22.11.4.1

The capacity of the listed primary tank shall not exceed the capacities given in Table 22.11.4.1 for Classes I, II, and IIIA liquids shall not exceed 50,000 gal (189,000 L). Table 22.11.4.1 Maximum Capacities for Secondary Containment-Type Aboveground Storage Tanks

<table>
<thead>
<tr>
<th>Liquid Classification</th>
<th>Capacity</th>
<th>gal</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>12,000</td>
<td>45,400</td>
<td></td>
</tr>
<tr>
<td>II and IIIA</td>
<td>20,000</td>
<td>75,700</td>
<td></td>
</tr>
</tbody>
</table>

Submitter Information Verification

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City: 
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Submittal Date: Mon Jun 24 11:32:01 EDT 2013

Committee Statement

Committee Statement: The NFPA 30 Technical Committee on Tank Storage and Piping Systems has been persuaded that the capacities given in former Table 22.11.4.1 are not technically justified. Spill prevention for these tanks is not related to the limit on capacity; it is entirely dependent on the provisions set forth in 22.11.4.2 through 22.11.4.10. Therefore the Technical Committee has decided to raise the capacity limits to 50,000 gallons, which is reasonable, given the fact that this is the maximum practical size for factory-built secondary containment-type tanks.

Response Message:

Public Comment No. 9-NFPA 30-2013 [Section No. 22.11.4.1]
22.11.4.6
Spacing between adjacent tanks shall be not less than 3 ft (0.9 m) comply with Table 22.4.2.1.

Submitter Information Verification

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Submittal Date: Mon Jun 24 11:42:47 EDT 2013

Committee Statement

Committee Statement: This Second Revision accommodates the larger tanks allowed by Second Revision 13.

Response Message:
27.2.4 Low Melting Point Materials.
Materials that melt at a low temperature, including but not limited to aluminum, copper, or brass; materials that soften on fire exposure, such as plastics; or nonductile materials, such as cast iron.

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Submitter Full Name: Robert Benedetti
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Submittal Date: Mon Jun 24 11:47:45 EDT 2013

Committee Statement
Committee Statement: This Second Revision provides a needed definition to address amendments set forth in Second Revision No. 17.
Response Message: 
27.4.4 Low Melting Point Materials.

Low melting point materials, such as aluminum, copper, and brass; materials that soften on fire exposure such as plastics; or nonductile materials such as cast iron shall be permitted to be used underground within the pressure and temperature limitations of ASME B31, Code for Pressure Piping.

27.4.4.1

Low melting point materials, as defined in 27.2.4, shall be compatible with the liquids being handled and shall be used within the pressure and temperature limitations of ASME B31, Code for Pressure Piping.

27.4.4.2

Low melting point materials shall not be used as part of a tank's normal or emergency vent piping.

27.4.4.3

Low melting point materials shall be permitted to be used underground.

27.4.4.4

Such low melting point materials shall be permitted to be used outdoors aboveground, outside a dike, outside a remote impounding area, or inside buildings, provided they meet one of the following conditions:

(1) They are resistant to damage by fire.

(2) They are located so that any leakage resulting from failure will not expose persons, important buildings, tanks, or structures.

(3) They are located where leakage can be controlled by operation of one or more accessible, remotely located valves.

27.4.4.5

The piping materials chosen shall be compatible with the liquids being handled. Low melting point materials shall be permitted to be used within a dike or within a remote impounding area, provided they meet one of the following:

(1) They are connected above the normal operating liquid level of the tank.

(2) They are connected below the normal operating liquid level of the tank and one of the following conditions is met:
   
   (a) The stored liquid is a Class IIIB liquid, the tank is located outdoors, and the piping is not exposed to a potential spill or leak of Class I, Class II, or Class IIIA liquid.

   (b) The low melting point material is protected from fire exposure, such as by using materials that have a fire resistance rating of not less than 2 hours.

27.4.4.6

Piping systems of these materials shall be designed and built in accordance with recognized standards of design for the particular materials chosen or with approved equivalent standards or shall be listed.

Submitter Information Verification
Committee Statement

Committee Statement: This Second Revision addresses Committee Input No. 17 and Recommendation 2006-3-I-FL-5, made by the U. S. Chemical Safety and Hazard Investigation Board, in its report on a storage tank explosion at the Bethune Point Wastewater Treatment Plant. The NFPA 30 Technical Committee on Tank Storage and Piping Systems believes that this revision of the Subsection 27.4.4 provisions for low melting point piping materials addresses the concerns of the Board.

Response Message:
Protection from tampering or trespassing might include one or more of the following: appropriate fencing around isolated tanks in remote areas; "No Trespassing" signs; warning signs indicating the fire hazard of the tank or its contents; locked or secured access to stairways and ladders; locked or secured hatches, valves, and so forth.

Submitter Information Verification

Submitter Full Name: Robert Benedetti
Organization: National Fire Protection Assoc

Committee Statement
Committee Statement: This Second Revision addresses Committee Input No. 16 and Recommendation 2011-H-1-6 of the U. S. Chemical Safety and Hazard Investigation Board’s Recommendation, which was submitted to NFPA as a consequence of the Board, based on their investigation of explosion and fire incidents at oil and gas production sites, wherein young adults were injured and killed while “socializing” around the tanks. With respect to the Board’s specific recommendations, the NFPA 30 Technical Committee on Tank Storage and Piping Systems has not amended Paragraph 21.7.2.2, pointing out that replacing the word “isolated” with “normally unoccupied” serves no useful purpose, since all tanks are “normally unoccupied”. Further, Section 6.10, Management of Security, of NFPA 30, and its related Annex G, provide comprehensive guidance on this issue. The Technical Committee further points out the following: 1. Surveys indicate that there are great numbers of such tanks which could be affected at significant cost without commensurate risk reduction. For example, many remote tanks are located on private farms or in areas so isolated as to be effectively safe from passerby acts of mischief. 2. Existing language seems to be effective, statistically, based on the relatively few incidents and the large number of tanks in remote service. Broad language might impact such tanks, as many authorities having jurisdiction enforce Annex material as requirements. 3. Such a potential impact deserves more careful discussion involving more types of tank operators than is possible at this stage of the current edition revision cycle. 4. The American Petroleum Institute is reportedly revising their security recommendations for production tanks in API RP 12P, which tanks are at the core of this issue. The Technical Committee will revisit this issue when the revised API RP 12P is released. 5. A revisit to the intent of the TC relative to other types of remote storage may be appropriate at that time. 6. Meanwhile, Section 6.10 of NFPA 30 presents approaches to security which are intended to address storage tank security. These can be enforced by authorities having jurisdiction, if a specific situation warrants such action.

Response Message: