CA

66264.193 Containment and Detection of Releases

(a)

In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this section shall be provided (except as provided in subsections (f) and (g) of this section): (1) for all new tank systems or components, prior to the tank system or component being put into service. (2) for all existing tank systems. (3) for tank systems that transfer, store or treat materials that subsequently become hazardous wastes within two years after the materials become hazardous waste unless the owner or operator complies with section 262.16(b)(3) and is one of the following: (A) the owner or operator is a very small quantity generator or a small quantity generator as defined in 66260.10 of this division, or (B) the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(1)

for all new tank systems or components, prior to the tank system or component being put into service.

(2)

for all existing tank systems.

(3)

for tank systems that transfer, store or treat materials that subsequently become hazardous wastes within two years after the materials become hazardous waste unless the owner or operator complies with section 262.16(b)(3) and is one of the following: (A) the owner or operator is a very small quantity generator or a small quantity generator as defined in 66260.10 of this division, or (B) the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(A)

the owner or operator is a very small quantity generator or a small quantity generator as defined in 66260.10 of this division, or

(B)

the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(b)

Secondary containment systems shall be: (1) designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater or surface water at any time during the use of the tank system; and (2) capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(1)

designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater or surface water at any time during the use of the tank system; and

(2)

capable of detecting and collecting releases and accumulated liquids until the collected

material is removed.

(c)

To meet the requirements of subsection (b) of this section, secondary containment systems shall be at a minimum:(1) constructed of or lined with materials that are compatible with the wastes(s) to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions and the stress of daily operation (including stresses from nearby vehicular traffic); (2) provided with a foundation or base underlying the tanks capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression or uplift. This base shall be free of cracks or gaps and sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed; (3) provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator can demonstrate to the Department that existing detection technologies or site conditions will not allow detection of a release within 24 hours; and (4) sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within as timely a manner as is necessary to prevent overflow of the containment system, but within no more than 24 hours, or in as timely a manner as possible to prevent harm to human

health and the environment, if the owner or operator can demonstrate to the Department that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours and that overflow of the containment system will not occur.(A) If the collected material is a hazardous waste under chapter 11 of this division, it shall be managed as a hazardous waste in accordance with all applicable requirements of chapters 12 through 15 of this division. (B) If the collected material is discharged through a point source to waters of the United States, the owner or operator shall comply with the requirements of sections 301, 304, and 402 of the Federal Clean Water Act, as amended (33 U.S.C. sections 1311, 1314 and 1342, respectively). (C) If the collected material is discharged to a Publicly Owned Treatment Works (POTW), the owner or operator shall comply with the requirements of section 307 of the Federal Clean Water Act, as amended (33 U.S.C. section 1317). (D) If the collected material is released to the environment, the owner or operator shall comply with the applicable reporting requirements of Title 40 CFR Part 302.

(1)

constructed of or lined with materials that are compatible with the wastes(s) to be placed in the tank system and shall have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions and the stress of daily operation (including stresses from nearby vehicular traffic);

(2)

provided with a foundation or base underlying the tanks capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression or uplift. This base shall be free of cracks or gaps and sufficiently impervious to contain

leaks, spills and accumulated precipitation until the collected material is detected and removed;

(3)

provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator can demonstrate to the Department that existing detection technologies or site conditions will not allow detection of a release within 24 hours; and

(4)

sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within as timely a manner as is necessary to prevent overflow of the containment system, but within no more than 24 hours, or in as timely a manner as possible to prevent harm to human health and the environment, if the owner or operator can demonstrate to the Department that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours and that overflow of the containment system will not occur.(A) If the collected material is a hazardous waste under chapter 11 of this division, it shall be managed as a hazardous waste in accordance with all applicable requirements of chapters 12 through 15 of this division. (B) If the collected material is discharged through a point source to waters of the United States, the owner or operator shall comply with the requirements of sections 301, 304, and 402 of the Federal Clean Water Act, as amended (33 U.S.C. sections 1311, 1314 and 1342, respectively). (C) If the collected material is discharged to a Publicly Owned Treatment Works (POTW), the owner or operator shall comply with the requirements of section 307 of the Federal

Clean Water Act, as amended (33 U.S.C. section 1317). (D) If the collected material is released to the environment, the owner or operator shall comply with the applicable reporting requirements of Title 40 CFR Part 302.

(A)

If the collected material is a hazardous waste under chapter 11 of this division, it shall be managed as a hazardous waste in accordance with all applicable requirements of chapters 12 through 15 of this division.

(B)

If the collected material is discharged through a point source to waters of the United States, the owner or operator shall comply with the requirements of sections 301, 304, and 402 of the Federal Clean Water Act, as amended (33 U.S.C. sections 1311, 1314 and 1342, respectively).

(C)

If the collected material is discharged to a Publicly Owned Treatment Works (POTW), the owner or operator shall comply with the requirements of section 307 of the Federal Clean Water Act, as amended (33 U.S.C. section 1317).

(D)

If the collected material is released to the environment, the owner or operator shall comply with the applicable reporting requirements of Title 40 CFR Part 302.

(d)

Secondary containment for tanks shall include one or more of the following devices: (1) a liner (external to the tank); (2) a vault; (3) a double-walled tank; or (4) an equivalent device as approved by the Department.

(1)

a liner (external to the tank);

(2)

a vault;

(3)

a double-walled tank; or

(4)

an equivalent device as approved by the Department.

(e)

In addition to the requirements of subsections (b), (c) and (d) of this section, secondary containment systems shall satisfy the following requirements. (1) External liner systems shall be: (A) designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater; (B) designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity, in addition to that required in subsection (e)(1)(A) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event; (C) free of cracks or gaps; and (D) designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste). (2) Vault systems shall be: (A) designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater; (B) designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity, in addition to that required in subsection (e)(2)(A) of this section, to contain run-on and infiltration from a

25-year, 24-hour rainfall event; (C) constructed with chemical-resistant water stops in place at all joints (if any); (D) provided with an impermeable interior coating or lining that is compatible with the waste being transferred, stored or treated and that will prevent migration of waste into the concrete; (E) provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being transferred, stored or treated: 1. meets the definition of ignitable waste under section 66261.21 of this division; or 2. meets the definition of reactive waste under section 66261.23 of this division, and may form an ignitable or explosive vapor; and (F) provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure. (3) Double-walled tanks shall be: (A) designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell; (B) protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and (C) provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator can demonstrate to the Department, and the Department concludes, that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

(1)

External liner systems shall be: (A) designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater; (B) designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the collection system has

sufficient excess capacity, in addition to that required in subsection (e)(1)(A) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event; (C) free of cracks or gaps; and (D) designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

(A)

designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater;

(B)

designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity, in addition to that required in subsection (e)(1)(A) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event;

(C)

free of cracks or gaps; and

(D)

designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the waste).

(2)

Vault systems shall be: (A) designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater; (B) designed or operated to prevent run-on and infiltration of

precipitation into the secondary containment system unless the collection system has sufficient excess capacity, in addition to that required in subsection (e)(2)(A) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event; (C) constructed with chemical-resistant water stops in place at all joints (if any); (D) provided with an impermeable interior coating or lining that is compatible with the waste being transferred, stored or treated and that will prevent migration of waste into the concrete; (E) provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being transferred, stored or treated: 1. meets the definition of ignitable waste under section 66261.21 of this division; or 2. meets the definition of reactive waste under section 66261.23 of this division, and may form an ignitable or explosive vapor; and (F) provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(A)

designed or operated to contain precipitation from a 24-hour, 25-year storm event plus the greater of 10 percent of the aggregate volume of all tanks or 100 percent of the capacity of the largest tank within its boundary, whichever is greater;

