

**Scenario Worksheet**

**Practice and Scenario Description:**

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	5
Scenario Name	Above Ground Steel/Concrete < 25K ft <sup>3</sup> storage

**Scenario Description**

An above ground circular glass lined steel or concrete structure constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This scenario has a design storage volume of less than 25,000 ft<sup>3</sup>. **Payment made on struck full volume.** This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation.

Potential Associated Practices: Fence (382), Critical Area Planting (342), Nutrient Management (590), Waste Transfer (634), Heavy Use Area Protection (561), Solid/Liquid Waste Separation Facility (632), Waste Treatment (629), and Pumping Plant (533).

**Before Practice Situation**

Operator presently has a confined animal feeding operation without a waste management system adequate to handle the waste stream leaving the animal production facilities. Manure and other agricultural waste by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwater resources.

**After Practice Situation**

An above ground storage structure provides an environmentally safe facility for storing manure and other agricultural waste by-products. This facility provides the landowner a means of storing waste until it can be utilized in a proper manner in accordance with a nutrient management plan. Typical design size : Storage Volume struck full (Includes freeboard),14,333; based on 31' X 19' glass lined steel tank

Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	14,333

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$28,226.17	\$1.97
Equipment/Installation	\$10,687.04	\$0.75
Labor	\$0.00	\$0.00
Mobilization	\$650.96	\$0.05
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$39,564.17	\$2.76



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	6
Scenario Name	Above Ground Steel/Concrete 25-100K ft <sup>3</sup> storage

**Scenario Description**

An above ground circular glass lined steel or concrete structure constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This scenario has a design storage volume of between 25,000 and 100,000 ft<sup>3</sup>. Payment made on struck full volume. This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation.

Potential Associated Practices: Fence (382), Critical Area Planting (342), Nutrient Management (590), Waste Transfer (634), Heavy Use Area Protection (561), Solid/Liquid Waste Separation Facility (632), Waste Treatment (629), and Pumping Plant (533).

**Before Practice Situation**

Operator presently has a confined animal feeding operation without a waste management system adequate to handle the waste stream leaving the animal production facilities. Manure and other agricultural waste by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwater resources.

**After Practice Situation**

An above ground storage structure provides an environmentally safe facility for storing manure and other agricultural waste by-products. This facility provides the landowner a means of storing waste until it can be utilized in a proper manner in accordance with a nutrient management plan.

Typical design size : design storage volume 71,160 ft<sup>3</sup> plus 6" for freeboard on 70' X 19' glass lined steel tank. Struck full= 73,084 ft<sup>3</sup>

Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	73,084

Cost Summary:		
Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$127,693.19	\$1.75
Equipment/Installation	\$31,105.11	\$0.43
Labor	\$0.00	\$0.00
Mobilization	\$650.96	\$0.01
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
<b>Total</b>	<b>\$159,449.26</b>	<b>\$2.18</b>



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	7
Scenario Name	Above Ground Steel/Concrete >100-200K ft <sup>3</sup> storage

Scenario Description	<p>An above ground circular glass lined steel or concrete structure constructed to store wastes such as manure, wastewater, and contaminated runoff as part of an agricultural waste management system. This scenario has a design storage volume of between 100,000 and 200,000 ft<sup>3</sup>. Payment is based on struck full volume. This practice will address soil and water quality by reducing the pollution potential for surface water and groundwater quality degradation.</p> <p>Potential Associated Practices: Fence (382), Critical Area Planting (342), Nutrient Management (590), Waste Transfer (634), Heavy Use Area Protection (561), Solid/Liquid Waste Separation Facility (632), Waste Treatment (629), and Pumping Plant (533).</p>
Before Practice Situation	Operator presently has a confined animal feeding operation without a waste management system adequate to handle the waste stream leaving the animal production facilities. Manure and other agricultural waste by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwater resources.
After Practice Situation	An above ground storage structure provides an environmentally safe facility for storing manure and other agricultural waste by-products. This facility provides the landowner a means of storing waste until it can be utilized in a proper manner in accordance with a nutrient management plan. Typical design size : design storage volume 182,172 ft <sup>3</sup> plus 0.5' freeboard; based on 112' X 19' glass lined steel tank: struck full volume = 187,094 ft <sup>3</sup>

Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	187,094

Cost Summary:		
Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$314,391.13	\$1.68
Equipment/Installation	\$60,252.69	\$0.32
Labor	\$0.00	\$0.00
Mobilization	\$650.96	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
<b>Total</b>	<b>\$375,294.78</b>	<b>\$2.01</b>



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	12
Scenario Name	Dry Stack,<2K Conc Fl walls

Scenario Description	<p>This scenario consists of a small dry stack facility with reinforced concrete floor and concrete walls. This scenario is intended for situations where consistency of manure or geographical conditions prohibit earthen floors. Typical size 40'x40' with a 4' wall on three sides. The purpose of this practice is to properly store manure and other agricultural by-products until they can be hauled away from the site for proper disposal or utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water</p> <p>Potential Associated practices: 342-Critical Area Planting, 362-Diversion, 561-Heavy Use Area Protection, 367-Roofs and Covers, 558-Roof Runoff Structure, 317-Composting Facility, 633-Waste Recycling, 634-Waste Transfer, 635-Vegetated Treatment Area</p>
Before Practice Situation	<p>Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.</p>
After Practice Situation	<p>The typical is 1,600 SqFt (40' x 40'). The facility floor is 5" reinforced concrete with 4'-6" high reinforced concrete walls. Walls allow for greater storage volume. Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan.</p>
Scenario Feature Measure	Square foot floor area
Scenario Unit	Square Foot
Scenario Typical Size	1600

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$808.50	\$0.51
Equipment/Installation	\$27,608.78	\$17.26
Labor	\$727.92	\$0.45
Mobilization	\$571.80	\$0.36
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
<b>Total</b>	<b>\$29,717.00</b>	<b>\$18.57</b>



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	13
Scenario Name	Dry Stack, 2K+ Concr Fl wall

**Scenario Description**

This scenario consists of a larger dry stack facility with reinforced concrete floor and concrete walls. This scenario is intended for situations where consistency of manure or geographical conditions prohibit earthen floors. The purpose of this practice is to properly store manure and other agricultural by-products until they can be hauled away from the site for proper disposal or utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Potential Associated practices: 342-Critical Area Planting, 362-Diversion, 561-Heavy Use Area Protection, 367-Roofs and Covers, 558-Roof Runoff Structure, 317-Composting Facility, 633-Waste Recycling, 634-Waste Transfer, 635-Vegetated Treatment Area

**Before Practice Situation**

Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.

**After Practice Situation**

The typical is 6,000 SqFt (60' x 100'). The facility floor is 5" reinforced concrete with 4'-6" high reinforced concrete walls. Walls allow for greater storage volume. Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan.

Scenario Feature Measure	Square Foot Floor Area
Scenario Unit	Square Foot
Scenario Typical Size	6000

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$3,137.12	\$0.52
Equipment/Installation	\$88,944.57	\$14.82
Labor	\$425.84	\$0.07
Mobilization	\$1,069.52	\$0.18
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$93,577.05	\$15.60



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	15
Scenario Name	Dry Stack, concrete floor, wood wall

**Scenario Description**

This scenario consists of a dry stack facility with reinforced concrete Floor with pressure treated wood walls. This scenario is intended for situations where consistency of manure or geographical conditions prohibit earthen floors. The purpose of this practice is to temporarily, properly store manure and other agricultural by-products until they can be hauled away from the site for proper disposal or utilization on land at agronomical rates. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Potential Associated practices: 342-Critical Area Planting, 362-Diversion, 561-Heavy Use Area Protection, 367-Roofs and Covers, 558-Roof Runoff Structure, 317-Composting Facility, 633-Waste Recycling, 634-Waste Transfer, 635-Vegetated Treatment Area

**Before Practice Situation**

Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.

**After Practice Situation**

The typical is 4,000 SqFt (40' x 100'). The facility floor is 5" reinforced concrete with 5' pressure treated wood (2" x 8" boards) walls, 4' x 6" x 8' posts set 4' c-c with 6" concrete curbing. Walls allow for greater storage volume. Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan.

