Applications for permits shall be submitted to the Cedar Rapids Fire Marshal’s Office via E-mail at mollyk@cedar-rapids.org or v.mckinnon@cedar-rapids.org or US Mail at 713 1st Ave SE, Cedar Rapids IA 52401.

A permit applicant may be required to submit the following information for a complete permit application: a completed permit application, a site diagram, installation plans, MSDS sheets (if applicable), equipment data sheets, and permit application fee. If it is deemed necessary, further information may be required by the Cedar Rapids Fire Marshal’s Office before a permit application is accepted for review.

The Cedar Rapids Fire Marshal’s Office may take up to 14 days to review the application for compliance with the Cedar Rapids Fire Code (CRFC). Once it is determined that the application meets these requirements, a permit will be issued for installation per approved plans. Any changes to the approved plans shall be submitted in writing via a drawing and approved by the Cedar Rapids Fire Marshal's Office PRIOR to implementing the change.

If the permit is an installation process, then various inspections may be needed to ensure compliance with CRFC and permit application requirements. You must schedule these inspections with the Fire Marshal’s Office a minimum of 48 hours in advance. Final approval from CRFD Fire Marshal's Office is required prior to use. If an operation is found to be in use without approval from the Cedar Rapids Fire Marshal’s Office, a citation may be issued.

If you need any further information or assistance, or have any questions, please call the Cedar Rapids Fire Marshal’s Office at (319) 286-5166.

INSTRUCTIONS:

1. Complete Page 2 for all permits, temporary or permanent.
   - Permit Guide Sheets, with Fire Code sections referenced, are available for many of the permit categories. Check our website, or request guides from the Fire Marshal’s Office at 319-286-5166.

2. Enclose a check payable to the Cedar Rapids City Treasurer with your application.

3. Include a site diagram, and if applicable, installation plan, MSDS sheets, equipment specification sheets, and other required supporting documents.

4. Be sure to call for a final approval at the completion of the project.
INSTRUCTIONS:
Complete this page of the application and submit to the Cedar Rapids Fire Marshal’s Office. “Permit Guides” include some Code information specific to many permit operations and are found on the Fire Marshal’s Office Fire Code Permits page of our website at www.cedar-rapids.org/fire.
NOTE: The “Permit Guides” do not include all codes that apply to your individual project. Refer to the appropriate Chapter of the 2006 IFC (International Fire Code) and any local amendments for additional code requirements.

Permit Site Business Name

Permit Site Address

Permanent (installation) ☐ Temporary (installation) ☐

Permit Conditions
A permit shall be obtained from the Cedar Rapids Fire Marshal’s Office prior to installing any operation or system requiring a Permit (see the International Fire Code 2006 Section 105).

Application for Permit
• The permit applicant shall provide a legible site diagram listing the site business name, address, including system locations. Where applicable, please provide any information sheets regarding listing, approvals, electrical, mechanical, and any applicable other supporting documentation required for a Permit.
• The required fee must be included when the application is submitted.

Proposed project: ____________________________________________________________
____________________________________________________________________________

Fee per $ ________ Total Fee __________ Date ______________

The undersigned representative agrees to adhere to the Cedar Rapids Fire Code and all applicable Federal, State, and other local regulations

Contractor Company __________________________ Address ________________________

Contact Name & Signature __________________________ Phone ________________________

Party Responsible for Billing (if other than above)
Name __________________________ Address __________________________

FOR OFFICE USE ONLY!
Date received: ___________________ Fire Inspector Issuing Permit ______________________

Final Approval Inspector’s Name __________________________ Date ______________
Permit Application for the Installation of Aboveground Storage Tanks for Emergency Generators  IFC 2012

Referenced from IFC 2012 Chapter 57. This installation shall be installed in accordance with the International Fire Code (IFC) 2012 Edition and applicable federal, state, and local law. Please complete the Permit Application form with required site diagram. This guide does not include all Fire Code requirements, but is a basic guide for you and the inspector to verify basic compliance with the Fire Code.

### REQUIREMENTS

#### Permit Conditions

1. A permit shall be obtained from the Cedar Rapids Fire Marshal’s Office prior to any work being conducted at the site. The permit is valid for 180 days at a cost of $130.00 for a single tank being installed to supply fuel to a generator set. This includes both generator mounted base tanks, and all other tanks supplying fuel to the generator set. (A $130.00 fee will be added for each additional tank being installed) Permits can be extended by written request.  IFC Sec 105

2. The permit applicant shall provide a completed Permit Application with a legible site diagram listing the site business name, address, tank(s) and piping locations, distances from tank(s) to nearby streets, buildings, and property lines, fill pipe location, fire pump or generator being served.  IFC 105.2

3. All installations shall comply with CRFC, Cedar Rapids Building Code and applicable Federal, State and other local requirements.
IFC 105.3 NOTE: LINN COUNTY HEALTH MUST ISSUE AN APPROVAL FOR EMISSIONS – CALL 892-6000 TO START THIS PROCESS PRIOR TO WORK ON SITE.

4. Design, fabrication, and construction of tanks shall comply with NFPA 30. Each tank shall bear a **permanent nameplate** indicating the tank is constructed to UL142 standards. IFC 5704.2.7 NFPA 2012 Chapter 30 2.2 Tanks and all associated equipment shall be built in accordance with recognized engineering standards for the material of construction and use (e.g. UL Listed). The permit applicant shall provide product specification sheets regarding the listing and approvals of all major components or the system being installed, i.e., tanks, piping, generator or pump, etc. for compliance with this requirement.  IFC 105.2 and 105.4

#### GENERAL REQUIREMENTS

5. **Label or placard.** Tanks more than 100 gallons (379 L) in capacity, which are permanently installed or mounted and used for the storage of Class I, II or IIIA liquids, shall bear a label and placard identifying the material therein. Placards shall be in accordance with NFPA 704. IFC 5704.2.3.2

6. Electrical wiring and equipment located in areas where flammable or combustible liquids are stored or handled shall be installed and maintained in accordance with the Cedar Rapids Fire Code and the Electrical Code.  IFC 5703.1

07/12
### Vehicle Protection

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>When tanks are subject to vehicular damage, protection shall be in accordance with the following or an approved alternative: IFC 5704.2.9.7.5 and Section 312</th>
</tr>
</thead>
</table>
|   | 7. | Guard posts shall be constructed of steel not less than 4 inches in diameter and concrete filled. Spaced not more than 4 feet between posts on center.  
Set not less than 3 feet deep in concrete footing of not less than 15-inch diameter. Set with the top of the posts not less than 3 feet above ground and located not less than 5 feet from the tank. |
|   | 8. | Aboveground tanks shall rest on the ground or on foundations made of concrete, masonry, piling, or steel. Tank foundations shall be designed to minimize the possibility of uneven settling of the tank and to minimize corrosion in any part of the tank shell resting on the foundation. IFC 5704.2.9.3 NFPA 2012 Chapter 30 2.2.4 & IBC |
|   | 9. | Connections for tank openings shall be liquid tight. Filling, emptying, and vapor recovery openings in tanks containing Class I, II and IIIA liquids shall be located outside of buildings at a location free from sources of ignition and not less than 5 feet away from building openings or of lines of property that can be built on. Such openings shall be provided with a liquid-tight cap, which shall be closed when not in use and shall be properly identified. **Fill caps used inside enclosures must be equipped with a vapor tight seal.** IFC 5704.2.7.5.2 |
|   | 10. | **Secondary containment required.** Generator base tanks and other related tanks must be listed UL 142 tanks, and must provide for secondary containment. IFC 5704.2.9.7.4 & IFC 5704.2.7 |

### Vents

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Vent lines from tanks shall be installed such that they will drain toward the tank without sags or traps in which liquid can collect. IFC 5704.2.7.3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11.</td>
<td>Vent line flame arresters shall be installed in accordance with their listings for Class I-B or I-C liquids. IFC 5704.2.7.3.2 in accordance with (American Petroleum Institute) API 2028.</td>
</tr>
<tr>
<td></td>
<td>12.</td>
<td>Vent lines shall not be used for purposes other than venting.</td>
</tr>
<tr>
<td></td>
<td>13.</td>
<td>Vent pipe outlets for tanks storing flammable or combustible liquids shall be located such that the vapors are released at a safe point outside of buildings or generator enclosures and not less than 12 feet above the adjacent ground level. Vent outlets shall be located such that flammable vapors will not be trapped by eaves or other obstructions and shall be at least 5 feet from building opening or property lines of properties that can be built on. IFC 5704.2.7.3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tank vent piping shall not be manifolled unless required for special purpose such as vapor recovery, vapor conservation or air pollution control. IFC 5704.2.7.3.5</td>
</tr>
</tbody>
</table>
Emergency Vents

14. Stationary aboveground tanks shall be provided with adequate additional venting that will relieve excessive internal pressure caused by fire exposure. Emergency relief vents shall not be modified, obstructed or otherwise altered such that the required area of opening for the required flow rate is reduced. IFC 5704.2.7.4 Venting shall be installed and maintained in accordance with 2012 NFPA 30:2.2.5.2

15. Where pressure-relieving devices provide emergency relief venting, the total venting capacity of both normal and emergency vents shall be enough to prevent rupture of the tank. The total capacity of both normal and emergency venting devices shall not be less than that derived from NFPA 30.

16. Emergency vents for class I, II and IIIA liquids shall not discharge inside of buildings. The emergency vent device serving generators located outside of a building and inside an enclosure may terminate inside the enclosure as long as the venting device is a normally closed type. IFC 5704.2.7.4

17. Tanks located inside of buildings. Stationary tanks for the storage of flammable and combustible liquids shall be in rooms or buildings complying with the Building Code. Rooms or buildings used for storage of Class I, II, or III liquids shall be in accordance with IFC Chapter 57 (Quantity limits based on occupancy type). IFC 5704.3.4 NFPA 30 2.3.4.3 requires that the room shall have a 2 Hr. fire resistance rating.

18. Tanks storing flammable or combustible liquids inside buildings shall be equipped with a device or other means to prevent overflow into the buildings. Suitable devices include, but are not limited to, a float valve, a preset meter on the fill line, a valve actuated by the weight of the tank contents, a low head pump which is incapable of producing overflow or a liquid-tight overflow pipe at least one pipe size larger than the fill pipe discharging by gravity back to the outside source of liquid or to an approved location. IFC 5704.2.9.7.6

Testing

19. Unless piping is testing in accordance with the applicable sections of ANSI B31.9, all piping before being covered, enclosed or placed in use shall be tested in one of the following methods:

1. Hydro-statically tested to 150 percent of the maximum anticipated pressure of the system, or
2. Pneumatically tested to 110 percent of the maximum anticipated system pressure, but not less than 5 P.S.I at the highest point in the system.

This test shall be maintained for a sufficient time period to complete a visual inspection of all joints and connections, or a minimum of 10 minutes during which time there shall be no leakage or permanent distortion. IFC 5703.6.3