## CONTAINMENT BUILDING CHECKLIST

### CESQG:
- < 100 Kg. (approximately 25-30 gallons) of waste in a calendar month.

### SQG:
- Between 100 and 1,000 Kg. (about 25 to under 300 gallons) of waste in a calendar month.

### LQG:
- >1,000 Kg. (~300 gallons) of waste in a calendar month or > 1 Kg. of acutely hazardous waste in a calendar month.

**NOTE:** To convert from gallons to pounds: 
\[ \text{Amount in gallons} \times \text{Specific Gravity} \times 8.345 = \text{Amounts in pounds}. \]

### COMPLETE AND ATTACH A PROCESS DESCRIPTION SUMMARY

### DESIGN AND OPERATING STANDARDS

1. Are the containment buildings completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g., precipitation, wind, run-on), and to ensure containment of managed wastes? [3745-256-101(A)(1)]
   - Yes
   - No
   - N/A

2. Are the floor and containment walls of the unit, including the secondary containment system (if required), designed and constructed of materials of sufficient strength and thickness to:
   a. Support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit? [3745-256-101(A)(2)]
   - Yes
   - No
   - N/A
   
   b. Prevent failure due to pressure gradients, settlement, compression, or uplift?
   - Yes
   - No
   - N/A
   
   c. Prevent failure due to physical contact with the wastes to which they are exposed?
   - Yes
   - No
   - N/A
   
   d. Prevent failure due to climatic conditions?
   - Yes
   - No
   - N/A
   
   e. Prevent failure due to stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls?
   - Yes
   - No
   - N/A

3. Is the unit designed so that it has sufficient structural strength to prevent collapse or other failure? [3745-256-101(A)(2)]
   - Yes
   - No
   - N/A

**NOTE:** DMWM will consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of containment buildings. An exemption to the structural strength may be made for lightweight doors and windows if appropriate to the nature of waste management operation to take place in the unit. The lightweight doors and windows must meet the criteria in OAC 3745-256-101(A)(2)(a)&(b).

4. Are incompatible hazardous wastes or treatment reagents placed in the unit or its secondary containment system that could cause the unit or secondary containment system to leak, corrode, or otherwise fail? [3745-256-101(A)(3)]
   - Yes
   - No
   - N/A

5. Does the containment building have a primary barrier that is: [3745-256-101(A)(4)]
   a. Designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit?
   - Yes
   - No
   - N/A
   
   b. Appropriate for the physical and chemical characteristics of the waste to be managed?
   - Yes
   - No
   - N/A

6. Is the containment building used to manage hazardous waste containing free liquids or treated with free liquids? If so, has the owner/operator (o/o) included: [3745-256-101(B)]
   a. A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (i.e., geomembrane covered by a concrete wear surface)?
   - Yes
   - No
   - N/A
   
   b. A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building?
   - Yes
   - No
   - N/A
   
   i. Is the primary barrier sloped to drain liquids to the associated collection system?
   - Yes
   - No
   - N/A
   
   ii. Are liquids and waste collected and removed to minimize hydraulic head on the containment system at the earliest practicable time?
   - Yes
   - No
   - N/A
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<td><strong>c.</strong></td>
<td>A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time?</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td><strong>i.</strong></td>
<td>Is the leak detection component constructed with a bottom slope of 1% or more?</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td><strong>ii.</strong></td>
<td>Is the leak detection component constructed of a granular drainage material with a hydraulic conductivity of $1 \times 10^{-2}$ cm/sec or more and a thickness of twelve inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of $3 \times 10^{-5}$ m$^2$/sec or more?</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td><strong>d.</strong></td>
<td>If treatment is to be conducted in the buildings, is an area in which such treatment will be conducted designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building?</td>
<td>Yes</td>
<td>No</td>
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<td><strong>e.</strong></td>
<td>Is the secondary containment system constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building?</td>
<td>Yes</td>
<td>No</td>
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**NOTE:** Under certain conditions, containment buildings may serve as secondary containment systems for tanks placed within the building. A containment building may serve as an external liner system for a tank, provided it meets the requirements of OAC 3745-66-93(E)(1). In addition, the containment building shall meet the requirements of OAC 3745-66-93(B)(C)(1)&(C)(2) to be considered an acceptable secondary containment system for a tank.

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<td><strong>7.</strong></td>
<td>Are there existing units other than 90-day generator units? If so: [<em>3745-256-101(B)(4)</em>]</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>a.</strong></td>
<td>Did the o/o provide written notice to the director of their request to delay secondary containment requirement? If so:</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>i.</strong></td>
<td>Did the notification describe the unit and its operating practices with specific reference to the performance of existing containment systems, and specific plans for retrofitting the unit with secondary containment?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>b.</strong></td>
<td>Did the o/o respond within 30 days to any comments from the director on these plans?</td>
<td>Yes</td>
<td>No</td>
</tr>
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<td><strong>c.</strong></td>
<td>Did the o/o fulfill the terms of the revised plan approved by the director?</td>
<td>Yes</td>
<td>No</td>
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**NOTE:** An existing containment building is one constructed prior to December 7, 2000.

