

Docket No. 272 – Development and Management Plan Inspection

The Connecticut Light and Power Company Certificate of Environmental Compatibility and Public Need for the construction of a new 345-kV electric transmission line and associated facilities between Scovill Rock Switching Station in Middletown and Norwalk Substation in Norwalk, Connecticut, including reconstruction of portions of existing 115-kV and 345-kV electric transmission line, the construction of Beseck Switching Station in Wallingford, East Devon Substation in Milford, (and Singer Substation in Bridgeport), modifications at Scovill Rock Switching Station and Norwalk Substation, and the reconfiguration of certain interconnections.

Beseck Switching Station Inspection

Date: April 17, 2007

Inspector: Matthew Creighton

Location: Beseck Switching Station

Rainfall: 5.38” of precipitation was recorded in the week prior to inspection with 3.03” of the total reported on 4/15 (NOAA data at Meriden, CT).

Areas of Inspection	Observation	Recommended Action	Corrected Action
Access roads and adjacent roadways	All traffic entering and exiting the site is using the access on the east side. The heavy rains made full containment of sediment difficult despite the controls and turbid water was flowing from the exit and into a CB. 4/17/07	Continue to monitor and evaluate during larger storm events. Adjust controls as needed. Provide more detention in the appropriate locations. 4/17/07	Needs additional stabilization or containment in heavy rains.
	The haybales at the edge of the eastern site exit have been replaced but turbid water was still leaving the site due to the heavy rains. 4/17/07	Continue to monitor and adjust controls and replace haybales as needed. 4/17/07	Haybales installed at site exit have been replaced.
	The western site entrance was closed off with haybales and clean stone and check dams were added. It was well controlled for the storm and clear water was leaving the entrance. 4/17/07	Continue to monitor and evaluate during larger storm events. It is currently well 4/17/07	West side entrance had additional controls and was well contained during the rains.
	The stone access east of Beseck remains in place to reduce tracking to the main pad. 4/17/07	Continue to maintain and work out schedule with 1A contractors to share responsibility. 4/17/07	Not Applicable (NA)

Areas of Inspection	Observation	Recommended Action	Corrected Action
<p>Access roads and adjacent roadways (continued)</p>	<p>The sediment trap at the culvert under the ROW access road was overflowing with turbid water. The run-off was entering the wetlands under the ROW. 4/17/07</p> <p>Gutters contained accumulated sand from town snow removal and sedimentation from turbid run-off from the site. (noted since 2/27/07). Additional sediment was noted as a result of the storm. 4/17/07</p> <p>CB liners and gutter buddies (filter socks), along Carpenter Lane are in place. However, one gutter buddy was removed due to ponding on Carpenter Ln. creating a safety issue. Turbid water from the site was entering this drain. 4/17/07</p> <p>The CB within the entrance drive cannot be sealed yet so a drainage ditch remains in place prevent turbid water from flowing into the storm-water system. 4/17/07</p>	<p>This area will still require regular attention by all contractors (BSS and Segment 1A). This control works well for smaller storms but was overwhelmed by the heavy rain. Slow and filter water within the drainage ditch before it flows into the basin. 4/17/07</p> <p>Clean/sweep roadway regularly, including the gutters by hand if necessary. 4/3-4/17/07</p> <p>Clean and maintain liners as needed. Replace gutter buddy, which was removed, as soon as possible. 4/17/07</p> <p>CB will be sealed during final grading. Continue to monitor existing controls. 4/17/07</p>	<p>Needs additional controls in anticipation of larger storm events.</p> <p>Needs attention.</p> <p>Needs regular attention.</p> <p>NA</p>
<p>Foundation and site construction</p>	<p>Minor grading continues as needed. The majority of the site is at finished grade. 4/17/07</p> <p>Excavations for foundation work continue within the site,</p>	<p>Erosion controls may need to be adjusted as grading changes, especially at catch basins on site. 4/17/07</p> <p>Concrete washouts are being conducted within the excavations. Continue</p>	<p>NA</p> <p>Site construction continues, now installing steel.</p>

