

CONSERVATION PRACTICE PHYSICAL EFFECTS WORKSHEET

STATE	Texas	FIELD OFFICE	Any	DATE	11/3/2008
PRACTICE: Agrichemical Handling Facility 309		Baseline Setting:			
		Appropriate Land Use(s): Headquarters			
RESOURCES, CONSIDERATIONS AND CONCERNS	PHYSICAL EFFECTS	RATIONALE			
SOIL - EROSION					
Sheet and Rill	Not Applicable	Not applicable			
Wind	Not Applicable	Not applicable			
Ephemeral Gully	Not Applicable	Not applicable			
Classic Gully	Not Applicable	Not applicable			
Streambank	Not Applicable	Not applicable			
Shoreline	Not Applicable	Not applicable			
Irrigation Induced	Not Applicable	Not applicable			
Mass Movement	Not Applicable	Not applicable			
Road, Roadsides, and Construction Sites	Not Applicable	Not applicable			
SOIL – CONDITION					
Organic Matter Depletion	Not Applicable	Not applicable			
Rangeland Site Stability	Not Applicable	Not applicable			
Compaction	Not Applicable	Not applicable			
Subsidence	Not Applicable	Not applicable			
Contaminants:					
• Salts and other Chemicals	Not Applicable	Not applicable			
• Animal Waste and other Organics - N	Not Applicable	Not applicable			
• Animal Waste and other Organics - P	Not Applicable	Not applicable			
• Animal Waste and other Organics - K	Not Applicable	Not applicable			
• Commercial Fertilizer - N	Substantial Improvement	Provides for spill containment of fertilizer mixing operation.			
• Commercial Fertilizer – P	Substantial Improvement	Provides for spill containment of fertilizer mixing operation.			
• Commercial Fertilizer – K	Substantial Improvement	Provides for spill containment of fertilizer mixing operation.			
• Residual Pesticides	Substantial Improvement	Provides for spill containment of pesticide mixing operation.			
Damage from Sediment Deposition	Not Applicable	Not Applicable			
WATER – QUANTITY					
Rangeland Hydrologic Cycle	Not Applicable	Not Applicable			
Excessive Seepage	Not Applicable	Not Applicable			
Excessive Runoff, Flooding, or Ponding	Not Applicable	Not Applicable			
Excessive Subsurface Water	Not Applicable	Not Applicable			
Drifted Snow	Not Applicable	Not Applicable			
Inadequate Outlets	Not Applicable	Not Applicable			
Inefficient Water use on Irrigated Land	Not Applicable	Not Applicable			
Inefficient Water use on Non-Irrigated Land	Not Applicable	Not Applicable			
Reduced Capacity of Conveyances by	Not Applicable	Not Applicable			

Sediment Deposition		
Reduced Storage of Water Bodies by Sediment Accumulation	Not Applicable	Not Applicable
Aquifer Overdraft	Not Applicable	Not Applicable
Insufficient Flows in Water Courses	Not Applicable	Not Applicable
WATER – QUALITY		
In Groundwater:		
• Harmful Levels of Pesticides	Substantial Improvement	Provides for spill containment of pesticide mixing operation
• Excessive Nutrients and Organics	Substantial Improvement	Provides for spill containment of fertilizer mixing operation
• Excessive Salinity	Not Applicable	Not applicable.
• Harmful Levels of Heavy Metals	Not Applicable	Not applicable.
• Harmful Levels of Pathogens	Not Applicable	Not applicable.
• Harmful Levels of Petroleum	Not Applicable	Not applicable.
In Surface Water:		
• Harmful Levels of Pesticides	Substantial Improvement	Provides for spill containment of pesticide mixing operation
• Excessive Nutrients and Organics	Substantial Improvement	Provides for spill containment of fertilizer mixing operation
• Excessive Suspended Sediment and Turbidity	Not Applicable	Not applicable.
• Excessive Salinity	Not Applicable	Not applicable.
• Harmful Levels of Heavy Metals	Not Applicable	Not applicable.
• Harmful Temperatures	Not Applicable	Not applicable.
• Harmful Levels of Pathogens	Not Applicable	Not applicable.
• Harmful Levels of Petroleum	Not Applicable	Not applicable.
AIR – QUALITY		
Particulate Matter less than 10 Micrometers in Diameter (PM 10)	Not Applicable	Not applicable.
Particulate Matter less than 2.5 Micrometers in Diameter (PM 2.5)	Not Applicable	Not applicable.
Excessive Ozone	Not Applicable	Not applicable.
Excessive Greenhouse Gas:		
• CO ₂ (Carbon Dioxide)	Not Applicable	Not applicable.
• N ₂ O (Nitrous Oxide)	Not Applicable	Not applicable.
• CH ₄ (Methane)	Not Applicable	Not applicable.
Ammonia (NH ₃)	Not Applicable	Not applicable.
Chemical Drift	Not Applicable	Not applicable.
Objectionable Odors	Not Applicable	Not applicable.
Reduced Visibility	Not Applicable	Not applicable.
Undesirable Air Movement	Not Applicable	Not applicable.
Adverse Air Temperature	Not Applicable	Not applicable.
PLANTS – SUITABILITY		
Plants not Adapted or Suited	Not Applicable	Not applicable.
PLANTS - CONDITION		
Productivity, Health, and Vigor	Not Applicable	Not applicable.
Threatened or Endangered Plant Species:		
• Plant Species Listed or Proposed for Listing Under the Endangered	Not Applicable	Not applicable.

