Intern Supervision Assigned to:

Supervisor/Health Director **County** **Phone**

Intern Name **Date**

Prior to beginning the On-Site Wastewater Track within the Centralized Intern Training program, the intern must turn in an initialed, completed copy of this checklist. The intern can turn the checklist in on the first day of training. Keep a copy in the intern's county personnel file.

Date Completed	Intern & Supervisor Initials	Activity
		Complete the OSWP specific distance learning requirements prior to attending CIT in Raleigh. Read referenced rules within each section from: 15A NCAC 18E Working Copy Read referenced chapters from *Soil Science Simplified Fourth Edition* by Helmut Kohnke and D.P. Franzmeier* Read referenced pages from the Onsite Wastewater Guidance Manual (OWGM).
		Introduction to Onsite Wastewater: *(Review and read)* **Introduction to Septic Systems:** *Septic Systems and their Maintenance* https://content.ces.ncsu.edu/septic-systems-and-their-maintenance OWGM Chapter 2.1-2.8, Background
		Introduction to Soils and Soil Formation: *(Review and read)* Title 15A NCAC 18E: Rule .0501 *Soil Science Simplified:* Chapters 1-4 Introduction to Soils & BMP, Durham SWCD: https://www.youtube.com/watch?v=DDn66moJP58 Soil formation, Thomas Pettengill: https://www.youtube.com/watch?v=thttNgtsSxU *Soil Science Simplified*: Chapters 6-7 Soil Formation, Science Monkey: https://www.youtube.com/watch?v=7iyxocIhfu0
		Topography and Landscape Position: *(Review and read)* Title 15A NCAC 18E: Rule .0502 Introduction to Topo Maps, Seth Horowitz: https://www.youtube.com/watch?v=zqPMYGDxCr0 How to use a Laser Level, Permaspien: https://www.youtube.com/watch?v=bDyFNOC558c Determining Landscape Slope, Clear Image Solutions: https://www.youtube.com/watch?v=bOouNoX8WfU

		Soil Morphology: *(Review and read)* Title 15A NCAC 18E: Rule .0503 *Soil Science Simplified:* Chapter 8 Texture (.0503(1)) Soil Texture by Feel, UCDavis (no audio): https://www.youtube.com/watch?v=GWZwbVJCNec Structure (.0503(2)) Soil Structure Part **1,** NVGrapegrowers: https://www.youtube.com/watch?v=yEDjwQOpzrA Mineralogy (.0503(3)) Soil Mineralogy, Clay Mineralogy, Elementary Engineering https://www.youtube.com/watch?v=Qh6wSfVN45s Cation Exchange, Leaming Games Lab: https://www.youtube.com/watch?v=HmĒyymGXOfI
		Soil Wetness: *(Review and read)* Title 15A NCAC 18E: Rule .0504(a)(b) Soils: Soil Color, Clear Image Solutions: https://www.youtube.com/watch?v=N6doCSP8T7I
		Introduction to LTAR: *(Review and read)* Title 15A NCAC 18E: Rule .090l(c) OWGM Chapter 4.6.1-4.6.4, Onsite Wastewater Loading Rates LTAR: http://americangeoservices.com/ltar-long-term-acceptance-rate.html Water Movement in Soils, NRCS NSSC: https://www.youtube.com/watch?v=vmo0FRAVgkM
		Miscellaneous Topics: *(Review and read)* Boundary Survey, Ludlow Engineering: https://www.youtube.com/watch?v=-1KSBqYHfOg&t=8s Laurel Falls Saprolite, jshoemaker_l: (Rule .0506, Rule .090l(c) Table XVIII) https://www.youtube.com/watch?v=WY-nnloWgT4 OWGM: Onsite Wastewater System Design, Chapter 5.2.1-5.2.14 OWGM: Tanks, Chapter 5.3.1-5.3.7 OWGM: Conventional Onsite Systems, Chapter 5.3.8-5.3.20 OWGM: Shallow Placement, LDP, PPBPS, Pressure Manifold, Chapter 5.4.7-5.4.12 OWGM: System Inspection, Chapter 5.5.15-5.5.24
		Forms: Review county forms including Application Packet, Improvement Permit, Construction Authorization, and Operation Permit. Review application procedures with responsible staff. If possible, observe an applicant being assisted with submission.

		Field Observations: **Site Evaluations:** • Accompany an REHS on a minimum of three (3) new soil/site evaluations. On the first site, review procedure for completing a site evaluation (orient to site plan/map, identify property comers/boundary markers, identify proposed facility location, discuss boring placement, observe auger borings and completion of a soil evaluation sheet, discuss system layout). • On at least one site, practice the following: -Review application and site plan/map. -Identify property comers and lines and orient yourself to the site plan provided. -Locate the proposed facility. -Use a hand auger to excavate a boring. -Observe and assist with the layout of a wastewater system. **System Installations:** • Accompany EHS on three (3) final inspections of new installations of on-site sewage systems, if available. • Review completed Operation Permits for these three (3) inspections. • Complete a mock final inspection checklist (attached) for one of these installations. Bring completed checklist to CIT.
		Gather required equipment for module: • Auger • Knife/rock hammer or pick • Water bottle for wetting soil samples • 100' or 200' measuring tape • Engineer scale • Laser level (if available) • Pin flags • Clinometer (Or download a clinometer app to your phone that provides precent slope) • Munsell Color Chart • Field Book for Describing and Sampling Soils • 12' measuring tape • Clipboard • Rain gear • Calculator

*The fourth edition of *Soil Science Simplified* is available used online. If you have the fifth edition, chapter equivalents are below.

Fourth Edition	Fifth Edition
Chapter 1: Nature/Function	Ch 1: Nature/Function
Chapter 2: Physical Properties	Ch 3: Physical Properties
Chapter 3: Soil&Water	Ch 4: Soil Water and Climate
Chapter 4: Chemical Properties	Ch 2: Soil Minerology & Chemistry
Chapter 6: Organic Matter/Microbes	Ch 9: Organic Matter and Microbes
Chapter 7: Soil Formation	Ch 5: Soil Formation
Chapter 8: Morphology	Ch 6: Morphology