(B)

designed or operated to prevent run-on and infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity, in addition to that required in subsection (e)(2)(A) of this section, to contain run-on and infiltration from a 25-year, 24-hour rainfall event;

(C)

constructed with chemical-resistant water stops in place at all joints (if any);

(D)

provided with an impermeable interior coating or lining that is compatible with the waste

being transferred, stored or treated and that will prevent migration of waste into the concrete;

(E)

provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being transferred, stored or treated: 1. meets the definition of ignitable waste under section 66261.21 of this division; or 2. meets the definition of reactive waste under section 66261.23 of this division, and may form an ignitable or explosive vapor; and

1.

meets the definition of ignitable waste under section 66261.21 of this division; or

2.

meets the definition of reactive waste under section 66261.23 of this division, and may form an ignitable or explosive vapor; and

(F)

provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(3)

Double-walled tanks shall be: (A) designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell; (B) protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and (C) provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator can demonstrate to the Department, and the Department concludes, that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

(A)

designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(B)

protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(C)

provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator can demonstrate to the Department, and the Department concludes, that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

(f)

Ancillary equipment shall be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of subsections (b) and (c) of this section except for: (1) aboveground piping (exclusive of flanges, joints, valves and other connections) that are visually inspected for leaks on a daily basis; (2) welded flanges, welded joints and welded connections, that are visually inspected for leaks on a daily basis; (3) sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and (4) pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

(1)

aboveground piping (exclusive of flanges, joints, valves and other connections) that are visually inspected for leaks on a daily basis;

(2)

welded flanges, welded joints and welded connections, that are visually inspected for

leaks on a daily basis;

(3)

sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and

(4)

pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

(g)

The owner or operator may obtain a variance from the requirements of this section for existing above-ground tanks in place, if the Department finds, as a result of a demonstration by the owner or operator that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system, or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. (1) In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the Department will consider: (A) the nature and quantity of the wastes; (B) the proposed alternate design and operation; (C) the hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater, and (D) all other factors that would influence the quality and mobility of the hazardous constituents and the potential for the constituents to migrate to groundwater or surface water. (2) In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard,

the Department will consider:(A) the potential adverse effects on groundwater, surface water and land quality taking into account:1. the physical and chemical characteristics of the waste in the tank system, including its potential for migration; 2. the hydrogeological characteristics of the facility and surrounding land; 3. the potential for health risks caused by human exposure to waste constituents; 4. the potential for damage to wildlife, crops, vegetation and physical structures caused by exposure to waste constituents; and 5. the persistence and permanence of the potential adverse effects; (B) the potential adverse effects of a release on groundwater quality, taking into account: 1. the quantity and quality of groundwater and the direction of groundwater flow; 2. the proximity and withdrawal rates of groundwater users; 3. the current and future uses of groundwater in the area; and 4. the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality; (C) the potential adverse effects of a release on surface water quality, taking into account:1. the quantity and quality of groundwater and the direction of groundwater flow; 2. the patterns of rainfall in the region; 3. the proximity of the tank system to surface waters; 4. the current and future uses of surface waters in the area and any water quality standards established for those surface waters; and 5. the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and (D) the potential adverse effects of a release on the land surrounding the tank system, taking into account:1. the patterns of rainfall in the region; and 2. the current and future uses of the surrounding land. (3) The owner or operator of a tank system, for which a variance from secondary containment has been granted in accordance with the requirements of subsection (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system but has

not migrated beyond the zone of engineering control (as established in the variance), shall:(A) comply with the requirements of section 66264.196, except subsection (b)(5); and (B) decontaminate or remove contaminated soil to the extent necessary to: 1. enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and 2. prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and (C) if contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B) of this section, comply with the requirements of section 66264.197(b). (4) The owner or operator of a tank system, for which a variance from secondary containment has been granted in accordance with the requirements of subsection (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), shall: (A) comply with the requirements of section 66264.196(b); and (B) prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater has been contaminated, the owner or operator shall comply with the requirements of section 66264.197(b); and (C) if repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (a) through (f) of this section or reapply for a variance from secondary containment and meet the requirements for new tank systems in section 66264.192 if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been

contaminated.

(1)

In deciding whether to grant a variance based on a demonstration of equivalent protection of groundwater and surface water, the Department will consider: (A) the nature and quantity of the wastes; (B) the proposed alternate design and operation; (C) the hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater, and (D) all other factors that would influence the quality and mobility of the hazardous constituents and the potential for the constituents to migrate to groundwater or surface water.

(A)

the nature and quantity of the wastes;

(B)

the proposed alternate design and operation;

(C)

the hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater, and

(D)

all other factors that would influence the quality and mobility of the hazardous constituents and the potential for the constituents to migrate to groundwater or surface water.

(2)

In deciding whether to grant a variance based on a demonstration of no substantial present or potential hazard, the Department will consider:(A) the potential adverse effects on groundwater, surface water and land quality taking into account:1. the physical and chemical characteristics of the waste in the tank system, including its potential for migration; 2. the hydrogeological characteristics of the facility and surrounding land; 3. the potential for health risks caused by human exposure to waste

constituents; 4. the potential for damage to wildlife, crops, vegetation and physical structures caused by exposure to waste constituents; and 5. the persistence and permanence of the potential adverse effects; (B) the potential adverse effects of a release on groundwater quality, taking into account: 1. the quantity and quality of groundwater and the direction of groundwater flow; 2. the proximity and withdrawal rates of groundwater users; 3. the current and future uses of groundwater in the area; and 4. the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality; (C) the potential adverse effects of a release on surface water quality, taking into account:1. the quantity and quality of groundwater and the direction of groundwater flow; 2. the patterns of rainfall in the region; 3. the proximity of the tank system to surface waters; 4. the current and future uses of surface waters in the area and any water quality standards established for those surface waters; and 5. the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and (D) the potential adverse effects of a release on the land surrounding the tank system, taking into account:1. the patterns of rainfall in the region; and 2. the current and future uses of the surrounding land.

(A)

the potential adverse effects on groundwater, surface water and land quality taking into account:1. the physical and chemical characteristics of the waste in the tank system, including its potential for migration; 2. the hydrogeological characteristics of the facility and surrounding land; 3. the potential for health risks caused by human exposure to waste constituents; 4. the potential for damage to wildlife, crops, vegetation and physical structures caused by exposure to waste constituents; and 5. the persistence and permanence of the potential adverse effects;

1.

the physical and chemical characteristics of the waste in the tank system, including its potential for migration;

2.

the hydrogeological characteristics of the facility and surrounding land;

3.

the potential for health risks caused by human exposure to waste constituents;

4.

the potential for damage to wildlife, crops, vegetation and physical structures caused by exposure to waste constituents; and

5.

the persistence and permanence of the potential adverse effects;

(B)

the potential adverse effects of a release on groundwater quality, taking into account: 1. the quantity and quality of groundwater and the direction of groundwater flow; 2. the proximity and withdrawal rates of groundwater users; 3. the current and future uses of groundwater in the area; and 4. the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

1.

the quantity and quality of groundwater and the direction of groundwater flow;

2.

the proximity and withdrawal rates of groundwater users;

3.

the current and future uses of groundwater in the area; and

4.

the existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

(C)

the potential adverse effects of a release on surface water quality, taking into account:1. the quantity and quality of groundwater and the direction of groundwater flow; 2. the patterns of rainfall in the region; 3. the proximity of the tank system to surface waters; 4. the current and future uses of surface waters in the area and any water quality standards established for those surface waters; and 5. the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and

1.

the quantity and quality of groundwater and the direction of groundwater flow;

2.

the patterns of rainfall in the region;

3.

the proximity of the tank system to surface waters;

4.

the current and future uses of surface waters in the area and any water quality standards established for those surface waters; and

5.

the existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and

(D)

the potential adverse effects of a release on the land surrounding the tank system, taking into account:1. the patterns of rainfall in the region; and 2. the current and future uses of the surrounding land.

1.

the patterns of rainfall in the region; and

2.

the current and future uses of the surrounding land.

(3)

The owner or operator of a tank system, for which a variance from secondary containment has been granted in accordance with the requirements of subsection (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), shall:(A) comply with the requirements of section 66264.196, except subsection (b)(5); and (B) decontaminate or remove contaminated soil to the extent necessary to: 1. enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and 2. prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and (C) if contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B) of this section, comply with the requirements of section 66264.197(b).

(A)

comply with the requirements of section 66264.196, except subsection (b)(5); and

(B)

decontaminate or remove contaminated soil to the extent necessary to: 1. enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and 2. prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and

1.

enable the tank system for which the variance was granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

2.

prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and

(C)

if contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B) of this section, comply with the requirements of section 66264.197(b).

(4)

The owner or operator of a tank system, for which a variance from secondary containment has been granted in accordance with the requirements of subsection (g)(1) of this section, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), shall: (A) comply with the requirements of section 66264.196(b); and (B) prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater has been contaminated, the owner or operator shall comply with the requirements of section 66264.197(b); and (C) if repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (a) through (f) of this section or reapply for a variance from secondary containment and meet the requirements for new tank systems in section 66264.192 if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been contaminated.

(A)

comply with the requirements of section 66264.196(b); and

(B)

prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed or if groundwater has been contaminated, the owner or operator shall comply with the requirements of section 66264.197(b); and

(C)

if repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (a) through (f) of this section or reapply for a variance from secondary containment and meet the requirements for new tank systems in section 66264.192 if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be decontaminated or removed and groundwater or surface water has not been contaminated.

(h)

The following procedures shall be followed in order to request a variance from secondary containment. (1) The Department shall be notified in writing by the owner or operator that the facility intends to conduct and submit a demonstration for a variance from secondary containment as allowed in subsection (g) of this section at least 24 months prior to the date that secondary containment is required to be provided in accordance with subsection (a) of this section; or, if a variance is sought from the requirements of section 66264.193(i)(1), the demonstration shall be submitted to the Department with Part B of the permit application. (2) As part of the notification, the owner or operator shall also submit to the Department a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration shall address each of the factors listed in subsection (g)(1) or subsection (g)(2) of this section. (3) The demonstration for a variance shall be completed within 180 days after notifying the Department of an intent to conduct

the demonstration. (4) If a variance is granted under this subsection, the Department will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(1)

The Department shall be notified in writing by the owner or operator that the facility intends to conduct and submit a demonstration for a variance from secondary containment as allowed in subsection (g) of this section at least 24 months prior to the date that secondary containment is required to be provided in accordance with subsection (a) of this section; or, if a variance is sought from the requirements of section 66264.193(i)(1), the demonstration shall be submitted to the Department with Part B of the permit application.

(2)

As part of the notification, the owner or operator shall also submit to the Department a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration shall address each of the factors listed in subsection (g)(1) or subsection (g)(2) of this section.

(3)

The demonstration for a variance shall be completed within 180 days after notifying the Department of an intent to conduct the demonstration.

(4)

If a variance is granted under this subsection, the Department will require the permittee to construct and operate the tank system in the manner that was demonstrated to meet the requirements for the variance.

(i)

All tank systems, until such time as secondary containment that meets the requirements of this section is provided, shall comply with the following: (1)

subsections (c)(2), (c)(4), (e)(1)(A) or (e)(2)(A) (except for tanks that do not contain free liquids), and (e)(1)(B) or (e)(2)(B); (2) for nonenterable underground tanks, a leak test that meets the requirements of section 66264.191(c)(5) or other tank integrity method, as approved or required by the Department, shall be conducted at least annually; (3) for other than nonenterable underground tanks, the owner or operator shall either conduct a leak test as in subsection (i)(2) of this section or develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified professional engineer, registered in California, in accordance with section 66270.11(d). The schedule and procedure shall be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments shall be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated; (4) for ancillary equipment, a leak test or other integrity assessment as approved by the Department shall be conducted at least annually; (5) the owner or operator shall maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(2) through (i)(4) of this section; (6) if a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(2) through (i)(4) of this section, the owner or operator shall comply with the requirements of section 66264.196.

