and operate the underground storage tanks. The Class A Operator is normally the owner and the Class B Operator is the manager responsible for the day to day operation of the tanks. The Class B Operator must be located within a 4 hr response time to the site. They can be the same person. **You will be required to provide the names of the trained Class A and B operators on the tank registration form.** If the site dispenses to the public, the employee on site must be trained at least as a Class C Operator. Information on operator training can be found at [www.iowadnr.gov/ust](http://www.iowadnr.gov/ust) under UST Owner & Operator.



Iowa DNR – UST Section  
Registration Form #148

**CASHIER USE ONLY**  
0050-542-G100-0561  
Registration #  
Facility Name

Tanks and piping must be registered within 30 days of installation. Installation is considered complete when the tanks and piping have been covered and tightness tested. **There is an additional registration fee of \$250 per tank when not registered within 30 days of installation.**

REGISTRATION #

**1. LOCATION OF TANKS**

Facility Name				County and County #		
Street Address					Phone	
City			ZIP			FAX
<b>Type of Owner</b> <input type="checkbox"/> Private or Corp <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> School <input type="checkbox"/> Indian Trust Land						

**2. OWNERSHIP OF TANKS**

Owner Name (Corp., Individual, Agency)						
Contact				e-mail		
Street Address					Phone	
City			State			FAX

**3. AUTHORIZED REPRESENTATIVE (PERSON TO RECEIVE ALL CORRESPONDENCE)**

Name						
				e-mail		
Street Address					City	
State	Zip Code		Phone Number		FAX	

**4. LESSEE (OPERATOR LEASING SITE, NOT TANK OWNER)**

Name (Corp., Individual, Agency)						
Contact				e-mail		
Street Address					Phone	
City			State			FAX

**5. PREVIOUS TANK OWNER**

Individual or Company Name						
Mailing Address					Phone	
City			State			FAX

**6. NEW TANK REGISTRATION FEES**

- Enter the number of **NEW** Tanks being registered in the boxes below. **For tanks with compartments, each compartment is considered a separate tank and must be included in the tank total.**
- There is a one-time \$10 registration fee per tank. For tanks over 1,100 gallons, an annual tank management fee of \$65 per tank must also be paid. Multiply the tank number by the fee for the amount due for each line below.
- Total the column for the total fee due.

DO NOT SEND FEES FOR TECHNICAL UPDATES	# OF TANKS	FEES	FEE DUE
Number of tanks/compartments (\$10 each)		X \$10 =	
Number of tanks/compartments over 1,100 gallons (\$65 each)		X \$65 =	
30 day late fee (if applicable)		X \$250 =	
<b>TOTAL FEE DUE</b>			<b>\$</b>

**7. TYPE OF REGISTRATION (DO NOT USE FOR OWNERSHIP CHANGE – SEE 'CHANGE OF OWNERSHIP FORM')**

<input type="checkbox"/> <b>NEW TANK SYSTEM</b> installed at <b>NEW SITE</b>	<input type="checkbox"/> Spill Containment/Overfill Prevention Equipment
<input type="checkbox"/> <b>NEW TANKS</b> installed at site <b>ALREADY REGISTERED</b>	<input type="checkbox"/> Replacing Leak Detection Equipment
<input type="checkbox"/> Replacing Product Lines	<input type="checkbox"/> Stage 1 Vapor Recovery Equipment
<input type="checkbox"/> Containment Sumps	<input type="checkbox"/> Other ( <b>specify</b> ):

**IOWA DEPARTMENT OF NATURAL RESOURCES**  
**UNDERGROUND STORAGE TANK REGISTRATION FORM #148**

**1. STATUS OF TANK (MARK {X} OR DATE OUT-OF-USE)**

	TANK #1	TANK #2	TANK #3	TANK #4	TANK #5
Tank Identification Number					
Currently in Use	<input type="checkbox"/>				
Temporarily Out-of -Use (M/D/Y)					

**2. DATE OF INSTALLATION** MONTH/YEAR  
 (DATE TANK/PIPING COVERED AND TIGHTNESS TEST COMPLETED)

**3. TANK TYPE**

Residential	<input type="checkbox"/>				
Farm	<input type="checkbox"/>				
Industrial	<input type="checkbox"/>				
Commercial (Retail Sale)	<input type="checkbox"/>				
Other (Please Specify)	<input type="checkbox"/>				

**4. TANK CAPACITY & SUBSTANCE STORED**

Fill in size and contents of each compartment using the abbreviations provided. Use only compartment #1, for a single compartment tank. Put the substance stored below the compartment size in shaded space.

		TANK #1	TANK #2	TANK #3	TANK #4	TANK #5
<b>Example:</b>	gallons: <span style="border: 1px solid black; padding: 2px;">12,000</span>	Compartment 1 				
	Type of fuel: <span style="border: 1px solid black; padding: 2px;">E10</span>					
		Compartment 2				
<b>G</b> – Gasoline (Regular Unleaded)		Compartment 3				
<b>P</b> – Premium Unleaded		Compartment 4				
<b>E 10</b> – Ethanol Blend		Compartment 5				
<b>E85</b> – Ethanol Blend		Compartment 6				
<b>D</b> – Diesel						
<b>K</b> - Kerosene						
<b>B2, B5, B20</b> , etc - Biodiesel						
<b>H</b> – Hazardous ( <i>provide chemical name</i> )						
<b>O</b> – Other ( <i>please specify</i> )						

**5. TANK MATERIAL AND CONSTRUCTION**

Tank Manufacturer				Model		
Are tanks anchored	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes	<input type="checkbox"/> Deadman	<input type="checkbox"/> Concrete Pad		
Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiberglass Reinforced Plastic (FRP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Double Wall (FRP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steel tank jacketed with plastic for interstitial space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Composite (steel clad with Fiberglass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Double Wall Composite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other ( <i>Please Specify</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which tanks are siphoned together						

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**UNDERGROUND STORAGE TANK REGISTRATION FORM #148**

6. TANK INTERNAL PROTECTION (STEEL TANKS ONLY)	TANK #1	TANK #2	TANK #3	TANK #4	TANK #5
Tank Identification Number					
Interior Lining	<input type="checkbox"/>				
Installation Date					
Installation Company					
Lining Material					

7. CATHODIC PROTECTION (STEEL TANKS ONLY)	TANK #1	TANK #2	TANK #3	TANK #4	TANK #5
Field Installed Galvanic	<input type="checkbox"/>				
Field Installed Impressed Current	<input type="checkbox"/>				
Factory Installed Galvanic (STIP-3)	<input type="checkbox"/>				
Date Cathodic Protection System Installed ( <i>month/year</i> )					
Cathodic Protection Installation Company					

COATINGS	TANK #1	TANK #2	TANK #3	TANK #4	TANK #5
Factory Applied Fiberglass Reinforced Plastic (FRP)	<input type="checkbox"/>				
Factory Applied Coal Tar Epoxy	<input type="checkbox"/>				
Factory Applied Fiberglass Reinforced Urethane (FRU)	<input type="checkbox"/>				
None	<input type="checkbox"/>				
Other ( <i>Please Specify</i> )	<input type="checkbox"/>				

8. TANK LEAK DETECTION SYSTEM	TANK #1	TANK #2	TANK #3	TANK #4	TANK #5
Groundwater Monitoring Wells	<input type="checkbox"/>				
Vapor Monitoring Wells	<input type="checkbox"/>				
Manual Interstitial Monitoring of Secondary Containment	<input type="checkbox"/>				
Electronic Interstitial Monitoring of Secondary Containment	<input type="checkbox"/>				
Automatic Tank Gauging (ATG)	<input type="checkbox"/>				
CSLD Automatic Tank Gauging	<input type="checkbox"/>				
Inventory Control with Tank Tightness Testing	<input type="checkbox"/>				
Statistical Inventory Reconciliation (SIR)	<input type="checkbox"/>				
Manual Tank Gauging (only for tanks 1,100 gallons or less)	<input type="checkbox"/>				
Other ( <i>Please Specify</i> )					

For each method marked, please specify the **equipment** used for leak detection. This would include leak measuring device, sensing device, ATG system or SIR method.

Equipment used for Monitoring	
Equipment Manufacturer or SIR provider	
Equipment Model or SIR method	
For ATG, Probe Type	

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9. PIPING – TYPE, CONSTRUCTION AND PROTECTION	TANK #1	TANK #2	TANK #3	TANK #4	TANK #5
Tank Identification Number					

**TYPE OF PRODUCT DELIVERY**

Pressurized	<input type="checkbox"/>				
Suction	<input type="checkbox"/>				

Does this site operate unattended <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Operates unattended 24 hours a day <input type="checkbox"/> Operates unattended Less than 24 hours a day <input type="checkbox"/> Always Staffed when operating				
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**CONSTRUCTION**

Single Wall FRP (Fiberglass)	<input type="checkbox"/>				
Double Wall FRP (Fiberglass)	<input type="checkbox"/>				
Single Wall Flex	<input type="checkbox"/>				
Double Wall Flex	<input type="checkbox"/>				
Single Wall Galvanized Steel	<input type="checkbox"/>				
Double Wall Galvanized Steel	<input type="checkbox"/>				
Other (Please Specify)	<input type="checkbox"/>				
External Secondary Barrier	<input type="checkbox"/>				
Piping Manufacturer					
Model					

**CATHODIC PROTECTION (FOR STEEL PIPING)**

Galvanic	<input type="checkbox"/>				
Impressed	<input type="checkbox"/>				
Specify external coating (if any)					

**10. CONTINUOUS LINE LEAK DETECTION FOR PRESSURIZED PIPING**

Mechanical Line Leak Detector	<input type="checkbox"/>				
Electronic Line Leak Detector	<input type="checkbox"/>				
Leak Detection Make					
Model					

**11. PIPING LEAK DETECTION**

Annual Line Tightness Testing	<input type="checkbox"/>				
Interstitial Monitoring of Double Wall System	<input type="checkbox"/>				
Vapor Monitoring	<input type="checkbox"/>				
Groundwater Monitoring	<input type="checkbox"/>				
Statistical Inventory Reconciliation (SIR)	<input type="checkbox"/>				
Name of SIR Company					
Version of SIR Method					
Safe Suction System (one check valve beneath dispenser)	<input type="checkbox"/>				
Suction System with Check Valve at Tank	<input type="checkbox"/>				
Other (Please Specify)					

**12. SPILL PROTECTION EQUIPMENT**

Spill Containment Size in Gallons					
Spill Equipment Mfg.					
Spill Equipment Model					

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<b>13. OVERFILL PROTECTION EQUIPMENT</b>	<b>TANK #1</b>	<b>TANK #2</b>	<b>TANK #3</b>	<b>TANK #4</b>	<b>TANK #5</b>
Tank Identification Number					
Automatic Shutoff Device @ Full 95%	<input type="checkbox"/>				
Flow Restrictor @ 90% Full (e.g., ball float valve)	<input type="checkbox"/>				
High Level Alarm @ 90% Full	<input type="checkbox"/>				
Overfill Equipment Mfg.					
Overfill Equipment Model					

**14. STAGE 1 VAPOR RECOVERY**

Note: Dual point vapor control is required on all new (installed after November 9, 2006) gasoline dispensing facilities (GDFs) that exceed 100,000 gallons throughput determined by a 30-day rolling average. GDFs that exceed 100,000 gallons in a 30-day rolling average are large source GDFs and must have dual point vapor control installed at start up.

The DNR recommends all new tanks be installed with dual point vapor recovery capability for possible future use. An Iowa-licensed installation inspector would inspect the Stage 1 vapor system at the time of installation, and document the integrity of the vapor control system on the installation inspection checklist.

Existing systems (installed before November 9, 2006) that exceed 100,000 gallons throughput in a 30-day period must be retrofitted with either coaxial or dual point vapor control by January 1, 2011.

	<b>TANK #1</b>	<b>TANK #2</b>	<b>TANK #3</b>	<b>TANK #4</b>	<b>TANK #5</b>
Tank Identification Number					
Coaxial System	<input type="checkbox"/>				
Dual Point System	<input type="checkbox"/>				
Manifolded System (single vapor hose connection)	<input type="checkbox"/>				
Vapor recovery is not required for this UST	<input type="checkbox"/>				

**15. UNDER DISPENSER CONTAINMENT (UDC)**

Enter the dispenser number(s) in each column that will have the same make/model of dispenser UDC. If all dispenser UDCs will be the same, then enter "ALL" as the number in Column 1 and complete only Column 1. Dispensers with the same UDCs only have to be entered in one of the columns with a list of the dispensers that have that model UDC.

	<b>DISPENSER #</b>				
UDC Manufacturer					
UDC Model					
UDC Single (SW) or Double-Walled (DW)					
Method of monitoring UDC <sup>1</sup>					
UDC Material of Construction <sup>2</sup>					
If Other ( <i>Specify</i> )					

<sup>1</sup>Enter one of the following choices: Sump Sensor, Vacuum, Pressure, Hydrostatic, or Visual

<sup>2</sup>Enter one of the following choices: Plastic, FRP (Fiberglass Reinforced Plastic), or Other

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**16. FLEXIBLE CONNECTORS, SUBMERSIBLE PUMPS, RISER PIPES, SIPHON BARS, AND OTHER METAL FITTINGS**

	TANK #1		TANK #2		TANK #3		TANK #4	
	Tank	Dispenser	Tank	Dispenser	Tank	Dispenser	Tank	Dispenser
Flex Connector is present	<input type="checkbox"/> Yes <input type="checkbox"/> No							
Flex connector is secondarily contained or located in a monitored containment sump	<input type="checkbox"/> Yes <input type="checkbox"/> No							
Submersible pump (STP) is located in a monitored containment sump	<input type="checkbox"/> Yes <input type="checkbox"/> No							
Riser pipes, siphon bars, and/or other metal fittings are located in a monitored containment sump	<input type="checkbox"/> Yes <input type="checkbox"/> No							

**FINANCIAL ASSURANCE**

**17. I have financial responsibility to cover pollution liability for my underground storage tanks in accordance with 567--Chapter 136 of the Iowa Administrative Code by the following method:**

**ATTACH A COPY OF YOUR FINANCIAL RESPONSIBILITY DOCUMENT**

- Self-insured - tangible net worth of \$10 million and ability to pass one of the financial tests in rule 136.6
- Insurance coverage through private insurance carrier meeting rule 136.8
- Guarantee from corporate parent or other firm able to pass the net worth financial test in rule 136.7
- Surety bond meeting rule 136.9
- Letter of credit meeting rule 136.10
- Trust Fund meeting rule 136.11
- Combination of the above methods (*please mark those methods being used*)

Name of Insurer:

Policy No.