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	<p>resulting in small soil stockpiles. Contractors are setting rebar, pouring concrete, regrading soils, and installing frames. 4/17/07</p>	<p>to monitor and control soil stockpiles at new excavations as needed. 4/17/07</p>	
<p>Erosion and sediment controls</p>	<p>Perimeter silt fence along the east side of the site is secure and well-maintained. 4/17/07</p> <p>The silt fence that was down along Carpenter Lane has been repaired. The adjacent area is stable and no erosion was noted. 4/17/07</p> <p>Additional controls (haybales and stone check dams) were added to filter run-off from the west site entrance. Water was clear and the area is well controlled. 4/17/07</p> <p>Filter fabric and numerous haybales remain in place over and around the drain inlets in the permanent detention basins. The heavy rains resulted in stormwater overtopping the controls within the basins. Contractors were pumping water out of the basins and into frac tanks to settle. 4/17/07</p> <p>The storm water outlet pipe at the wetland across Carpenter Lane has several layers of haybales in place to help filter turbid water. Water within the outlet and flowing into the wetlands was turbid. In general, sediment from the site is very fine and difficult to filter but efforts continue</p>	<p>Continue to inspect and maintain silt fence throughout site and repair as needed. 4/17/07</p> <p>Provide any necessary final restoration efforts and remove the erosion controls. 4/17/07</p> <p>Continue to monitor controls for effectiveness. Stabilize remaining areas when feasible. See Access Roads and Adjacent Roadways. 4/17/07</p> <p>Continue to monitor and replace haybales as needed within the detention basins. Removed sediment from controls to maintain effectiveness as needed.</p> <p>See dewatering section for more information. 4/17/07</p> <p>Haybales should be monitored and replaced as needed at the storm drain outlet. Stormwater should continue to be contained and filtered before leaving the site to the extent possible. Continue addressing stormwater issues at the source. Good efforts were made on site to reduce</p>	<p>NA</p> <p>The silt fence was repaired.</p> <p>NA</p> <p>Stormwater overtopped the controls but was being pumped into frac tanks per the back-up protocol.</p> <p>Turbid stormwater leaving the site exit is turbid, as was the overflow in the detention basins.</p>

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	<p>to be made onsite to reduce turbid run-off. The several inches of rain in 24 hours overwhelmed the existing efforts. 4/17/07</p>	<p>run-off. Stone check dams along Carpenter Ln. should be considered to help reduce turbid run-off from entering the CBs. 4/17/07</p>	
<p>Inland Wetland and Watercourse encroachment and mitigation</p>	<p>Despite commendable efforts on site, turbid water was observed flowing from the outlet across Carpenter Lane and entering wetlands. Standing, turbid water was observed throughout. 4/17/07</p> <p>Turbid water was flowing around the drainage ditch (north side of the site) and culvert, under the ROW access, overflowing the sediment trap and controls and the entering wetlands off-site to the east. 4/17/07</p> <p>Additional work in this wetlands, and wetlands to the east of Beseck are covered in other project reports. 4/17/07</p>	<p>Several areas in the wetland have sediment accumulation. Sediment should be removed from the outlet and adjacent areas when water levels recede 12/26/06- 4/17/07. It will be evaluated whether the accumulation justifies the minor disturbance required to remove it. 1/23-4/17/07</p> <p>Add controls along the drainage ditch to slow and filter run-off before leaving the site. Pump turbid water from the sediment trap into frac tanks if needed. 4/17/07</p> <p>See Segment 1a or 2a inspection reports for more details. 4/17/07</p>	<p>Continue to evaluate and add controls as needed.</p> <p>Needs additional controls for large storms.</p> <p>Not jurisdictional to this D&M plan.</p>
<p>State species of concern, threatened and endangered species.</p>	<p>According to the D&M plan, state-listed species are not located in this work area.</p> <p>Several different species of frogs, turtles, and salamanders have been noted in wetlands south of Carpenter Ln, this spring and last year. 4/17/07</p>	<p>None. 4/17/07</p> <p>Although these species were not state-listed, it indicates good habitat. Continue to make good efforts to reduce impacts to these wetlands to the extent possible. 4/17/07</p>	<p>NA</p> <p>NA.</p>
<p>Vegetative clearing or stabilization</p>	<p>Most exposed soil surfaces around the site, which are not currently active, were hydroseeded</p>	<p>Continue to place hay mulch (or similar) for temporary stabilization, and closely monitor</p>	<p>Patchy, sparse grass growth noted.</p>

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	<p>(including a tackifier) last winter to promote stabilization. Patchy grass growth is beginning to establish. This includes the slopes of the detention basins. 4/17/07</p> <p>Erosion control mats are in place on steep slopes. Some areas were at final grade and crushed stone base was installed at work trailer locations. 4/17/07</p>	<p>detention basin slopes. Monitor site closely, especially during rain events. Regrade any erosion (gullies) and reseed areas as needed. 4/17/07</p> <p>Continue to reduce areas of exposed soil where work is not actively occurring or not expected to occur for more than 14 days (including soil stockpiles). 4/17/07</p>	<p>NA</p>
<p>Dewatering <i>(As of 1/12/07 contractors stated: the detention ponds will be monitored during rain events and spring thaw to ensure that neither pond reaches capacity. Water will be pumped to the larger pond and then to the frac tank if any component of the system is reaching capacity.)</i></p>	<p>Large volumes of turbid stormwater from the heavy rains had overwhelmed the controls in the detention basins. Contractors were observed pumping the water into frac tanks for settling as stated in the back-up plan. 4/17/07</p> <p>When dewatering is required turbid water is pumped into two frac tanks on site in order to settle. Clean water is released to the controlled CBs within the detention basins onsite. 4/17/07</p> <p>Muddy River, located a distance down gradient from the wetland across Carpenter Lane, is also being monitored. At this time no turbidity from the site appears to have reached Muddy River. 4/17/07</p>	<p>When dewatering is required, pumping must be monitored to avoid, overwhelming controls, or increasing sediment in the basins. Clean water from the frac tanks can be pumped directly into the controlled CBs in the detention basins as long as water is released slowly. This will prevent overwhelming controls and forcing sediment, from the stormwater system into the wetlands at the outlet. 4/17/07</p> <p>Continue to monitor and evaluate Muddy River during rain events and dewatering activities. Reinforce and improve controls on site as needed. 4/17/07</p>	<p>Water was pumped from the detention basins to reduce run-off into wetlands following the heavy rain.</p> <p>NA</p>
<p>Blasting</p>	<p>All blasting was complete as of 9/7/06.</p>	<p>None. 4/17/07</p>	<p>NA</p>
<p>Spills, soils and material storage</p>	<p>All remaining soil on site will be used as fill in construction activities. 4/17/07</p>	<p>Soils appear to be handled appropriately. 4/17/07</p>	<p>NA</p>

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	<p>A few small stockpiles resulting from the foundation excavations remain. 11/20/06-4/17/07</p> <p>Spill cleanup materials were available on site and are being used and restocked as needed. 4/17/07</p>	<p>Install controls for the stockpiles where/if needed. 11/20/06-4/17/07</p> <p>Always use spill control materials when working on equipment and during refueling. 4/10/07</p>	<p>NA</p> <p>NA</p>
<p>Additional Observations</p>	<p>A line of haybales is maintained across the old ROW access to prevent unauthorized use (eg ATVs) and potential run-off. 4/17/07</p>	<p>Monitor haybales and replace as needed. 4/17/07</p>	<p>NA</p>

Next likely scheduled inspection: Tuesday April 24, 2007

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

Field Inspector: Matthew Creighton, BSC Group

Reviewer: Diana Walden, BSC Group



Site exit off Carpenter Lane is at final grade; haybales at the exit were replaced. However, the heavy rains overwhelmed the controls and turbid water was flowing off site and into a CB.



Turbid water entering a CB downgradient of the exit. The gutter buddy was removed because the high volume of water was ponding on Carpenter Ln., causing a safety issue.



View of entire site from the southeast corner looking northwest.



Haybales and controls remain in place at the inlet of the detention basin. Turbid run-off had overtopped the controls due to the heavy rain but contractors were working to pump water into settling tanks.



New stone and stone check dams were added to the site entrance which was closed in anticipation of the rain. Controls appear to be working effectively.



View of the culvert and sediment trap under the access road to the ROW. During the heavy rains, turbid water overflowed the trap and was entering the wetlands downgradient, across the access road.



Storm drain outlet across Carpenter Lane had turbid water flowing through the haybales as the very heavy rains (over 3" in 24 hours) overwhelmed the controls on site.



Turbid water was observed in the wetlands as a result of the heavy rains. Evaluate whether the amount of sediment accumulation justifies the minor disturbance needed to remove it, once the water subsides.