

**Scenario Worksheet**

**Practice and Scenario Description:**

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Engineering General
Practice Code/Name	521A - Pond Sealing or Lining, Flexible Membrane
Scenario ID	1
Scenario Name	Flexible Liner with leak detection line
Scenario Description	Installation of a flexible geosynthetic membrane liner to prevent seepage from a waste storage impoundment structures. Practice implementation includes installatoin of a leak detection line, geotextile to cushion liner from subgrade damage, and liner with vents anchored around the top of a earthen pond. Associated practices include Pond (378), Waste Storage Facility(313), Heavy Use Area Protection (561), Critical Area Planting (342), Access Road (560) Waste Transfer (634) Underground Ground Outlet (620) and Fence (382)
Before Practice Situation	In-place soils at site exhibit seepage rates in excess of acceptable limits.
After Practice Situation	A 60 mil HDPE flexible liner is installed after a leak detection line is placed and the entire area covered in geotextile. Measurement based on neatline installed SF of material to inside top of slope. The result is enviromental protection is provided by avoiding seepage losses from the waste storage impoundments.
Scenario Feature Measure	Surface area of Liner Material (To Inside top of slope)
Scenario Unit	Square Foot
Scenario Typical Size	21700

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$17,839.35	\$0.82
Equipment/Installation	\$7,982.36	\$0.37
Labor	\$7,678.72	\$0.35
Mobilization	\$857.70	\$0.04
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$34,358.13	\$1.58



**Scenario Worksheet**

Practice and Scenario Description:	
Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Engineering General
Practice Code/Name	521A - Pond Sealing or Lining, Flexible Membrane
Scenario ID	2
Scenario Name	Flexible liner used for Agrichemical Mixing Facility
Scenario Description	Installation of a flexible geosynthetic membrane liner to prevent seepage from a Agricultural Chemical Facility. Practice implementation includes installation of geotextile to cushion liner from subgrade damage, and liner with vents anchored around the top of a earthen pond. Associated practices include Pond (378), Heavy Use Area Protection (561), Critical Area Planting (342), Access Road (560), Underground Ground Outlet (620), and Fence (382)
Before Practice Situation	In-place soils at site exhibit seepage rates in excess of acceptable limits.
After Practice Situation	A flexible liner suitable for the chemicals or pesticides is installed after the entire area covered with geotextile. Measurement based on neatline installed SF of material to inside top of slope. The result is that environmental protection is provided by avoiding seepage losses from spillage within a facility designed to contain spillage.
Scenario Feature Measure	SF of liner to inside top
Scenario Unit	Square Foot
Scenario Typical Size	2500

**Cost Summary:**

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$660.96	\$0.26
Equipment/Installation	\$1,038.82	\$0.42
Labor	\$2,565.14	\$1.03
Mobilization	\$857.70	\$0.34
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$5,122.62	\$2.05