**FOR LOCAL GOVERNMENTS AND THEIR AGENCIES, THE FOLLOWING MAY ALSO BE USED**

- Local government bond rating test meeting rule 136.13
- Local government financial test meeting rule 136.14
- Local government guarantee meeting rule 136.15
- Local government fund meeting rule 136.16

**NOTE:** Proof of financial responsibility must be maintained in order to store fuel in the tanks. You must submit a current copy of the financial assurance document such as a new certificate of pollution liability insurance or proof of self-insurance every year. If financial responsibility is not maintained, the department can stop fuel delivery. Insurance companies are required to notify the department when insurance is being canceled.

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**INSTALLER/INSPECTOR CERTIFICATION**

**Pursuant to subrule 135.3(3)“e” the installer hereby certifies that the methods used to install the tank and piping systems comply with the requirements in subrule 135.3(1)“d”.**

Company Iowa License Number					
Print or Type Company Name					
Address					
City		State		Zip Code	
Installer Iowa Licensed Number:					
_____			_____		
Type or Print Signature	Title or Position in Company				
_____			_____		
Signature of licensed installer	Date Signed				

**Class A and B and C Operators for this site.** A trained Class A and B operator is required before you can receive fuel and operate the underground storage tanks. The Class B Operator must be located within a 4 hr response time to the site. Information on operator training can be found at [www.iowadnr.gov/ust](http://www.iowadnr.gov/ust) under UST Owner & Operator. If the site dispenses to the public, the employee on site must be trained at least as a Class C Operator.

	First Name	Last Name	Date Trained	Approved Vendor (Company)
Class A				
Class B				
Class C				

**OWNER CERTIFICATION**

*(READ AND SIGN AFTER COMPLETING FORM)*

**I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete.**

_____			_____	
Print or Type Name of Owner	Print or Type Official Title of Owner			
_____			_____	
Signature of Owner	Date Signed			

Iowa Secretary of State Corporation Number	
Iowa Secretary of State Corporation Registered Agent	

Registration is required by Iowa law for all underground storage tanks that have been used to store regulated substances since January 1, 1974 and were still in the ground as of July 1, 1985, or tanks brought into service after July 1, 1985. The information requested is required by 567–Chapter 135 of the Iowa Administrative Code (567-455B and Iowa Code Section 455B.473).

**Mail completed form, copy of financial assurance mechanism, and appropriate fee to the address below. Checks should be made payable to:**

**Iowa Department of Natural Resources**

**Iowa Department of Natural Resources  
 Underground Storage Tank Section  
 502 East 9th Street**





**IOWA DEPARTMENT OF NATURAL RESOURCES  
 UNDERGROUND STORAGE TANK SECTION  
 INSTALLER/INSTALLATION INSPECTOR CHECKLIST  
 FOR INSTALLATION, REPLACEMENT, UPGRADE, RETROFIT, REPAIR**

The Iowa DNR Underground Storage Tank (UST) program requires this form to be signed and submitted to the DNR by the UST Licensed Professional after completing an installation inspection, a replacement, repair, retrofit or upgrade to an UST system. If an installation inspection is conducted, this form is completed by the installation inspector and is due 14 days after the final inspection. If an installation inspection is not required, the UST licensed professional completes and signs this form, attaches it to the 148 form along with manufacturer's checklists (if appropriate) and sends all forms to the DNR UST Section. The form is used for compliance with Technical Standards and Corrective Action for Owners and Operators of Underground Storage Tanks [567--135 IAC].

Facility ID *(not available if new facility)*:

Facility Name:

Facility Street Address:

Facility City, State and

Zip:

Facility County:

Owner of Facility:

Owner Street Address:

Owner City, State and Zip:

Owner Phone:

Facility Contact Person:  Contact Phone:

Your Name:

I am an Iowa Licensed *(check all that apply)*:

- Installer     Installation Inspector     Tank and/or Piping Tester     Tank Liner

<p><u>Cathodic Protection</u>:    <input type="checkbox"/> Tester    <input type="checkbox"/> Technician    <input type="checkbox"/> Technologist    <input type="checkbox"/> Specialist</p> <p>NACE Certification #: <input type="text"/></p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Iowa License #:

Expiration Date:

Company Name:

Company Street Address:

Company City, State and Zip:

Company Phone:

E-mail:

CHECK ALL THAT APPLY:

New UST installation (at a new facility) <input type="checkbox"/>	Number of USTs: <input type="text"/>
Tank replacement/addition (at existing facility) <input type="checkbox"/>	Number of USTs: <input type="text"/>
Piping replacement (10 feet of piping or within 10 feet of a dispenser, secondary containment and double walled piping required). Secondary containment and double walled piping installed? <input type="checkbox"/>	<input type="checkbox"/>
Dispenser replacement (secondary containment required if piping replaced below the shear valve or check valve or if piping replaced within ten feet of dispenser) Dispenser pan installed? <input type="checkbox"/>	<input type="checkbox"/>
Tank top containment sump (submersible turbine) New Install <input type="checkbox"/> Replacement <input type="checkbox"/>	<input type="checkbox"/>
ATG system: Installation <input type="checkbox"/> Replacement <input type="checkbox"/>	<input type="checkbox"/>
Impressed current cathodic protection system install: New Install <input type="checkbox"/> Repair <input type="checkbox"/>	<input type="checkbox"/>
Replacement anodes install	<input type="checkbox"/>
Lining: Installation <input type="checkbox"/> or Repair <input type="checkbox"/>	<input type="checkbox"/>
Spill protection equipment replacement	<input type="checkbox"/>
Overfill prevention equipment replacement ( <b>Warning: do not install vent restriction devices on suction systems, systems with Stage 1 vapor recovery, remote-filled tanks, emergency generator or heating oil tanks:</b> )	<input type="checkbox"/>
UST system repair ( <i>Summarize work to be done:</i> )	<input type="checkbox"/>

FIRST INSPECTION

PRIOR TO PLACEMENT OF THE UST INTO THE EXCAVATION	YES	NO	UNKNOWN	N/A
The UST installer is licensed by the IDNR?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. The UST installer submitted the IDNR Notification of Installation form prior to installation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Was hydrocarbon contamination observed in the excavation? If so was it reported to IDNR?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
3. Surface depth to groundwater	_____ Ft.		<input type="checkbox"/>	
4. Tank and piping materials meet current and acceptable standards and comply with 567—Chapter 135?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Manufacturer's specifications for pre-installation followed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Visual damage inspection conducted for tanks and piping?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If damage(s) discovered--repaired per manufacturer's instruction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Pressure test conducted on tank according to PEI RP 100-05 or API 1615? All surfaces, seams and fittings soaped and inspected?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
9. Interstitial test conducted and passed? a. Liquid filled (tested per manufacturer's instructions)? b. Vacuum (tested per manufacturer's instructions)?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
10. Tank excavation complies with API 1615 or PEI 100-2005?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Tank Manufacturer / Model / UL	<input type="text"/>			

Installation Inspector's Name (Print):  1<sup>st</sup> Inspection Date:

Installation Inspector's Signature:

<b>SECOND INSPECTION</b>	<b>TANK #1</b>			<b>TANK #2</b>			<b>TANK #3</b>		
<b>AFTER PLACEMENT OF USTS AND PIPING, BUT PRIOR TO BACKFILLING</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
11. Tank placement conducted according to manufacturer's instructions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Was tank damaged prior to or during placement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Tank pit and piping trenches sufficiently wide and deep to accommodate backfill material and clearances according to PEI/RP 100-2005?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Type of anchorage used for tanks:	<input type="checkbox"/> Slab at Grade			<input type="checkbox"/> Deadmen Anchors			<input type="checkbox"/> Bottom Hold-Down Pad		
15. Tanks are anchored according to manufacturer's standards or PEI or RP100-2000?	<input type="checkbox"/> YES			<input type="checkbox"/> NO			<input type="checkbox"/> N/A		
<b><u>PIPING</u></b>	<b>TANK #1</b>			<b>TANK #2</b>			<b>TANK #3</b>		
	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
16. All piping slopes back to the tank?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Piping joints have been assembled according to the pipe and sealant manufacturer's preparation, application and assembly instructions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. All piping installation requirements specified by the manufacturer have been followed and implemented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Soap and mirror test conducted on all assembled piping joints, connections and flex connectors under pressure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Were there any leaks/evidence of leaks in the assembled piping from the soap/mirror test?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. If primary or secondary piping was damaged or failed the pressure test, it was repaired according to manufacturer's instruction, retested and passed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Primary piping passes pressure testing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Secondary piping passes pressure testing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Sump penetrations are tight and sealed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Conduit junction boxes and penetrations into the sumps are tight and sealed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Sumps and UDCs hydrostatically tested and passed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Satellite-dispenser piping installed and monitored for leaks with a line leak detector?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. All flex connectors properly installed, i.e., not kinked, twisted or bent out of its plane or beyond manufacturer's specifications:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>SACRIFICIAL ANODE SYSTEMS</u></b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
29. Did anodes, dielectric bushings, or coatings incur any damage during installation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Damages to anode connection, coatings or tanks have been repaired according to manufacturer instructions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Anodes prepared and installed according to manufacturer's instructions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Testing was conducted to ensure the structures are adequately protected by the sacrificial system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Structures passed NACE criterion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. A cathodic protection test station was installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Identify tank using tag number, capacity, and content:	Tag #:								
	Capacity:								
	Content:								
<u>IMPRESSED CURRENT SYSTEMS</u>	YES	NO	N/A	YES	NO	N/A	YES	NO	N/A
35. The impressed current cathodic protection system was designed by a corrosion expert?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. A pre-installation investigation was conducted (utilities contacted) to confirm there would be no interference from other DC sources.	YES <input type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>								
37. Anodes were installed according to the manufacturer's instructions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. The negative terminal on the rectifier has been connected to the structure, and the positive terminal to the anodes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. All cathodically protected structures are electrically connected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Testing was conducted to ensure the cathodically protected structures are not shorted or connected to other unintended metallic structures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. Impressed current system was tested and passed according to NACE standards and found to be providing adequate protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. Damage(s) to anode connections, coatings or tanks have been repaired according manufacturer's instructions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Any anode pre-packaging material has been removed, and the anodes placed in the proper backfill material?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. A cathodic protection test station was installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. A rectifier monitoring log has been prepared for the owner/operator.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Installation Inspector's Name (Print):  2nd Inspection Date:

Installation Inspector's Signature:

THIRD INSPECTION AFTER BACKFILLING AND PRIOR TO OPERATION	TANK #1			TANK #2			TANK #3		
	YES	NO	N/A	YES	NO	N/A	YES	NO	N/A
46. Backfilling materials comply with manufacturer's recommendations?	<input type="checkbox"/>								
47. Backfilling materials compacted according to manufacturer's instructions?	<input type="checkbox"/>								
48. All UST system components are compatible with the product stored?	<input type="checkbox"/>								
49. Spill protection devices have been properly installed	<input type="checkbox"/>								
50. Adequate clearance has been provided between piping and trench walls, conduit, monitoring wells, utilities, nearby structures, and other system components following NFPA, API or PEI standards?	<input type="checkbox"/>								
51. Both overfill protection and leak detection monitoring system requirements of 567—135 have been met and are operating properly?	<input type="checkbox"/>								
52. Emergency shut-off valve with fusible is positioned and anchored according to manufacturer's specification?	<input type="checkbox"/>								
53. Emergency breakaways are installed on Class I liquid hose?	<input type="checkbox"/>								
54. Vent pipes for Class I products terminate 12 feet above grade?	<input type="checkbox"/>								
55. Vent pipes for Class II products terminate at a minimum 4 feet above grade and higher than the fill pipe opening?	<input type="checkbox"/>								
56. Dispensers are mounted and bolted down properly?	<input type="checkbox"/>								
57. Tank deflection measurements for FRP tanks have been re-measured at this point and remain within the acceptable limits of the manufacturer's specifications?	<input type="checkbox"/>								
58. Leak detection monitoring systems are operational and appropriate for the site? Note: if this is a high throughput facility, such as truck stop, make sure the leak detection system is evaluated and appropriate for the monthly maximum volume of throughput.	<input type="checkbox"/>								
59. Unattended fueling—ELLD capable of positive shut down of STP when a leak is detected (for pressurized delivery)	<input type="checkbox"/>								
60. Installation inspection was photographed?	<input type="checkbox"/>								
61. Installation inspection was videotaped?	<input type="checkbox"/>								
62. Manufacturer's Checklist is completed and signed by installer?	<input type="checkbox"/>								

Installation Inspector's Name (Print):  3rd Inspection Date:

Installation Inspector's Signature:

Check the category below for the gasoline dispensing facility (GDF) you are installing and make sure the appropriate equipment is installed according to the expected or measured monthly throughput.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements for Source Categories *(check all that apply)*

Select one of the three source categories:	YES	NO	NA
1. Facility's estimated monthly throughput for gasoline is less than 10,000 gallons			
2. Facility's estimated monthly throughput for gasoline is 10,000 gallons or more, but less than 100,000 gallons			
a. Drop tube installed within 6 inches of tank bottom for submerged filling			
b. Vent pipes $\geq$ 12 feet above grade			
3. Facility's estimated monthly throughput for gasoline is 100,000 gallons or more			
a. Dual Point vapor balance system installed with spill buckets and swivel adaptors OR			
b. Single point (coaxial) vapor control system installed with spill bucket and swivel adaptor			
c. Manifolder vapor recovery system (single vapor hose) installed			
d. Drop tube installed within 6 inches of tank bottom for submerged filling			
e. Vapor-tight caps installed for liquid fill connections			
f. Vent pipes $\geq$ 12 feet above grade			
g. Pressure/vacuum vent valves installed on each vent pipe at specified setting OR			
h. Pressure/vacuum vent valves present on manifolded vent pipes at specified setting			
i. Pressure/vacuum vent valves tested and passed			
j. Static pressure test (decay) performed on vapor balance system and passes			
k. Stage 1 Vapor System is vapor tight			
If this is an installation inspection for a retrofit (on a new or existing UST system), complete the following:			
UST system was installed before November 9, 2006			
UST system was installed after November 9, 2006			