Species Act		
• Declining Species, Species of Concern	Not Applicable	Not applicable.
Noxious and Invasive Plants	Not Applicable	Not applicable.
Forage Quality and Palatability	Not Applicable	Not applicable.
Wildfire Hazard	Not Applicable	Not applicable.
ANIMALS - FISH AND WILDLIFE		
Inadequate Food	Not Applicable	Not applicable.
Inadequate Cover/Shelter	Not Applicable	Not applicable.
Inadequate Water	Not Applicable	Not applicable.
Inadequate Space	Not Applicable	Not applicable.
Habitat Fragmentation	Not Applicable	Not applicable.
Imbalance Among and Within Populations	Not Applicable	Not applicable.
Threatened and Endangered Fish and Wildlife Species:		
• Fish and Wildlife Species Listed or Proposed for Listing Under the Endangered Species Act	Not Applicable	Not applicable.
• Declining Species, Species of Concern	Not Applicable	Not applicable.
ANIMALS – DOMESTIC		
Inadequate Quantities and Quality of Feed and Forage	Not Applicable	Not applicable.
Inadequate Shelter	Not Applicable	Not applicable.
Inadequate Stock Water	Not Applicable	Not applicable.
Stress and Mortality	Not Applicable	Not applicable.
HUMAN – ECONOMICS		
Land - Change in Land Use	Slight	Potential change from cropland to headquarters.
Land – Land in Production	Slight Decrease	Possible land taken out of production.
Capital – Change in Equipment	Negligible	No change in field equipment, acquire facility equipment.
Capital - Total Investment Cost	Moderate	Purchase facility and equipment.
Capital – Annual Cost	Slight	Low annual cost, long facility lifespan.
Capital – Credit and Farm Program Eligibility	Situational	Facility help meet farm ordinances & regulations.
Labor - Labor	Slight to Moderate Decrease	Slight to moderate decrease due to availability of facility.
Labor – Change in Management Level	Slight Increase	Slight Increase to schedule and manage facility.
Risk - Yield	Not Applicable	Not applicable.
Risk - Flexibility	Slight Increase	Slight increase due to availability of facility.
Risk - Timing	Slight Decrease	Slight decrease as equipemnt is cleaned between operations.
Risk – Cash Flow	Slight Decrease	Slight decrease due to construction needs.
Profitability – Change in Profitability	Slight Increase	Slight increase due to availability of facility.

HUMAN - CULTURAL		
Cultural Resources and/or Historic Properties Present or Suspected to be PRESENT	Slight Increase	Excavated storage may adversely effect historic properties.
HUMAN – ENERGY		
Depletion of Fossil Fuel Resources	Slight to Moderate Increase	May increase tractor travel to facilitate usage of facility.
Underutilization of Non-Fossil Energy Resources	Not Applicable	Not applicable.

Human Considerations Explanation

Considerations	Physical effects indicate:
Land - Change in Land Use	The degree to which implementing the conservation practice is expected to cause a change from one land use to another.
Land - Land in Production	The degree to which implementing the conservation practice is expected to cause an increase or decrease in the amount of land in production.
Capital - Change in Equipment	The degree to which implementing the conservation practice is expected to cause an increase or decrease in the amount of capital equipment required for farm or ranch operations.
Capital - Total Investment Cost	A qualitative measure of the increase in total investment dollars required in order to implement the conservation practice.
Capital - Annual Cost	A qualitative measure of the expected change in annual capital costs required in order to operate and maintain the conservation practice.
Capital - Credit & Farm Program Eligibility	Included to make conservation planners aware of the potential availability of funding for implementing conservation practices.
Labor – Labor	The degree to which implementing the conservation practice is likely to cause an increase or decrease in the total amount of overall farm or ranch labor required for operations.
Labor - Change in Management Level	The degree to which implementing the conservation practice is likely to cause an increase or decrease in the total amount of required active management on a farm or ranch.
Risk – Yield	The degree to which risk, as related to crop or livestock yields, is expected to increase or decrease as a result of implementing the conservation practice.
Risk – Flexibility	The degree to which risk, as related to the flexibility of farm or ranch operations, is expected to increase or decrease as a result of implementing the conservation practice. For example, converting from flood irrigation to a sprinkler system gives a farmer an increase in flexibility of irrigation, which results in a decrease in the level of risk associated with inflexibility of operations.
Risk – Timing	The degree to which risk, as related to the timing of farm or ranch operations, is expected to increase or decrease as a result of implementing the conservation practice.
Risk - Cash Flow	The degree to which risk, as related to cash flow in farm or ranch operations, is expected to increase or decrease as a result of implementing the conservation practice.
Profitability - Change in Profitability	The degree to which farm or ranch profitability is expected to increase or decrease as a result of implementing the conservation practice.
Cultural Resources and/or Historic Properties Present or Suspected to be Present	The degree to which implementation of the conservation practice is expected to increase or decrease the risk of cultural resource disturbance, degradation, or loss.
Depletion of Fossil Fuel Resources	Inefficient use of fossil-originated energy sources (diesel, gasoline, propane, natural gas, coal), lubricants, and other materials.
Underutilization of Non-Fossil Energy Sources	Available and cost-effective alternative energy sources (solar, wind, biofuel, hydroelectric, geothermal) are not being used or are being used inefficiently.