# Table 2c ‐ Criteria for runoff ponds with a water depth of 2 feet or les and a storage period less than 90 days annually Very High High Moderate Slight

## Risk

Less than 500' upgradient from public

drinking water supply well; Doesn't meet Very High Risk criteria;

**OR** <200' upgradient from a domestic

Doesn't meet High Risk criteria; Doesn't meet Moderate Risk criteria;

well or Class 1 designated use surface water,

**OR** 1st ground water is a Class IB

**AND** In a recharge area for Sole Source

aquifers

**OR** 500'‐1000' up gradient from a public

**AND** 600' ‐ 1000' upgradient from an

domestic well or Class I surface water;

**AND** >1000' upgradient from an

domestic well or Class I surface water;

aquifer

drinking water supply well, **OR** < 600' up gradient from a non‐

**OR** > 600' up gradient from a non‐

**Or** 200'‐600' upgradient from an domestic water supply well or Class 1 designated use surface water,

Vulnerability

**OR** 1st ground water is a Class IA or Class

domestic water supply well or Class 2‐5 designated use surface water,

domestic water supply well or Class 2‐5 designated use surface water,

II aquifer **OR** 1st ground water is a class III aquifer **OR** 1st ground water is a class IV aquifer

# Very High Liner Requirements Liner Requirements Liner Requirements Liner Requirements

Large Voids (e.g. karst limestones, ~ Strongly consider relocation to another

~specific discharge less than

~specific discharge less than

~specific discharge less than

### lava tubes improperly abandoned

site

1 X 10‐6 cm3/cm3/sec

1 X 10‐5 cm3/cm3/sec

1 X 10‐5 cm3/cm3/sec

### well);

**Or** Highest anticipated ground water elevations within 2' of pond bottom

~ synthetic liner with specific discharge less than

1 X 10‐7 cm3/cm3/sec

~ No manure sealing credit ~ No manure sealing credit ~ No manure sealing credit

~ Design includes sampling and testing of

earthen liner or in‐place material including classification, standard Proctor compaction, in‐place density, and sample permeability by a licensed testing firm

~Published permeability data and

construction method specifications may be used.

~ Published permeability data and

construction method specifications may be used.

~ Published permeability data and

construction method specifications may be used.

# High Liner Requirements Liner Requirements Liner Requirements Liner Requirements

Doesn't meet Very High Vulnerability

criteria; ~specific discharge less than 1 X 10‐6 cm3/cm3/sec

~specific discharge less than 1 X 10‐6 cm3/cm3/sec

~specific discharge less than 1 X 10‐5 cm3/cm3/sec

~specific discharge less than 1 X 10‐5 cm3/cm3/sec

**AND** Bedrock (assumed fractured

within 2' of pond bottom; ~ No manure sealing credit ~ No manure sealing credit ~ No manure sealing credit ~ No manure sealing credit

**OR** Coarse soils/parent material (Permeability Group I soils as defined

Published permeability data and

Published permeability data and

~ Published permeability data and

~ Published permeability data and

in AWMFH, always including GP, GW, construction method specifications may

construction method specifications may

construction method specifications may

construction method specifications may

SP, SW);

**OR** Highest anticipated groundwater Elevation is between 2' ‐15' below pond bottom;

be used.

be used.

be used.

be used.

# Moderate Liner Requirements Liner Requirements Liner Requirements Liner Requirements

Doesn't meet High Vulnerability

criteria; ~specific discharge less than

**AND** Medium soils/parent material (Permeability Group II soils as defined in AWMFH, usually including

1 X 10‐5 cm3/cm3/sec ~ No Liner required ~ No Liner required ~ No Liner required

CL‐ML, GM, SM, ML); ~ No manure sealing credit

**OR** Flocculated or blocky clays

(typically associated with high Ca); ~ Published permeability data and

construction method specifications may

**OR** Highest anticipated groundwater

Elevation is between 15' ‐50' below pond bottom;

be used.

# Low Liner Requirements Liner Requirements Liner Requirements Liner Requirements

Doesn't meet Moderate Vulnerability

criteria; ~specific discharge less than

1 X 10‐5 cm3/cm3/sec ~ No Liner required ~ No Liner required ~ No Liner required

**AND** Fine soils/parent material

(Permeability Group III and IV soils as defined in AWMFH, usually including GC, SC, MH, CL, CH);

**OR** Highest anticipated groundwater Elevation is > 50' below pond bottom;

### ~ No manure sealing credit

~ Published permeability data and construction method specifications may be used.