Scenario Feature Measure	Square Foot Floor Area
Scenario Unit	Square Foot
Scenario Typical Size	4000

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$3,867.46	\$0.97
Equipment/Installation	\$37,121.96	\$9.28
Labor	\$2,051.10	\$0.51
Mobilization	\$1,069.52	\$0.27
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$44,110.04	\$11.03



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	16
Scenario Name	Conc Tank, buried <5K

**Scenario Description**

This scenario consists of installing a small concrete tank with a design storage volume of less than 5,000 CF that is totally or partially buried and has solid lid with several openings for direct loading from heavyuse area, gutter cleaner or gravity pipe. Manure is held for 3 to 14 day on smaller operations or transferred to larger storage facility or direct land applied. Payment volume based on struck full. Design volume does not include freeboard. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Potential Associated Practices: Pond Sealing or Lining, Bentonite Sealant (521C), Pond Sealing or Lining, Compacted Clay Treatment (521D), Pond Sealing or Lining, Flexible Membrane (521A), Pond Sealing or Lining, Soil Dispersant (521B), Fence (382), Critical Area Planting (342), Nutrient Management (590), Access Road (560), Waste Transfer (634), Heavy Use Area Protection (561), Roof and Covers (367), Solid/Liquid Waste Separation Facility (632), Diversion (362), Subsurface Drain (606), Pumping Plant (533),and Underground Outlet (620).

**Before Practice Situation**

Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.

**After Practice Situation**

Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan. Tank typically 8' deep x 12' wide x 40' long, with a design storage volume of 3,600 cubic feet plus 6" freeboard. Sizing based on manure, other wastes, rainfall, lot runoff, etc. Volume does not include 6" of freeboard. Tanks associated with open lots sized to handle design storm in tank or in combination with lot as per state regulations. Struck full volume = 3,840 CF

Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	3840

Cost Summary:		
Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$872.00	\$0.23
Equipment/Installation	\$24,033.01	\$6.26
Labor	\$1,218.48	\$0.32
Mobilization	\$1,935.20	\$0.50
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$28,058.69	\$7.31





**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	17
Scenario Name	

**Scenario Description**

This scenario consists of installing a concrete tank that has a design storage volume from 5,000 to 14,999 CF that is totally or partially buried and has an open top. The tank can also be under an animal facility with the top cover of either slats or solid concrete lid/floor. Design volume does not include freeboard.

Potential Associated Practices: Pond Sealing or Lining, Bentonite Sealant (521C), Pond Sealing or Lining, Compacted Clay Treatment (521D), Pond Sealing or Lining, Flexible Membrane (521A), Pond Sealing or Lining, Soil Dispersant (521B), Fence (382), Critical Area Planting (342), Nutrient Management (590), Access Road (560), Waste Transfer (634), Heavy Use Area Protection (561), Roof and Covers (367), Solid/Liquid Waste Separation Facility (632), Diversion (362), Subsurface Drain (606), and Underground Outlet (620).

**Before Practice Situation**

Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.

**After Practice Situation**

Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan. Tank typically 8' deep, with a bottom area of 1256 SF, and a design storage volume of 9,420 cubic feet plus 6" freeboard. Sizing based on manure, other wastes, rainfall, lot runoff, etc. as appropriate. Volume does not include 6" of freeboard. Struck full volume = 10,048

Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	10,048

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,198.90	\$0.12
Equipment/Installation	\$28,003.36	\$2.79
Labor	\$3,808.16	\$0.38
Mobilization	\$2,190.36	\$0.22
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
<b>Total</b>	<b>\$35,200.78</b>	<b>\$3.50</b>