(1)

subsections (c)(2), (c)(4), (e)(1)(A) or (e)(2)(A) (except for tanks that do not contain

free liquids), and (e)(1)(B) or (e)(2)(B);

(2)

for nonenterable underground tanks, a leak test that meets the requirements of section 66264.191(c)(5) or other tank integrity method, as approved or required by the Department, shall be conducted at least annually;

(3)

for other than nonenterable underground tanks, the owner or operator shall either conduct a leak test as in subsection (i)(2) of this section or develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified professional engineer, registered in California, in accordance with section 66270.11(d). The schedule and procedure shall be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments shall be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated;

(4)

for ancillary equipment, a leak test or other integrity assessment as approved by the Department shall be conducted at least annually;

(5)

the owner or operator shall maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(2) through (i)(4) of this section;

(6)

if a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(2) through (i)(4) of this section, the owner or operator shall comply with the requirements of section 66264.196.

(j)

(1) Notwithstanding subsection (a) through (c) of this section, secondary containment that meets the requirements of subsections (l) and (m) shall be provided for tank systems used to manage hazardous wastes generated onsite, and which meet the criteria specified in subsection (j)(2) of this section: (A) prior to the tank system or component being placed in service for new tank systems or components; or (B) by January 24, 1998 for existing tank systems. (2) The provisions of subsection (j)(1) of this section apply only to: (A) onground or aboveground tank systems containing only non-RCRA hazardous wastes generated onsite, and tank systems authorized under Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, and (B) onground or aboveground tank systems containing RCRA hazardous wastes generated onsite, if: 1. the owner or operator is a very small quantity generator as defined in section 66260.10 of this division, or a small quantity generator as defined in section 66260.10 of this division, or 2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(1)

Notwithstanding subsection (a) through (c) of this section, secondary containment that meets the requirements of subsections (l) and (m) shall be provided for tank systems used to manage hazardous wastes generated onsite, and which meet the criteria specified in subsection (j)(2) of this section: (A) prior to the tank system or component

being placed in service for new tank systems or components; or (B) by January 24, 1998 for existing tank systems.

(A)

prior to the tank system or component being placed in service for new tank systems or components; or

(B)

by January 24, 1998 for existing tank systems.

(2)

The provisions of subsection (j)(1) of this section apply only to: (A) onground or aboveground tank systems containing only non-RCRA hazardous wastes generated onsite, and tank systems authorized under Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, and (B) onground or aboveground tank systems containing RCRA hazardous wastes generated onsite, if: 1. the owner or operator is a very small quantity generator as defined in section 66260.10 of this division, or a small quantity generator as defined in section 66260.10 of this division, or 2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(A)

onground or aboveground tank systems containing only non-RCRA hazardous wastes generated onsite, and tank systems authorized under Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, and

(B)

onground or aboveground tank systems containing RCRA hazardous wastes generated onsite,

if: 1. the owner or operator is a very small quantity generator as defined in section 66260.10 of this division, or a small quantity generator as defined in section 66260.10 of this division, or 2. the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

1.

the owner or operator is a very small quantity generator as defined in section 66260.10 of this division, or a small quantity generator as defined in section 66260.10 of this division, or

2.

the owner or operator is not subject to regulation in 40 CFR part 264 pursuant to an exemption in 40 CFR section 264.1, but the owner or operator is subject to the standards of this article.

(k)

A generator or owner or operator authorized pursuant to Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, or Conditional Exemption pursuant to HSC 25201.5, operating a non-RCRA underground tank system or an underground tank system otherwise exempt from permitting requirements pursuant to the federal act, shall comply with the applicable standards of Title 23 of the California Code of Regulations relating to underground tank systems.

(l)

Secondary containment for onground or aboveground generator and onsite tier (Permit-by-Rule, Conditional Authorization, and Conditional Exemption), non-RCRA tank systems or tank systems otherwise exempt from permitting requirements pursuant to the federal act, shall consist of any of the devices listed in subsection (d) and satisfy the requirements of (e) of this section or any device or combination of devices as approved by the CUPA, or the Department if there is no CUPA or the

CUPA requests that the Department makes a determination, which would satisfy the following minimum requirements:(1) designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, surface water, or air at any time during the use of the tank system; and (2) capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(1)

designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, surface water, or air at any time during the use of the tank system; and

(2)

capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(m)

Ancillary equipment shall be provided with secondary containment as specified in subsection (f) of this section or an alternative device or devices as approved in writing by the CUPA, or the Department if there is no CUPA or if the CUPA requests that the Department make a determination, which would prevent and/or detect any release of wastes out of the tank system before such wastes could migrate to the soil, ground water, or surface water at any time during the use of the tank system. The following are examples of tank system and ancillary equipment secondary containment alternatives or options that may be proposed for review and approval by the CUPA:(1) traditional containment of entire system within a bermed containment area with visual and/or electronic leak detection monitoring; (2) troughs or pipe runs with impermeable liners that incorporate the following:(A) visual monitoring during hours of operation or; (B) continuous electronic leak

detection monitoring for releases; or (C) sumps located at low elevations with leak detection monitors. (3) double-walled piping with continuous interstitial monitoring or monitoring intervals located at low elevation points along pipeline; (4) Double-walled piping with translucent or transparent sections located at low points or low endpoints so that visual monitoring is possible.

(1)

traditional containment of entire system within a bermed containment area with visual and/or electronic leak detection monitoring;

(2)

troughs or pipe runs with impermeable liners that incorporate the following:(A) visual monitoring during hours of operation or; (B) continuous electronic leak detection monitoring for releases; or (C) sumps located at low elevations with leak detection monitors.

(A)

visual monitoring during hours of operation or;

(B)

continuous electronic leak detection monitoring for releases; or

(C)

sumps located at low elevations with leak detection monitors.

(3)

double-walled piping with continuous interstitial monitoring or monitoring intervals located at low elevation points along pipeline;

(4)

Double-walled piping with translucent or transparent sections located at low points or low endpoints so that visual monitoring is possible.

(n)

A generator or owner or operator authorized pursuant to Permit-by-Rule pursuant to Chapter 45 of this division, Conditional Authorization pursuant to HSC 25200.3, and Conditional Exemption pursuant to HSC 25201.5, operating an onground or aboveground, non-RCRA tank system or a tank system otherwise exempt from permitting requirements pursuant to the federal act, that has 18 months or less remaining in service prior to planned closure of the tank system, may propose alternatives to retrofitting the tank system with secondary containment. Local agency requirements must be considered when proposing alternatives to secondary containment. The owner or operator shall provide the following information in writing to the CUPA, or the Department if there is no CUPA or the CUPA requests that the Department make a determination, so that a determination can be made whether the proposed alternative would be acceptable:(1) name, address, and EPA identification number of the facility; (2) date of planned closure; (3) description of tank system to be closed and form of current authorization for the tank system; (4) description of how the proposed alternative would provide adequate environmental protection such that the design, installation, and operation will be capable of detecting a release and preventing any migration of wastes or accumulated liquid out of the system to the soil, ground water, surface water, or air at any time during the remaining life of the tank system.

(1)

name, address, and EPA identification number of the facility;

(2)

date of planned closure;

(3)

description of tank system to be closed and form of current authorization for the tank

system;

(4)

description of how the proposed alternative would provide adequate environmental protection such that the design, installation, and operation will be capable of detecting a release and preventing any migration of wastes or accumulated liquid out of the system to the soil, ground water, surface water, or air at any time during the remaining life of the tank system.