New Jersey Department of Agriculture Soil Erosion and Sediment Control Program Frequently Asked Questions for the Implementation of the New Jersey Soil Restoration Act P.L. 2010, Chpt. 113 and the New Jersey Standards for Soil Erosion and Sediment Control

1. What is the Soil Restoration Act and how does it affect NJ Soil Conservation District Permitting?

The Act, adopted in 2010, required the Department to develop new erosion control practices for mitigating soil compaction on constructions sites which are regulated by the NJ Soil Erosion and Sediment Control Act (N.J.S.A. 4;24-39 et seq). The Department has modified its existing erosion control standards to include measures to remediate compacted soil on construction sites. These modifications will now be required to be implemented through the District-certified soil erosion and sediment control plan.

2. What are these changes?

The Standards for <u>Topsoiling</u> and <u>Land Grading</u> include new and revised requirements to mitigate the potential for soil compaction. General changes include but are not limited to: 5" of topsoil required (no longer just a recommended), and a requirement to <u>test</u> subsoil for compaction or <u>if compacted</u>, <u>remediate</u> compacted subsoil to a depth of 6 inches prior to the application of topsoil.

3. Are there any exemptions to these requirements?

Yes. The Land Grading Standard excludes industry-specific soil designs which it considers to pre-empt the Standard requirements. Examples of these designs include but are not limited to: golf courses, athletic fields, landfills or landfill caps, structural soils, industrial remediation sites and areas where increased infiltration is not desirable such as around building foundations or over septic fields.. The Standard also establishes that a minimum contiguous area of 500 square feet or less is exempt.

4. How do I know which areas of my site are subject to soil compaction mitigation?

All areas within the proposed limits of disturbance but are outside any building foot print buffer or other excluded area (i.e. septic fields) must be graphically depicted on the erosion control plan (or alternatively, a plan entitled 'soil compaction mitigation plan'). Additionally, soil compaction <u>test locations</u> must be shown on the mitigation plan to avoid confusion about where tests may be taken.

5. How do I know where to take my soil compaction tests?

Locations are to be set at an interval of at least one test per $\frac{1}{2}$ acre for projects 1 acre or larger. For projects less than one acre, at least two tests are required regardless of the size.

6. Is soil compaction testing mandatory?

No. Testing is allowed as an alternative to performing compaction mitigation (tilling or discing). If <u>subsoils</u> pass the compaction tests noted in the Land Grading Standard, then <u>no</u> <u>further mitigation is required</u>. Test locations must be depicted on the plan at the time of plan review and certification.

7. What are these tests?

There are four tests that may be used to verify that soils are not compacted: 1. Wire Flag (survey wire) probe -6" into the subsoil without bending 2. Penetrometer - 6" of penetration at a reading of less than 300 psi

3. Tube bulk density test – field samples and lab analysis required

4. Nuclear Densitometer - to be performed by individuals certified for this test. Tests 1 and 2 may be conducted by anyone authorized by the project owner and are considered a 'screening level' (pass-fail) type of test. If more precise assessments of soil compaction are desired, tests 3 and/or 4 must be performed by certified individuals (usually soil scientists, geotech or civil engineers) but must be certified a N.J. licensed engineer.

8. What happens if my site does not pass these tests?

Each test is progressively more detailed so that if a low level test is failed, the possibility exists that a more refined test may yield favorable results. If testing is completed, and the soil density is found to be excessive (according to test parameters), then the soils in those areas of testing failure <u>must</u> be de-compacted by tilling, discing, ripping etc. to a depth of 6" into the <u>subsoil</u>, prior to topsoil application.

9. How is testing and/or mitigation integrated into the soil district inspection process?

As the applicant, you or your designee will either perform compaction testing or mitigation and will report the results on a soil compaction mitigation verification form, provided by the Department (see below). You will also need to provide a copy of your plan confirming the location of the tests that you performed, assuming you choose that option. You are required to provide the form and test location plan to the district before requesting a final soil erosion control inspection.

While you as the applicant must provide for testing and/or mitigation and certify the results on the official form, District inspectors will perform random verification of the results reported on the form using a simple wire flag test. If the inspector is unable to verify that the subsoil is sufficiently de-compacted to a depth of 6"(not including the topsoil layer of 5"), the inspection will not be approved and the subsoil must be de-compacted and reinspected by the District before a certificate of compliance for erosion and sediment control can be issued.

10. When do these requirements take effect?

The changes to the Standards were adopted by the Department on ______ and have been posted on the Department's website since October 201. However the effective date of implementation was differed until December 7, 2017. Any newly submitted applications to the local soil conservation district on or after this date must comply with the requirements outlined above.

Please note- the testing/mitigation/inspection process will only apply to plans which have been submitted to a district on or after December 7th, 2017. Plan and inspection requirements are not retroactive to previously certified plans or plans which are in process of being reviewed by the District.

11. Where can I get a copy of these Standards and forms?

The Standards and associated forms used in the Soil Erosion and Sediment Control Program may be downloaded from the Department's website at <u>http://www.nj.gov/agriculture/divisions/anr/nrc/njerosion.html</u> Additional information is also available on the website such as sample soil compaction mitigation plans, plan notes etc.