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	18
Scenario Name	

Scenario Description	<p>This scenario consists of installing a concrete tank that has a design storage volume from 15,000 to 24,999 CF. The tank is totally or partially buried and has an open top. It can be under an animal facility with the top cover being slats or concrete lid/floor. The design volume does not include freeboard. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.</p> <p>Potential Associated Practices: Pond Sealing or Lining, Bentonite Sealant (521C), Pond Sealing or Lining, Compacted Clay Treatment (521D), Pond Sealing or Lining, Flexible Membrane (521A), Pond Sealing or Lining, Soil Dispersant (521B), Fence (382), Critical Area Planting (342), Nutrient Management (590), Access Road (560), Waste Transfer (634), Heavy Use Area Protection (561), Roof and Covers (367), Solid/Liquid Waste Separation Facility (632), Diversion (362), Subsurface Drain (606), Pumping Plant (533) and Underground Outlet (620).</p>
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Before Practice Situation	<p>Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.</p>
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After Practice Situation	<p>Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan. Tank is typically 8 ft deep, with a bottom area of 2,667 sq.ft., and a design storage volume of 20,000 cubic feet plus 6" freeboard. Size based on design volume of manure, other wastes, rainfall, lot runoff, etc as appropriate and does not include the 6" of freeboard. Struck Full Volume = 21,336 cf</p>
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Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	21,336

Cost Summary:		
Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$4,501.29	\$0.21
Equipment/Installation	\$46,146.52	\$2.16
Labor	\$5,528.00	\$0.26
Mobilization	\$2,665.32	\$0.12
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$58,841.13	\$2.76



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	19
Scenario Name	Conc Tank, Buried 25K<50K

**Scenario Description**

This scenario consists of installing a concrete tank that has a design storage volume from 25,000 to 49,999 CF. Tank is totally or partially buried and has an open top. Tank can be under a animal facility with the top cover being slats or concrete lid/floor. The design volume does not include freeboard. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.

Potential Associated Practices: Pond Sealing or Lining, Bentonite Sealant (521C), Pond Sealing or Lining, Compacted Clay Treatment (521D), Pond Sealing or Lining, Flexible Membrane (521A), Pond Sealing or Lining, Soil Dispersant (521B), Fence (382), Critical Area Planting (342), Nutrient Management (590), Access Road (560), Waste Transfer (634), Heavy Use Area Protection (561), Roof and Covers (367), Solid/Liquid Waste Separation Facility (632), Diversion (362), Subsurface Drain (606), and Underground Outlet (620).

**Before Practice Situation**

Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.

**After Practice Situation**

Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan. Tank installed is 10' deep, with a bottom area of 2,947 SF, and a design storage volume of 28,000 cubic feet plus 6" freeboard. Size based on manure, other wastes, rainfall, lot runoff, etc as appropriate. Calculated volume for scenario does not include the 6" of freeboard. Struck Full Volume = 29,740 CF used for this scenario.

Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	29,740

Cost Summary:		
Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$4,585.37	\$0.15
Equipment/Installation	\$57,305.00	\$1.93
Labor	\$5,766.00	\$0.19
Mobilization	\$2,823.64	\$0.09
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
<b>Total</b>	<b>\$70,480.01</b>	<b>\$2.37</b>



**Scenario Worksheet**

<b>Practice and Scenario Description:</b>	
<b>Information Type</b>	<b>Data</b>
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	20
Scenario Name	

Scenario Description	<p>This scenario consists of installing a concrete tank that has a design storage volume from 50,000 to 74,999 CF. Tank is totally or partially buried and has an open top, however it can be under a animal facility with the top cover with slats or concrete lid/floor. The design volume does not include freeboard. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.</p> <p>Potential Associated Practices: Pond Sealing or Lining, Bentonite Sealant (521C), Pond Sealing or Lining, Compacted Clay Treatment (521D), Pond Sealing or Lining, Flexible Membrane (521A), Pond Sealing or Lining, Soil Dispersant (521B), Fence (382), Critical Area Planting (342), Nutrient Management (590), Access Road (560), Waste Transfer (634), Heavy Use Area Protection (561), Roof and Covers (367), Solid/Liquid Waste Separation Facility (632), Diversion (362), Subsurface Drain (606), and Underground Outlet (620).</p>
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Before Practice Situation	Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.
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After Practice Situation	Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan. Tank typically 12' deep, with a bottom area of 5,391 SF, and a design storage volume of 62,000 cubic feet plus 6" freeboard. Sizing based on manure, other wastes, rainfall, lot runoff, etc. as appropriate. Volume does not include 6" of freeboard. Struck Full Volume = 64,692 cf
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Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	64,692

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$3,841.91	\$0.06
Equipment/Installation	\$101,995.20	\$1.58
Labor	\$12,535.40	\$0.19
Mobilization	\$2,348.68	\$0.04
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$120,721.19	\$1.87



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	21
Scenario Name	

Scenario Description	<p>This scenario consists of installing a concrete tank that has a design storage volume from 75,000 to 109,999 CF. Tank is totally or partially buried and has an open top. Tank can also be under an animal facility with the top cover using slats or concrete lid/floor. The design volume does not include freeboard. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.</p> <p>Potential Associated Practices: Pond Sealing or Lining, Bentonite Sealant (521C), Pond Sealing or Lining, Compacted Clay Treatment (521D), Pond Sealing or Lining, Flexible Membrane (521A), Pond Sealing or Lining, Soil Dispersant (521B), Fence (382), Critical Area Planting (342), Nutrient Management (590), Access Road (560), Waste Transfer (634), Heavy Use Area Protection (561), Roof and Covers (367), Solid/Liquid Waste Separation Facility (632), Diversion (362), Pipeline (516), Subsurface Drain (606), and Underground Outlet (620).</p>
Before Practice Situation	<p>Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.</p>
After Practice Situation	<p>Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location, until such time that they are disposed of or utilized in a proper manner, typically in accordance with a nutrient management plan. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.</p> <p>Tank typically 12' deep, with a bottom area of 8,044 SF, and a storage capacity of 92,500 cubic feet plus 6" freeboard. Sizing based on manure, other wastes, rainfall, lot runoff, etc. as appropriate. Volume does not include 6" of freeboard. Struck Full Volume = 95,528 CF</p>

Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	95,528

Cost Summary:		
Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$5,354.80	\$0.06
Equipment/Installation	\$131,161.88	\$1.37
Labor	\$11,801.68	\$0.12
Mobilization	\$2,665.32	\$0.03
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$150,983.68	\$1.58



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	313 - Waste Storage Facility
Scenario ID	22
Scenario Name	Conc Tank, Buried 110K or >
Scenario Description	<p>This scenario consists of installing a concrete tank that has a design storage volume of 110, 000 or more CF. Tank is totally or partially buried and has an open top. Tank can also be under a animal facility with the top cover using slats or concrete lid/floor. The design volume does not include freeboard. This practice will address soil and water quality by reducing the pollution potential to soil, surface water and ground water.</p> <p>Potential Associated Practices: Pond Sealing or Lining, Bentonite Sealant (521C), Pond Sealing or Lining, Compacted Clay Treatment (521D), Pond Sealing or Lining, Flexible Membrane (521A), Pond Sealing or Lining, Soil Dispersant (521B), Fence (382), Critical Area Planting (342), Nutrient Management (590), Access Road (560), Waste Transfer (634), Heavy Use Area Protection (561), Roof and Covers (367), Solid/Liquid Waste Separation Facility (632), Diversion (362), Pipeline (516), Subsurface Drain (606), and Underground Outlet (620).</p>
Before Practice Situation	Manure and other agricultural by-products are not being utilized or controlled in an environmentally safe manner. The wastes are either accumulating at the source, or other location, or are being transported but not properly utilized or disposed of. This situation poses an environmental threat of excessive nutrients, organics, and pathogens being transported into surface and groundwaters, in addition to the use of excessive amounts of fertilizers.
After Practice Situation	Manure and other agricultural by-products are being controlled, by the collection at the source, and stored temporarily, at an environmentally suitable location.
Scenario Feature Measure	Struck Full Volume
Scenario Unit	Cubic Foot
Scenario Typical Size	158,256

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$6,880.10	\$0.04
Equipment/Installation	\$184,819.44	\$1.17
Labor	\$10,590.00	\$0.07
Mobilization	\$3,298.60	\$0.02
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
<b>Total</b>	<b>\$205,588.14</b>	<b>\$1.30</b>

