

**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.**

**Underground Line Watercourse and Railroad Crossings**

**Date:** February 21, 2008

**Inspector:** Gregory Sommer

**Location:** Crossings of Watercourses and Railroads in Segments 3, 4a and 4b

**Rain Event:** 0.60" of precipitation was reported since the previous inspection; 0.20" was recorded on 2/17 and 0.40" was recorded on 2/18. (Bridgeport, CT NOAA data).

Areas of Inspection	Observation	Recommended Action	Corrected Action
<b>Access Roads and Adjacent Roadways Saugatuck River</b>	<b>On the east side of the Saugatuck River, the contractor for segment 4b is utilizing the partially restored staging area to facilitate vault installation. The stone construction entrance remains however, some ruts were noted along the shoulder of the roadway. 2/7-2/21/08 The bituminous curb near the access driveway has been damaged by heavy truck traffic (since 1/24). 2/21/08</b>	<b>Coordinate final restoration efforts/ responsibilities with the contractor working on segment 4b. Restore site to pre-construction conditions (gravel parking area). Restore rutted area and temporarily stabilize. Repair damaged curbing when work is complete. 2/21/08</b>	<b>Continue to monitor.</b>
<b>Ash Creek</b>	<b>The temporary work zone set-up along the south side of Post Road/ Fairfield Avenue has been removed, as all HDD work in this area is complete. Drilling pits were backfilled and repaved. 2/21/08</b>	<b>None. 2/21/08</b>	<b>Work areas were closed up and repaved.</b>
<b>Housatonic River</b>	<b>A temporary staging area is in place on the west side of the Housatonic River in a parking lot behind a shopping plaza</b>	<b>Continue to monitor for tracking or slurry residue. See Erosion and Sediment Control section for more details. 2/21/08</b>	<b>Not Applicable (NA)</b>

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	<p><b>HDD work is complete and the bentonite reclamation machine and drilling rig have been broken down and are ready to demobilize. A work area is also in place on the eastern bank. 2/21/08</b></p> <p><b>On the east side of the Housatonic River conduit sections had been staged in the area between sta. #1015 to 1020, creating some ruts in the crushed stone backfill installed by Segment 3 contractors. 2/21/08</b></p>	<p><b>Re-grade the stone backfill when feasible. 2/21/08</b></p>	<p><b>Needs attention when feasible.</b></p>
<p><b>Vault Openings and Trench Construction Saugatuck River</b></p> <p><b>Ash Creek</b></p> <p><b>Housatonic River</b></p>	<p><b>HDD work on the Saugatuck River is almost complete. 2/21/08</b></p> <p><b>HDD work at Ash Creek is complete and the drilling pits have been backfilled. 2/21/08</b></p> <p><b>HDD work at the Housatonic River is almost complete. Conduit has been pulled through the boring and the electrical contractors were blowing out the lines and running fish wires. 2/21/08</b></p>	<p><b>Monitor and maintain sediment and erosion controls. 2/21/08</b></p> <p><b>None. 2/21/08</b></p> <p><b>Monitor and maintain sediment and erosion controls. 2/21/08</b></p>	<p><b>NA</b></p> <p><b>NA</b></p> <p><b>NA</b></p>
<p><b>Erosion and Sediment Controls</b></p> <p><b>Saugatuck River</b></p>	<p><b>Any exposed soils have potential for airborne dust migration. Contractors are aware of the potential. 2/21/08</b></p> <p><b>On the west side of the Saugatuck River, hay bales and mulch remain in place around the drill pit. Haybales remain along Lincoln St. 2/21/08</b></p> <p><b>Misc. debris has been</b></p>	<p><b>Prevent dust migration by implementing the dust control measures. 2/21/08</b></p> <p><b>Continue to monitor and maintain the controls to ensure they adequately contain area until drilling pit is backfilled. Continue to sweep the roadway as necessary. 2/21/08</b></p> <p><b>Continue to monitor until</b></p>	<p><b>NA at this time.</b></p> <p><b>NA at this time. Continue to monitor.</b></p> <p><b>The area has been</b></p>

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Ash Creek	<p>removed from the previous access area in the park on the west side of the Saugatuck River near sta. #236. Minor ruts have been graded and the area has been seeded. Hay mulch has been applied to temporarily stabilize the exposed soil. 2/21/08</p>	<p>final stabilization during the growing season. Provide any additional restoration measures at that time. 2/21/08</p>	<p>seeded and mulched for temporary stabilization. Leftover debris was removed.</p>
	<p>The contractor for segment 4b is now utilizing the partially restored staging area on the east side of the Saugatuck River. The areas of exposed soil are no longer an issue as much of the soil has been scraped up and transported off-site. 2/21/08</p>	<p>Coordinate final restoration efforts/ responsibilities with the contractor working on segment 4b. Restore site to pre-construction conditions (gravel parking area). Backfill and stabilize the drilling pit when feasible. 2/21/08</p>	<p>Exposed soil was removed from site.</p>
	<p>Two minor frac outs were observed (on land) between the access drive and drilling pit on the east side of the Saugatuck River. Fencing remains around this area. Both areas were full of water at the time of the inspection. 2/14-2/21/08</p>	<p>Properly contain and remove the material. Restore the area to pre-construction conditions. 1/24-2/21/08</p>	<p>Needs attention.</p>
	<p>Work is complete at Ash Creek and the temporary work zone was removed. Catch basins did not appear to be impacted by HDD work and the overall area appear to be appropriately restored. 2/21/08</p>	<p>None at this time. 2/21/08</p>	<p>The overall area appears to be appropriately restored.</p>
Housatonic River	<p>Perimeter controls are in place around the work area on the west side of the Housatonic River. A dirt berm remains in place around the drilling pit. A minor amount of</p>	<p>Continue to monitor the area and maintain the controls to ensure they adequately contain the area. Ensure adequate capacity for drilling materials as well as stormwater run-off.</p>	<p>Needs regular attention.</p>

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	<p>mud/slurry was observed over the paved surface of the parking lot and near the frac tank. 2/21/08</p> <p>On the east side of the river, the dirt berm around the drilling pit remains mulched, and hay bales were in place between the berm and the river. These sedimentation control measures appeared to be functioning properly. 2/21/08</p> <p>On the east side of the Housatonic River, the dirt berm located adjacent to a resource area on the western side of the staging area remains mulched. However, there are no other controls between the berm and the resource area. 12/21-2/21/08</p>	<p>Continue to clean any areas where incidental spills may have occurred due to construction activities. 1/24-2/21/08</p> <p>Continue to monitor the area. Replace/secure controls as needed to provide complete coverage and containment of the area. Continue to attend to spilled drilling slurry/mud on a regular basis. 2/21/08</p> <p>Add controls if necessary. Permanently stabilize area when feasible. 12/21-2/21/08</p>	<p>NA</p> <p>Continue to monitor.</p>
<p><b>Inland Wetland and Watercourse encroachment and mitigation</b></p>	<p>The HDD of the Saugatuck River and associated wetlands in Westport is complete. Final restoration efforts continue in upland staging areas. 2/21/08</p> <p>The HDD of Ash Creek and associated wetlands in Fairfield and Bridgeport is complete and the work areas have been restored. 2/21/08</p> <p>The HDD of the Housatonic River and associated wetlands in Stratford and Milford is nearing completion. 2/21/08</p> <p>On the east side of the</p>	<p>None. 2/21/08</p> <p>None. 2/21/08</p> <p>Continue to implement the approved monitoring plan for the crossing of the Housatonic provided in the D&amp;M plan. 2/21/08</p> <p>Install erosion control</p>	<p>NA</p> <p>Work was completed without incident.</p> <p>NA</p> <p>The berm was</p>

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	<p><b>Housatonic River, the berm along the west side of the staging area has been mulched but there are no other controls between it and the adjacent resource area. 2/21/08</b></p>	<p><b>measures between the dirt berm and the adjacent resource area if needed. See Erosion and Sedimentation Controls section for more details. 2/21/08</b></p>	<p><b>mulched, but additional controls may still be needed.</b></p>
<p><b>Staging, Storage, and Parking Areas Saugatuck River</b></p>	<p><b>A staging area remains on either side of the Saugatuck River. On the east side of the river, the area has been partially restored. Minor construction related debris (wooden stakes, metal banding, conduit sections, toed-in portions of silt fence, etc.) remains near the perimeter of the area. On the west side, the staging area is in a church parking lot. The contractor for segment 4b is utilizing both areas to facilitate vault installation and tie-in work. 2/21/08</b></p> <p><b>The shoulder area along Imperial Ave. on the east side of the Saugatuck River was previously rutted due to vehicle traffic accessing the site directly from the roadway. The contractor for segment 4b is utilizing this area and is now using the existing construction entrance to access the site. 2/21/08</b></p>	<p><b>Coordinate final restoration efforts/ responsibilities with the contractor working on segment 4b. Restore site to pre-construction conditions (gravel parking area). Final restoration will mostly likely be on hold until after the vaults are installed and final connections made. 2/21/08</b></p> <p><b>Continue to utilize the existing construction entrance when accessing the site. Coordinate efforts with the contractor for segment 4b. 2/21/08</b></p>	<p><b>NA at this time but needs final restoration.</b></p> <p><b>Work zones have been removed.</b></p>
<p><b>Ash Creek</b></p>	<p><b>The temporary work zone previously located along Post Road/ Fairfield Avenue on both sides of Ash Creek have been removed. 2/21/08</b></p>	<p><b>None. 2/21/08</b></p>	<p><b>NA</b></p>
<p><b>Housatonic River</b></p>	<p><b>A staging area remains within a paved parking lot behind a plaza on the</b></p>	<p><b>Contain all material within the established limits of work zone and clean and</b></p>	<p><b>Continue to monitor.</b></p>

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	<p>west side of the Housatonic River. HDD work is complete and demobilization of equipment is occurring. A drill pit/work area is also located to the east of the River within a paved access. 2/21/08</p>	<p>restore the areas appropriately. See erosion control and spills/ material storage sections for more details. 2/21/08</p>	
<p><b>Soils</b></p>	<p>Soils are exposed as part of the drill set-up and excavations at each HDD. Drilling slurry (bentonite clay) is used in the process. 2/21/08</p> <p>Drilling pits remain open on both sides of the Saugatuck River. 2/21/08</p> <p>On the west side of the Saugatuck River, exposed soils in the park adjacent to the river have been re-graded, seeded, and mulched with hay. 2/21/08</p> <p>Drilling is complete at Ash Creek and both pits have been backfilled. 2/21/08</p> <p>Drilling pits are excavated on both sides of the Housatonic River. The drilling pits on the west side have a small dirt/sand berm around portions of the perimeter. Both drill pits appear adequately sized. 2/21/08</p>	<p>Monitor for dust as previously indicated. See the Spills and Material Storage section. 2/21/08</p> <p>Backfill the drilling pit as soon as feasible and stabilize the surface. 2/21/08</p> <p>Continue to monitor and provide final restoration measures at the growing season if needed. See Erosion and Sediment Controls section for more details. 2/21/08</p> <p>None. 2/21/08</p> <p>Continue to monitor the amount of slurry in relation to the size of the pit to ensure adequate storage capacity. Also consider impacts from future storm events and run-off. 2/21/08</p>	<p>NA</p> <p>Continue to monitor, needs attention when feasible.</p> <p>Exposed soil has been graded, mulched and seeded.</p> <p>NA</p> <p>NA</p>
<p>State species of concern, threatened and endangered species.</p>	<p>According to the D&amp;M plan, state-listed species are not located in this work area. 2/21/08</p>	<p>None. 2/21/08</p>	<p>NA</p>
<p>Vegetative clearing (including trees to save)</p>	<p>Although not marked on the D&amp;M, a row of</p>	<p>If shrubs were removed by the property owner prior to</p>	<p>Contractor states the property owner</p>

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<p><b>or danger trees noted) or stabilization</b></p>	<p><b>hedges/shrubs was removed (9/18/07) from the west side of the river near sta. #235+75. The contractor states that the property owner removed the shrubs in preparation for the HDD work. 12/5/07-2/21/08</b></p> <p><b>Shrubs had previously been removed from the west side of the river near sta. #234+50 as per the D&amp;M Plan. 2/21/08</b></p>	<p><b>HDD work, then discuss and reach an agreement with the property owner regarding the final restoration measures. 12/5/07-2/21/08</b></p> <p><b>When work is completed, restore the area as indicated in the D&amp;M plan. 2/21/08</b></p>	<p><b>removed the shrubs. Needs evaluation during restoration.</b></p> <p><b>NA at this time.</b></p>
<p><b>Dewatering</b></p>	<p><b>Dewatering activities were not observed at the time of the inspection. 2/21/08</b></p>	<p><b>Continue to ensure that material is contained appropriately and treated according to the ground-water handling plan as referenced in the D&amp;M. 2/21/08</b></p>	<p><b>NA</b></p>
<p><b>Blasting</b></p>	<p><b>No blasting has been proposed. 2/21/08</b></p>	<p><b>None 2/21/08</b></p>	<p><b>NA</b></p>
<p><b>Spills and Material Storage</b></p> <p><b>Saugatuck River</b></p> <p><b>Housatonic River</b></p>	<p><b>Reserve spill cleanup materials/kits were observed in the staging area. 2/21/08</b></p> <p><b>Gel-max was previously spilled in the staging area on the east side of the Saugatuck River. The contractor for segment 4b is now using this area and much of the soil has been scraped up and transported off site. Small, frac-outs were also observed near the drilling pit (since 1/24). 2/21/08</b></p> <p><b>The large drill pit on the west side of the Housatonic River is intended to facilitate drilling activities and project sequencing. The contractor indicated that</b></p>	<p><b>Continue to bring spill kits to active work sites. 2/21/08</b></p> <p><b>Coordinate final restoration efforts/ responsibilities with the contractor working on segment 4b. Restore site to pre-construction conditions (gravel parking area). See Erosion and Sediment Controls section for more details. 2/21/08</b></p> <p><b>Continue to monitor the amount of slurry in relation to the size of the pit to ensure adequate storage capacity. Also consider impacts from future storm events and run-off.</b></p>	<p><b>NA</b></p> <p><b>Most soil, including remnants of spilled gel-max (non-toxic) material was removed from site.</b></p> <p><b>Needs regular evaluation.</b></p>

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	<p><b>some slurry must remain in the pit overnight during cold weather to prevent the equipment from freezing. 2/21/08</b></p> <p><b>On the west side of the Housatonic River, absorbent material remains spread over several areas of the spill/leak noted since 1/31, where the generator trailer was previously located. A new spill (likely oil) was also observed on the surface of the absorbent material. The generator trailer has been relocated to a paved area adjacent to the work zone and continues to leak. 2/21/08</b></p> <p><b>On the west side of the Housatonic River a minor amount of mud/slurry was observed over the paved surface of the parking lot in various areas throughout the staging area. 2/21/08</b></p>	<p><b>Contractor states that the level of slurry in the pit will be lowered at the end of each workday to provide additional capacity 12/12/07-2/21/08</b></p> <p><b>Properly contain, clean, and dispose of the spilled substances ASAP. Repair the equipment ASAP and provide containment and clean up in the new location as well. 2/21/08</b></p> <p><b>Continue to clean any areas where incidental spills may have occurred due to construction activities. 2/21/08</b></p>	<p><b>Needs attention.</b></p> <p><b>Needs regular attention.</b></p>
<p><b>Additional Observations</b></p>	<p><b>On the east side of the Saugatuck River, a broken light standard near the entrance drive to the staging area has been repaired. 2/21/08</b></p>	<p><b>None. 2/21/08</b></p>	<p><b>Light standard has been repaired.</b></p>

**Next likely scheduled inspection:**

Wednesday, February 27, 2008

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:** Gregory Sommer, BSC Group

**Reviewer:** Diana Walden, BSC Group



**On the east side of the Housatonic River a haybale barrier remains in place near the end of the paved surface. Haybales are also in place around a small area of pavement that has collapsed near the drilling pit.**



**On the east side of the Housatonic River, conduit had been staged in the area between sta. #1015-1020, creating ruts in the stone backfill installed by Segment 3 contractors. Ruts should be re-graded.**



**Spills and absorbent material were still noted near the generator trailer on the west side of the Housatonic River. An additional, fresh spill of oil or some other substance was noted on top of the absorbent material.**



**A frozen puddle of mud/water remains near the frac tank on the west side of the Housatonic River.**



**Haybales in place along Riverside Ave. are successfully retaining a mixture of sediment and what appears to be drilling slurry. This material should be removed as part of the final restoration.**



**The park area along Riverside Ave. has been re-graded. Seed and hay mulch have been applied to temporarily stabilize the exposed soil.**



**Staging area on the east side of the Saugatuck River was partially restored but is now being utilized by another contractor to facilitate the vault installation. Final restoration efforts will need to be coordinated between the two contractors.**



**The HDD work at Ash Creek has been completed. The drilling pits have been backfilled and paved and the temporary lane closure has been removed.**