



Conduct of Engineering Request for Variance or Alternate Method

To display the *VAR Request Metadata* pane for this document, click **File > Info > Properties > Show Document Panel.**

1.0 General

1.1 Document Number: VAR-10586	1.2 Revision: 0				
1.3 Brief Descriptive Title: Vault-Type Restrooms — Hydrants and Occupancy Class					
1.4 Affected Program: Engineering Standards	1.5 Request Type: Variance				
1.6a Affected Tech Area 99	1.6b Affected Buildings Sitewide				
1.7 Requestor: Oruch, Tobin H Organization: ES-FE					
1.8 Revision History <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Revision Number</th> <th style="text-align: left; border-bottom: 1px solid black;">Changes and Comments</th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;">0</td> <td>Initial issue.</td> </tr> </tbody> </table>		Revision Number	Changes and Comments	0	Initial issue.
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0	Initial issue.				

2.0 Affected Conduct of Engineering Program/Documents

2.1 Affected "P" Document: P342 Engineering Standards If against the P document itself, revision (or N/A): <p style="text-align: center; margin-left: 40px;">N/A</p>	2.2 Subordinate or related document(s) [AP, master spec, LANL ESM chapter & section; or code, Order, standard, etc.]: Document Title/No.: ESM Chapter 16, IBC Program, Section IBC-GEN Revision 12 Document Title/No.: <i>Enter text..</i> REV. 11Revision <i>Enter text..</i> Document Title/No.: <i>Enter text..</i> Revision <i>Enter text..</i>
2.3 Section/Paragraph: Appendix B, Prefab Storage Approach	
2.4 Specific Requirement(s) as Written in the Document(s): Both on page 33: The table's Hydrant Coverage row: "Yes, within 300 ft. but should be at least 40 feet away. All sides of the unit(s) shall not be more that 300 ft from a hydrant." and the table's Occupancy Class (IBC) row: "S-1 (Moderate Hazard) or S-2 (Low Hazard) Usable for storage only, cannot be used for work or work like activities such as handling, fabricating, maintenance, offices, break areas, etc."	

2.5 Contractual, preference, or other basis for requirement in 2.4:

The requirement for hydrant coverage is based on contractually based expectations for property protection, which assumes value of contents and/or concern for spread of fire to surrounding flammables. The IBC/IFC S-1/S-2 classes are appropriate for storage, the original scope of the appendix.

2.6 Type of VAR from ESM Chap 1, Z10 [Applies only to standards variances)

Type 2

2.7 Discipline

IBC Program

3.0 Request Information & Comments

3.1 NCR required (work has occurred)? No

If Yes, NCR Number: [Enter text.](#)

3.2 System/Component Affected

OpSystem Acronym & Name BLDG - Building

System Number or Name [\[Select SystemNumberOrName\]](#)

3.3 Highest ML Level

ML-4

3.4 Proposal with Justification/Compensatory Measures:

Proposal

In the Appendix B table,

1. For the Hydrant Coverage row, add the following to the end of sentence: "Not required for vault toilets."
2. For the Occupancy Class (IBC) row, revise to say:
For carports, sheds, and vault toilets: U occupancy
For storage structures: S-1 (Moderate Hazard) or S-2 (Low Hazard).
All: Usable for storage only, cannot be used for work or work like activities such as handling, fabricating, maintenance, offices, break areas, etc.

Justification

1. For hydrant coverage of vault toilets, the FP Office has concluded (Fire Marshal Decision 32) that it was not the intent of the code to require water to be run to every Group U structure of insignificant value or risk. Additionally the typical onboard water capacity of a fire truck is sufficient to extinguish a largely non-combustible Group U vault toilet fire (and having negative contents value), so a nearby hydrant is not necessary.
2. For occupancy class, U occupancy (Utility and Miscellaneous) is the appropriate designation for carports and sheds (per IBC 312.1) and also vault toilets (the latter being not storage but included in Appendix B because it can be treated like the other in-scope structure types in many of the same ways).

3.5 Attachments

Document Title or Description [Enter text...](#)

3.6a Project ID

N/A

3.6b: Project Name

N/A

3.6c: Code of Record Date

N/A

3.7 Duration: Lifetime	3.8a If Finite Period, Start Date: N/A	3.8b End Date: Click to enter a date
3.8c Provide the PFITS number for tracking removal/correction: N/A		
3.9 USQD/USID required (Nuclear, High/Mod Hazard)? No If Yes, USQD/USID Number Click here to enter text.		
3.10 QA Review for process change matters potentially affecting LANL's NQA-1 implementation Is a QPA Determination required?: No If Yes , then: Choose an item. QPA Comments: Enter text..		
3.11 POC Determination: Accept POC Comments: Enter text..		
3.12 Management Program Owner's (SMPO) Approval for P341 and APs; P342, ESM, ML-1 and -2, and Contract Matters; and P343 SMPO Determination: Accept Comments: Enter text..		

4.0 Participant Signatures **NOTE:** DO NOT ADD NAMES FROM WITHIN WORD! *Save and close the form first, then do 1-4 below:*

1. From the SharePoint library, select the document, then click the **ellipsis (...)** in the second column; a small dialog appears
2. In the small dialog click the **ellipsis** again
3. Click **Edit Properties** and check out the document if prompted to Enter names using the controls provided, then **Save**

4.1 POC (Management Program Owner's Representative): Oruch, Tobin	Organization ES-FE	Signature
4.2 Facility Design Authority Representative [FDARName] FDAR signature not required <input type="checkbox"/>	Organization Enter text..	Signature
4.3 LANL Owning Manager (FOD or R&D/Program) [FODorPrgmMgrName] FOD or Program Manager signature not required <input type="checkbox"/>	Organization Enter text..	Signature

<p>4.4 Quality Reviewer's Name:</p> <p>[QPAName]</p> <p>QPA review/signature not required <input type="checkbox"/></p>	<p>Organization</p> <p>Enter text.</p>	<p>Signature</p>
<p>4.5 Safety or Security Management Program Owner's Approval for P341 and APs; P342, ESM and Contract Matters; and P343</p> <p>Tepley, Daniel James</p> <p>SMPO signature not required (Type 1 variance) <input type="checkbox"/></p>	<p>Organization</p> <p>LBO (ES-DO)</p>	<p>Signature</p>
<p>4.6 Additional Signer 1</p> <p>Kemp, Jason Bradstreet</p> <p>Role: Fire Protection AHJ</p>	<p>Organization</p> <p>FP</p>	<p>Signature</p>
<p>4.7 Additional Signer 2</p> <p>[AdditionalSigner2]</p> <p>Role: Enter text.</p>	<p>Organization</p> <p>Enter text.</p>	<p>Signature</p>
<p>4.8 CoE Administrator Signature</p> <p>Leyba, Matthew Anthony</p> <p>NOTE: The CoE Admin is always the last signature placed on this document. The date of that signing is the date of this document.</p>	<p>Signature</p>	