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<td><strong>8.</strong></td>
<td>Does the o/o of all containment buildings use controls and practices to ensure containment of hazardous waste within the unit? And at a minimum do the following: [<em>3745-256-101(C)(1)</em>]</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>a.</strong></td>
<td>Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>b.</strong></td>
<td>Maintain the level of stored/treated hazardous waste within the containment walls of unit so that the height of any containment is not exceeded?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>c.</strong></td>
<td>Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>d.</strong></td>
<td>Designate an area to decontaminate equipment, and collect and properly manage any rinseate?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>e.</strong></td>
<td>Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**NOTE:** Use Method 22 in Appendix A of 40 CFR 60 to determine visible emissions. Visible emissions training is provided by smoke schools.
9. Has the o/o obtained and kept on-site a certification by a qualified professional engineer that the containment building design meets the requirements of OAC 3745-256-101(A) to (C)(4)? [3745-256-101(C)(2)]

   | Yes | No | N/A |
---|-----|----|-----|

10. Did the o/o promptly repair any condition that could lead to or cause a release of hazardous waste in accordance with the following procedures: [3745-256-101(C)(3)]

   a. Upon detection of a condition that has led to a release of hazardous waste (e.g., upon detection of leakage from the primary barrier) did the o/o:

      i. Enter a record of the discovery in the facility’s operating record?

         | Yes | No | N/A |
---|-----|----|-----|

      ii. Immediately remove from service the containment building affected by the condition?

         | Yes | No | N/A |
---|-----|----|-----|

      iii. Determine that steps shall be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs?

         | Yes | No | N/A |
---|-----|----|-----|

      iv. Within seven days after the discovery of the condition, notify the director of the condition, and within 14 working days, provide a written plan to the director with a description of the steps taken to repair the containment building and with the schedule for accomplishing the work?

         | Yes | No | N/A |
---|-----|----|-----|

11. Upon completing all repairs and cleanup, did the o/o notify the director in writing and provide verification, signed by a qualified professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with OAC 3745-256-101(C)(3)(a)(iv)? [3745-256-101(C)(3)(c)]

   | Yes | No | N/A |
---|-----|----|-----|

12. Did the o/o, at least once every seven days, inspect and record in the facility’s operating record, data gathered from: [3745-256-101(C)(4)]

   a. Monitoring equipment?

      | Yes | No | N/A |
---|-----|----|-----|

   b. Leak detection equipment?

      | Yes | No | N/A |
---|-----|----|-----|

   c. The containment building?

      | Yes | No | N/A |
---|-----|----|-----|

   d. The area immediately surrounding the containment building?

      | Yes | No | N/A |
---|-----|----|-----|

13. For containment building that contains both areas with secondary containment and without secondary containment, did the o/o: [3745-256-101(D)]

   a. Design and operate each area in accordance with the requirements of OAC 3745-256-101(A) to (C)(4)?

      | Yes | No | N/A |
---|-----|----|-----|

   b. Take measures to prevent the releases of liquids or wet materials into areas without secondary containment?

      | Yes | No | N/A |
---|-----|----|-----|

   c. Maintain in the facility’s operating record a written description of the operating procedures used to maintain the integrity of area without secondary containment?

      | Yes | No | N/A |
---|-----|----|-----|

14. If a permitted containment building does not have a secondary containment system, has the director waived requirements for secondary containment for the unit where the o/o demonstrated that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system? [3745-256-101(E)]

   | Yes | No | N/A |
---|-----|----|-----|

[Facility Name/Inspection Date]
[ID number]
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## CLOSURE AND POST-CLOSURE

15. Did the o/o close the containment building? If so: [3745-256-102(A)]
   - [ ] Yes  [ ] No  [ ] N/A
   a. Did the o/o remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste or leachate?
      - [ ] Yes  [ ] No  [ ] N/A
   b. Manage all waste generated during closure as hazardous waste unless it is not a hazardous waste as described in OAC 3745-51-03(D)?
      - [ ] Yes  [ ] No  [ ] N/A

16. Does the closure plan, closure activities, cost estimate for closure, and financial responsibility for containment buildings meet all of the requirements specified in OAC 3745-66-10 to 3745-66-21 and 3745-66-40 to 3745-66-48? [3745-256-102(A)]
   - [ ] Yes  [ ] No  [ ] N/A

17. Did the o/o find that not all contaminated subsoils can be practically removed or decontaminated after making all reasonable efforts required by OAC 3745-256-102(A)? If so: [3745-256-102(B)]
   - [ ] Yes  [ ] No  [ ] N/A
   a. Did the o/o close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (see OAC 3745-68-10)?
      - [ ] Yes  [ ] No  [ ] N/A

**NOTE:** A hazardous waste generator is exempt from all interim standards for closure and post closure and financial requirements, except for the closure performance standards of OAC 3745-66-11(A)&(B) and the disposal or decontamination of equipment structures and soil requirements of OAC 3745-66-14.

### RECORD KEEPING

18. Is the containment building operated by a generator without a hazardous waste operating permit? If so:
   - [ ] Yes  [ ] No  [ ] N/A
   a. Are written procedures to ensure that all wastes are removed from the unit and associated collection system at least once every 90 days maintained at the facility? [3745-52-34(A)(1)(d)(i)]
      - [ ] Yes  [ ] No  [ ] N/A
   b. Is documentation of the unit being emptied at least once every 90 days maintained at the facility? [3745-52-34(A)(1)(d)(ii)]
      - [ ] Yes  [ ] No  [ ] N/A