

Vermont NRCS Worksheet #4
Assessment of Groundwater Concerns Associated With
On-farm Petroleum Product Storage

Landowner/Producer's Name:	<input type="text"/>	Farm, Tract and Field No.	<input type="text"/>
Farm Name:	<input type="text"/>	Evaluator's Name:	<input type="text"/>
Site Location:	<input type="text"/>	Date of Evaluation:	<input type="text"/>

Site(s) Sketch

This worksheet is adapted from the Vermont Farm*A*Syst worksheet #4.

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No tract with an underground storage tank (UST) (unless it's a double-walled tank, single walled with cathodic protection, fiberglass, or is registered with the State of VT UST program) or a UST being used or re-used above ground shall meet Vermont NRCS Resource Management System Quality Criteria for conservation planning. *

Ranking Score:	4	3	2	1	Score
LOCATION					
Position of tank in relation to drinking water well or spring	Tank down slope more than 100 feet from well, etc. in medium- or fine-textured soils (silt loam, loam, clay loams, silty clay) with low permeability.	Tank at grade or upslope more than 100 feet from well, etc. in medium- or fine-textured soils (silt loam, loam, clay loams, silty clay) with low permeability.	Tank down slope more than 100 feet from well, etc. in coarse-textured soil (sands, sandy loam) with high permeability.	Tank at grade or upslope less than 100 feet from private well, etc. or 200 feet from public well in coarse-textured soil (sand, sandy loams) with high permeability.	
Location relating to physical damage of the tank	Tank located away from all traffic and buildings and is out of reach of any ice falling off roofs.	Tank located away from all traffic, but is next to building and has roof to prevent ice damage.	Tank located away from most traffic, but is next to building, without roof, and susceptible to ice damage from roof.	Tank located next to driveway with frequent traffic (milk/feed truck) or is susceptible to ice damage from roof.	

*USTs are not designed to bear the weight of fuel without the additional structural support provided by the soil surrounding the tank.

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Ranking Score:	4	3	2	1	Score
Location relating to flood damage	Tank(s) out of the 100 year floodplain	Tank(s) in the 100 year floodplain, but are anchored to prevent floating. Have structures to prevent impact damage.	Tank(s) within the 100 year floodplain, but are anchored to prevent floating. No impact protection.	Tank(s) within the 100 year floodplain, not anchored to prevent flotation and no impact protection	
Design and Installation					
Tank Condition: Paint/Shading	Tank is painted silver or white, is not in contact with the ground, and has a roof for shade.	Tank is painted silver or white, is not in contact with the ground and has no roof or tank; is painted a dark color, not in contact with ground and has a roof for shade	Tank is not painted, or painted a dark color, does not have a roof, but is not in contact with ground.	Tank (any color, painted/unpainted) in contact with ground.	
Secondary containment	Tank placed within concrete, metal or synthetic containment structure able to hold 125% of tank capacity and has a roof that blocks most precipitation.	Tank placed within concrete, metal or synthetic containment structure able to hold 125% of tank capacity with no roof.	Tank placed on pad or within dike made of low permeability soils, able to hold 125% of tank capacity	No secondary containment.	
Venting/relief valve	Tank has a screened vent with a whistle and a pressure relief valve.	Tank has a screened vent with a whistle, but no pressure relief valve.	Tank has a vent without screen or whistle, but no pressure relief valve.	Tank without vent or pressure relief valve.	

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Instructions:

Total the rankings for the categories you completed and divide by the number of categories you ranked:

Rankings TOTAL
from all rows ranked divided by Number of risk categories
(rows) ranked equals *

* Carry the result out to one decimal
place.

Example: 16 divided by 6 = 2.66
Use 2.7

RESULTS:

3.6 - 4.0 = low risk

2.6 - 3.5 = low to moderate risk

1.6 - 2.5 = moderate to high risk

1.0 - 1.5 = high risk

A ranking of 2.5 or greater meets the Vermont NRCS Resource Management System Quality Criteria.

Any individual category (row) ranked with a score of 1 or 2 should be further assessed for risk related to that category.

OTHER:

Visual assessment should be made regarding hazards to surface water and documented in field notes and the VT RMS Quality Criteria checklist (Quality Criteria Assessment For Conservation Planning).

Conservation planners should note the proximity of the petroleum storage to important structures and provide recommendations regarding fire safety when appropriate. Petroleum storage should be located a minimum of 50 feet from any structures where fire would present a significant threat or risk to humans, animals or property.

NOTES: