

## 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: <b>VAR-10561</b>	1.2 Revision: <b>0</b>			
1.3 Brief Descriptive Title: <b>Transportainer and ARMAG Installation Requirements</b>				
1.4 Affected Program: <b>Engineering Standards</b>	1.5 Request Type: <b>Alternate Method</b>			
1.6a Affected Tech Area <b>99</b>	1.6b Affected Buildings <b>Sitewide</b>			
1.7 Requestor: <b>Apperson, Jason Wesley</b> Organization: <input type="text" value="Enter text."/>				
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">1.8 Revision History</th> </tr> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Revision Number      Changes and Comments</th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black;">0      Initial issue.</td> </tr> </tbody> </table>		1.8 Revision History	Revision Number      Changes and Comments	0      Initial issue.
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### 2.0 Affected Conduct of Engineering Program/Documents

<p>2.1 Affected "P" Document: <b>P342 Engineering Standards</b></p> <p>If against the P document itself, revision (or <b>N/A</b>): <b>N/A</b></p>	<p>2.2 Subordinate or related document(s) [AP, master spec, LANL ESM chapter &amp; section; or code, Order, standard, etc.]: <b>Document Title/No.: LANL ESM, Chapter 16, IBC Program, Section IBC-GEN</b></p> <p style="padding-left: 20px;"><b>Revision Rev. 11</b></p> <p style="padding-left: 20px;">Document Title/No.: <b>ESM Chapter 16, IBC Program, Reference: ARMAG robust structure summary of LANL requirements and guidance</b></p> <p style="padding-left: 20px;"><b>Revision Rev. 3</b></p> <p style="padding-left: 20px;">Document Title/No.: <input type="text" value="Enter text.."/></p> <p style="padding-left: 20px;">Revision <input type="text" value="Enter text.."/></p>
2.3 Section/Paragraph: <b>See 2.4 below.</b>	
<p>2.4 Specific Requirement(s) as Written in the Document(s):</p> <p><b>Subsection 3.0 (Scope), Table IBC-GEN-3, Three-Tiered Graded Approach: Categorizes New Buildings and Structures as Highest Risk; this requires a Test &amp; Inspection Plan, IBC SME/FP review, LBO permitting, and Certificate of Occupancy.</b></p> <p><b>Subsection 10.0 (Prefab Structure Requirements (For both Temporary and Permanent), Table Prefab-4, Prefab Structure Submittals: Prefab structure submittal requirements for Occupied, Robust/Hazmat, Modified, and Sheds/Carports over 120 sq. ft.</b></p> <p><b>Other subsections as affected.</b></p>	

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

ESM Chapter 16 is LANL's implementation of the International Building Code (IBC; 2015 edition), which is contractually required by DOE O 420.1C, Facility Safety. This alternate method concerns LANL's approach to matters of the code and ESM within the building official's discretion.

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: N/A

3.2 System/Component Affected

OpSystem Acronym & Name BLDG - Building

System Number or Name BLDG

3.3 Highest ML Level

ML-4

3.4 Proposal with Justification/Compensatory Measures:

Proposal

Allow for the installation of a subset of containers (transportainers) and ARMAG-type "robust" structures with streamlined, LANL-imposed requirements. To qualify for this alternate method, such structures shall be:

1. Incidental occupancy\*
2. Non-hazardous storage
3. No connected utilities
4. Length 40' maximum
5. Not used for work or work-like activities such as handling, fabricating, maintenance, offices, break areas, etc.

\* Occupied for a total of less than 2 hours/day, yearly average per ESM Ch. 16, IBC-GEN, Prefab article.

Storage units meeting the requirements above may be considered "Moderate Risk" per the three-tiered graded approach (rather than Highest); however, the corresponding administrative expectations are tailored to the need; see Attachment A, *ARMAG-Transportainer for Non-Hazardous Storage Only-- No Utilities with Incidental Occupancy*, for new administrative and technical requirements.

Justification

Given the restrictions above and the requirements in the attachment, this category of structure presents minimal risk to incidental occupants, adjacent workers and structures, and contents.

3.5 Attachments

Document Title or Description Attachment A, ARMAG-Transportainer for Non-Hazardous Storage Only – No Utilities with Incidental Occupancy

3.6a Project ID

N/A

3.6b: Project Name

N/A

3.6c: Code of Record Date

N/A

3.7 Duration: <b>Lifetime</b>	3.8a If Finite Period, Start Date: <b>N/A</b>	3.8b End Date: <a href="#">Click to enter a date</a>
3.8c Provide the PFITS number for tracking removal/correction: <b>N/A</b>		
3.9 USQD/USID required (Nuclear, High/Mod Hazard)? <b>No</b> If Yes, USQD/USID Number <a href="#">Click here to enter text.</a>		
3.10 QA Review for process change matters potentially affecting LANL's NQA-1 implementation Is a QPA Determination required?: <b>No</b> If <b>Yes</b> , then: <a href="#">Choose an item.</a> QPA Comments: <a href="#">Enter text..</a>		
3.11 POC Determination: <b>Accept</b> POC Comments: <a href="#">Enter text..</a>		
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: <b>Accept</b> Comments: <a href="#">Enter text..</a>		

**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):  <b>Oruch, Tobin H</b>	Organization <b>ES-FE</b>	Signature
4.2 Facility Design Authority Representative  [FDARName] FDAR signature not required <input checked="" type="checkbox"/>	Organization <a href="#">Enter text..</a>	Signature
4.3 LANL Owning Manager (FOD or R&D/Program)  [FODorPrgmMgrName] FOD or Program Manager signature not required <input checked="" type="checkbox"/>	Organization <a href="#">Enter text..</a>	Signature
4.4 Quality Reviewer's Name:  [QPAName] QPA review/signature not required <input checked="" type="checkbox"/>	Organization <a href="#">Enter text.</a>	Signature

<p>4.5 Safety or Security Management Program Owner's Approval for P341 and APs; P342, ESM and Contract Matters; and P343</p> <p>Apperson, Jason Wesley</p> <p>SMPO signature not required (Type 1 variance) <input type="checkbox"/></p>	<p>Organization</p> <p>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>Salazar-Barnes, Christina L</p> <p><u>NOTE</u>: 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>	