INSTALLATION INSPECTOR'S COMMENTS

INSTALLATION INSPECTOR'S NAME:

**Installation of Vapor Control Equipment  
At New and Existing Gasoline Dispensing Facilities  
National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 Code of  
Federal Regulations (CFR) Part 63, Subpart CCCCC**

Gasoline dispensing facilities (GDFs) are now required to control gasoline vapors based on the monthly throughput of the facility (gallons per month or gpm). There are three source categories of GDFs: less than 10,000 gpm (small), equal to or greater than 10,000 gpm (medium) and equal to or greater than 100,000 gpm (large). Source categories are determined by a 30-day rolling average throughput. If at any point throughput exceeds medium or large source categories, GDFs must comply with the requirements for those categories. It is incumbent upon Iowa-licensed Installers and installation inspectors to help their clients understand the NESHAP requirements as new UST systems are installed and existing systems are retrofitted.

Complete Stage 1 vapor recovery systems are required on all new GDFs (installed after November 9, 2006) that meet or exceed the large GDF category. Dual point systems are required on GDFs installed after January 10, 2008. The deadline for installation of vapor recovery systems for new GDFs is September 23, 2008. That means any large, medium or small source facility built after November 9, 2006 must comply with the specific requirements by September 23, 2008. Any proposed large source GDF must have complete Stage 1 Vapor Recovery system (dual point) ready to go at start up. Existing GDFs (constructed on or before November 9, 2006) that meet or exceed the large source category are required to have Stage 1 vapor recovery by January 10, 2011.

Stage 1 Vapor Recovery returns the gasoline vapors emitted during the transfer of gasoline to the UST back to the transport truck instead of forcing the vapors out through the vent pipe. Gasoline vapors contain benzene and volatile organic compounds (VOCs), which are harmful to the atmosphere and to human health. Depending on the technology that exists at the terminal or bulk plant, vapors captured during product transfer can be processed by condensation, absorption or incineration.

There are three types of Stage 1 Vapor Recovery: dual point, single point (coaxial), and manifolded. Dual point systems consist of two separate tank risers, one for delivery of the product and the other for the release of vapors. Both fill and vapor risers must be fitted with poppeted vapor swivel adaptors. Coaxial or single point systems have only one tank opening with concentric tubing, which allows for delivery through the inner drop tube and vapor recovery through the outer tube. A manifolded vapor control system allows for one vapor hose connection for all the tanks at a facility.

The coaxial vapor control is less expensive when retrofitting existing large source GDFs than installing dual point control, but coaxial transfers of product take longer. Eventually, within just a few years delivery costs can exceed the cost installing a two point system. Further, coaxial controls may not remain vapor and liquid tight over extended periods of use due to repeated torque force on the swivel adaptor. EPA strongly discourages the use of coaxial systems because of these problems.

Pressure vacuum relief vent valves complete the Stage 1 Vapor Recovery System. Vent valves must be installed on vent pipes (manifolded or separate) to prevent gasoline vapors from escaping to the atmosphere and prevent excessive positive or negative pressure in the tank.

**Testing Stage 1 Vapor Recovery Systems:**

The pressure decay test is a low-pressure testing method that tests the entire Stage 1 vapor control system, including the tank risers, the tank, piping, vent lines and pressure/vacuum vent valves. Testing is conducted after backfilling or just before the vapor control system is put into operation. Test equipment must be third party evaluated. Testing is required on start up and every three years on Stage 1 vapor control systems. Owners and operators must maintain initial test results and every three year pressure test results. Records must be maintained for five years.

See PEI's Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle-Fueling Sites (PEI RP 300) for more installation and testing information. To view the options available to GDFs in summary form go to <http://www.epa.gov/ttn/atw/area/gdfb.pdf>. To view the federal final rule for bulk terminals, bulk plants and GDFs go to <http://www.epa.gov/ttn/atw/area/fr10ja08.pdf>. To view Iowa DNR's proposed Air Quality rule revisions go to <http://www.iowadnr.gov/epc/08aug/18.pdf>. Contact Diane Brockshus (515.281.4801, e-mail: [diane.brockshus@dnr.iowa.gov](mailto:diane.brockshus@dnr.iowa.gov) with DNR's Air Quality Bureau for more information about NESHAP compliance.

