



Natural Resources Conservation Service  
 The Galleries of Syracuse  
 441 S. Salina Street  
 Syracuse, New York 13202-2450

November 4, 2009

**NATIONAL HANDBOOK OF CONSERVATION PRACTICES – NEW YORK**

**NOTICE - 130**

This notice transmits changes in the eFOTG and instructions for filing Conservation Practice Standards. For offices retaining a hardcopy of the National Handbook of Conservation Practices (NHCP) file this notice in numerical order in the front of the NHCP. File the practice standards in alphabetical order.

<u>Standards deleted</u>	No.	DATE	<u>New York Standards added</u>	No.	DATE
Deep Tillage	324	3/2001	DEEP TILLAGE	324	9/2009
Manure Transfer	634	6/2007	WASTE TRANSFER	634	9/2009
			ROAD/TRAIL/LANDING CLOSURE AND TREATMENT	654	9/2009

The New York Conservation Practice Standards Committee, in consultation with partner agencies including the New York State (NYS) - Soil and Water Conservation Committee of the Department of Agriculture and Markets, NYS-Department of Environmental Conservation, Cornell University, and others has developed New York Conservation Practice Standards. These practice standards have been edited for use in New York to meet local natural resources conditions.

Note: The color line in the margin of the Standard shows where a change or changes were made to the Standard.

EDWARD HENRY  
 State Resource Conservationist  
 Distribution: All Office

Attachments



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**DEEP TILLAGE (324)****REMOVED FROM – CONSIDERATIONS**

Reduce or control equipment traffic during periods when soils are prone to compaction and formation of tillage pans. Caution should also be exercised when excessively heavy equipment is used to ensure that soils are not prone to compaction. Loads greater than 6 tons/axle have been found to cause compaction to depths of approximately 16 inches which is below normal depths of tillage and may cause yield reductions for several years.

Reducing contact pressure between the load and the soil may also be helpful to reduce recompaction. Typical bias-ply tires require excessive inflation pressures which can concentrate the loads on the soil surface and cause excessive soil compaction. Radial tires offer superior soil compaction and traction characteristics when properly inflated to the manufacturer's specifications. Other methods that can be used to further spread the load and potentially reduce soil recompaction include using dual tires or tracks beneath tractors, grain wagons, slurry tanks, etc.

Research on numerous crops has shown that tillage conducted excessively deeper than the compacted layer does not promote increased yields, requires excessive amounts of tillage energy, and promotes future compaction from nearby vehicle traffic.

Reduce or control equipment traffic during periods when soils are prone to compaction and formation of tillage pans.

To help reduce compaction, it is desirable to conduct normal tillage operations when soil moisture is less than 50 percent of field capacity (see first page – only difference is depth, tillage is tillage. Cite the literature for using 50). When possible, harvest operations should be avoided when soil moisture is greater than 50 percent of field capacity. Field harvest haul traffic should be limited to end rows or haul roads. Compacted regions between crop rows that are not fractured can assist in supporting vehicle traffic, limiting rutting and soil compaction beneath the row.

**ADDED TO - CONSIDERATION**

Consider the location of existing shallow drainage lines and avoid deep tillage operation in these areas.

When infertile flood overwash is mixed with the pre-flood soil profile, the soil rebuilding process can be enhanced by additions of organic matter, such as manure or cover crops utilized as green manure. Crop rotations, tillage and planting systems, which maintain high levels of crop residues, such as no-till, can also accelerate this process.

Where the flood overwash layer is too thick to effectively mix with the pre-flood soil profile, redistribution of the overwash layer by smoothing or removal may be necessary. Generally, no more than about 6 inches of overwash can be uniformly mixed into the soil profile using commonly available equipment. Specialized equipment may be necessary where greater depths of overwash are to be incorporated.

Where unfavorable soil materials such as high sodium, calcium, gypsum or other undesirable materials, are within anticipated deep tillage depth and would be brought to the surface by deep tillage operations, this practice should not be applied.

Transport of sediment-borne pollutant(s) offsite can be reduced when this practice is used in a conservation management system, by reducing the concentration of pollutants in the surface layer.

Moldboard plows and large tandem disks, when used to bury and mix soil deposits and/or contaminants, have a severely destructive effect on soil physical characteristics. These implements create conditions ideal for soil compaction to occur. Chisels with twisted points have a slightly less destructive impact.

Disruption of the soil surface is not desired and should be minimized where possible through proper selection of shanks. Excessive disturbance of the soil surface can cover plant residues which should be maintained on the soil surface to intercept rainfall and impede surface runoff.

## **WASTE TRANSFER (634)**

### **ADDED TO GENERAL CRITERIA APPLICABLE TO ALL PURPOSES**

**STRUCTURES** - Equipment used shall ensure that the emptying of storage/treatment facilities is within appropriate time periods as stated in the system operation and maintenance plan in accordance with the CNMP.

**PIPELINES** - Design anti-siphon protection or open-air breaks or a minimum of two check valves in all pipelines pumping to a storage facility located at a higher elevation from the inlet of the transfer system.

In a gravity flow pipe system, a minimum head (from the maximum waste elevation in the hopper to the maximum design storage elevation) level is required, depending upon the consistency of the material: 4 feet for heavily bedded manure, 2 feet for slurry or semi-solid manure, and 1 foot for liquids and liquid manure per 100 feet of pipe.

**SAFETY** - Excavation depths near building foundations should be kept to a minimum and should be shored and/or braced as required to protect the building and workers during construction.

**BIOSECURITY** - Products from diseased animals shall be handled in accordance with the recommendations of the state veterinarian or in accordance to the Pathogen Management Standard (783).

### **ADDED TO ADDITIONAL CRITERIA IN SUPPORT OF AGRICULTURAL LAND FOR FINAL UTILIZATION**

**WASTE UTILIZATION** - Sprinkler system design capacity shall be adequate to apply the required volume of waste at a rate and uniformity that shall prevent runoff and meet the nutrient needs of the plants. Nozzle size and pressure shall be appropriate for the consistency of the waste applied. Sprinkler applied waste-contaminated water, shall contain less than two percent



solids unless provisions are made for straining, filtering or separating before application, or additional measures are taken, such as chopping the materials.

### **ADDED TO REFERENCES**

Agricultural Waste Management Field Handbook - Part 651, "National Engineering Handbook", USDA-NRCS, April 1992.

Liquid Manure Application Systems Design Manual, NRAES-89. Northeast Regional Agricultural Engineering Service, 152 Riley- Robb Hall, Ithaca, NY. February 1998.

Dairy Practice Council, Guidelines for Milking Center Wastewater, June, 1998, DPC 15, Northeast Regional Agricultural Engineering Service. NRAES-115.

Dairy Practice Council, Guidelines for Dairy Manure Management from Barn to Storage, June, 1998, DPC 27, Northeast Regional Agricultural Engineering Service. NRAES-108.

### **ROAD/TRAIL/LANDING CLOSURE AND TREATMENT (654)**

#### **ADDED TO CONSIDERATIONS FOR WILDLIFE ESPECIALLY POLLINATORS.**

“Consider planting diverse native woody species and forbs with differing blooming times that will provide pollen and nectar for native bees and other pollinators.”