*Installation Inspection Checklist 9.8.08*



### Notification of Change of Ownership

<b>1. LOCATION OF TANKS</b>			
Facility Name		Registration No	
Street Address		Phone	
City	ZIP	FAX	
<b>2. TYPE OF OWNER</b>			
<input type="checkbox"/> Private or Corp <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> School <input type="checkbox"/> Indian Trust Land			
<b>3. TYPE OF FACILITY</b>			
<input type="checkbox"/> Petroleum Retail Sales <input type="checkbox"/> Non-Retail Sales <input type="checkbox"/> Government <input type="checkbox"/> Farm/Residential <input type="checkbox"/> Emergency Power			
<b>4. OWNERSHIP OF TANKS (NEW OWNER)</b>			
Owner Name (Corp., Individual, Agency)			
Contact Person		Email	
Street Address		Phone	
City	State	ZIP	FAX
Iowa Secretary of State Corporation No			
Iowa Secretary of State Corporation Registered Agent			
<b>5. AUTHORIZED REPRESENTATIVE (PERSON TO RECEIVE ALL CORRESPONDENCE)</b>			
Name		Email	
Street Address		Phone	
City	State	ZIP	FAX
<b>6. LESSEE (IF YOU ARE LEASING THE SITE, COMPLETE THIS SECTION)</b>			
Name (Corp., Individual, Agency)			
Contact		Email	
Street Address		Phone	
City	State	ZIP	FAX
<b>7. PREVIOUS TANK OWNER</b>			
Individual or Company Name			
Mailing Address		Phone	
City	State	ZIP	FAX
<b>8. THE TYPE OF CHANGE BEING SUBMITTED</b>			
<input type="checkbox"/> Ownership <input type="checkbox"/> Authorized Rep <input type="checkbox"/> Lessee <input type="checkbox"/> Facility Name Change <input type="checkbox"/> New Address <input type="checkbox"/> New Contact			
<p>A person who sells, installs, modifies, or repairs a tank used or intended to be used in Iowa shall notify, in writing, the purchaser and the owner or operator of the tank of the obligations specified in paragraphs 135.3(3)"c" and "j" and the financial assurance requirements in 567—Chapter 136. The notification must include the prohibition on depositing a regulated substance into tanks which have not been registered and issued tags by the department.</p>			

**FINANCIAL ASSURANCE**

**I have financial responsibility to cover pollution liability for my underground storage tanks in accordance with 567- Chapter 136 of the Iowa Administrative Code by the following method.**

**ATTACH A COPY OF YOUR FINANCIAL RESPONSIBILITY DOCUMENT.**

- Self-insured- tangible net worth of \$10 million and ability to pass one of the financial tests in rule 136.6
- Insurance coverage through private insurance carrier meeting rule 136.8
- Guarantee from corporate parent or other firm able to pass the net worth financial test in rule 136.7
- Surety bond meeting rule 136.9
- Letter of credit meeting rule 136.10
- Trust Fund meeting rule 136.1
- Combination of the above methods (please mark those methods being used)

Name of Insurer: \_\_\_\_\_

Policy No.: \_\_\_\_\_

**For local governments and their agencies, the following may also be used:**

- Local government bond rating test meeting rule 136.13
- Local government financial test meeting rule 136.14
- Local government guarantee meeting rule 136.15
- Local government fund meeting rule 136.16

NOTE: Proof of financial responsibility must be maintained in order to store fuel in the tanks. You must submit a current copy of the financial assurance document such as a new certificate of pollution liability insurance or proof of self-insurance every year. If financial responsibility is not maintained, the department can stop fuel delivery. Insurance companies are required to notify the department when insurance is being canceled.

**Provide Class A and B and C Operators for this site.** A trained Class A and B operator is required before you can receive fuel and operate the underground storage tanks. The Class A Operator is normally the owner and the Class B Operator is the manager responsible for the day to day operation of the tanks. The Class B Operator must be located within a 4 hr response time to the site. They can be the same person. Information on operator training can be found at [www.iowadnr.gov/ust](http://www.iowadnr.gov/ust) under UST Owner & Operator.

If the site dispenses to the public, the employee on site must be trained at least as a Class C Operator.

	First Name	Last Name	Date Trained	Approved Vendor (company)
Class A				
Class B				
Class C				

**OWNER CERTIFICATION (READ AND SIGN AFTER COMPLETING FORM)**

**I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete.**

\_\_\_\_\_  
Print or Type Name of Owner

\_\_\_\_\_  
Print or Type Official Title of Owner

\_\_\_\_\_  
Signature of Owner

\_\_\_\_\_  
Date Signed

Date of Ownership Change: \_\_\_\_\_

Registration is required by Iowa law for all underground storage tanks that have been used to store regulated substances since January 1, 1974 and we still in the ground as of July 1, 1985, or tanks brought into service after July 1, 1985. This information is required by 567-Chapter 135 of the Iowa Administrative Code (567-455B and Iowa Code Section 455B.473).