

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: December 5, 2007

Inspector: Gregory Sommer & Margaret Washburn

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

Rain Event: 0.63” of precipitation was reported since the previous inspection, with 0.49” of the total recorded on 12/03 (Bridgeport, CT NOAA data).

Areas of Inspection	Observation	Recommended Action	Corrected Action
<p>Access Roads and Adjacent Roadways</p> <p>Saugatuck River</p>	<p>A stone construction entrance is in place at the access to the staging area on the east side of the Saugatuck River. The entrance is accessed from the paved parking area off of Imperial Ave. Sediment tracking was not an issue. 12/05/07</p>	<p>Continue to maintain construction entrance to reduce sediment migration from the work area. Continue to sweep the parking lot area as necessary. 12/05/07</p>	<p>Needs regular attention.</p>
<p>Ash Creek</p>	<p>Temporary work zone/ lane closures remain along Old Post Road near Ash Creek as crews continue the HDD. A bentonite reclamation machine and drilling rig were on-site within the protected work zone. A significant amount of drilling mud was noted on the roadway. 12/05/07</p>	<p>Monitor the work area for tracking or slurry residue as activity increases. Minimize unnecessary impacts. See erosion control section for more details. 12/05/07</p>	<p>Needs regular attention.</p>
<p>Housatonic River</p>	<p>A temporary staging area is in place on the west side of the Housatonic River in a parking lot behind a shopping plaza. A bentonite reclamation machine and drilling rig were on-site. A work area is also in place on the</p>	<p>Monitor the work area for tracking. Minimize unnecessary impacts. See the erosion control and spills/material storage sections for more detail. 12/05/07</p>	<p>Not Applicable (NA)</p>

Areas of Inspection	Observation	Recommended Action	Corrected Action
	eastern bank. 12/05/07		
Vault Openings and Trench Construction Saugatuck River	Crews have begun work on the second drill under the Saugatuck River. Crews continue to pull fishing wires in the completed conduits. 12/05/07	Continue to monitor carefully for drilling fluid releases and continue to address as specified in the monitoring plan provided in the D&M. Contractors have been monitoring pressure and making regular visual inspections of the river. 12/05/07	NA
Ash Creek	Drilling continues on the southwest side of Ash Creek to preream the pilot hole through to the northeast side. Crews are beginning to weld conduit sections together in preparation for installation. 12/05/07	Monitor carefully for drilling fluid releases and continue to address as specified in the monitoring plan provided in the D&M. Contractors have been monitoring pressure and making regular visual inspections of the creek. 12/05/07	NA
Housatonic River	Drilling continues on the west side of the Housatonic River. Drilling pits are present on both sides of the river. Both pilot holes have been drilled and work continues as crews preream the borings. 12/05/07	Monitor carefully for drilling fluid releases and continue to address as specified in the monitoring plan provided in the D&M. Contractors have been monitoring pressure and making regular visual inspections of the river. 12/05/07	NA
Erosion and Sediment Controls Saugatuck River	Any exposed soils have potential for airborne dust migration. Contractors are aware of the potential. Special attention should be given to the Saugatuck River (east side staging area) as the majority of the area is an exposed dirt surface and residences are nearby. 12/05/07 Plastic mats are in place on the west side of the Saugatuck River near sta. #236 to minimize rutting. Minor sediment is	Prevent dust migration by implementing the dust control measures. If exposed soils are not to be worked within 21 days, they should be stabilized. 12/05/07 Place a gutter buddy/silt sack (or similar) in any catch basins located down gradient of areas where vehicles are exiting the	Needs regular attention. Needs attention

Areas of Inspection	Observation	Recommended Action	Corrected Action
Ash Creek	<p>beginning to accumulate along the shoulder of Riverside Avenue as vacuum trucks and other vehicles exit the work area. 11/21-12/05/07</p>	<p>work zone to prevent sediment from entering basin. Sweep roadway as necessary. 11/21-12/05/07</p>	
	<p>Silt fence, haybales and mulch remain in place around the first drill pit on the west side of the Saugatuck River.12/05/07</p>	<p>Continue to monitor and maintain the controls to ensure they adequately contain the area. 12/05/07</p>	<p>NA at this time</p>
	<p>On the east side of the Saugatuck River, drilling fluid/mud has splashed out of the drilling pit beyond the contained limits of the silt fence. Silt fence is sagging at this spot. 12/05/07</p>	<p>Repair damaged sections of silt fence. Continue to monitor and maintain the controls. Identify areas of potential high flow or run-off and reinforce controls when necessary. 12/05/07</p>	<p>Needs attention.</p>
	<p>Catch basins near Ash Creek have been protected and surrounded with hay bales, including the basin adjacent to the northeast drilling pit. However a significant amount of drilling mud was noted on the roadway near a CB. 12/05/07</p>	<p>Place a gutter buddy (or similar) in any catch basins located down gradient of exposed soils to prevent sediment from entering basin. Remove accumulations of drilling mud/slurry. See spills/material section. 12/05/07</p>	<p>The northeastern catch basin has been protected.</p>
Housatonic River	<p>The small area of soil previously excavated/ exposed soil on the northeast side of Ash Creek at the water valve, has been contained with silt fence and haybales. 12/05/07</p>	<p>Maintain the sediment control measures between the exposed soils and the creek to prevent sediment from entering the resource area. 12/05/07</p>	<p>Silt fence and haybales have been installed.</p>
	<p>Perimeter controls are in place around the work area on the west side of the Housatonic River but some sediment and asphalt debris had been temporarily stockpiled at/on the haybales. 12/05/07</p>	<p>Pull materials back to ensure the perimeter controls remain effective. 12/05/07</p>	<p>Needs attention</p>

Areas of Inspection	Observation	Recommended Action	Corrected Action
	<p>Haybales and silt fence were installed as an added precaution to contain a frac-out area within the pavement on the east side of the Housatonic River. 12/05/07</p>	<p>Continue to monitor the area. 12/05/07</p>	<p>Controls were installed after drilling material was removed.</p>
<p>Inland Wetland and Watercourse encroachment and mitigation</p>	<p>Drilling has commenced at the second of two drill holes for the watercourse crossing of the Saugatuck River and associated wetlands in Westport. 12/05/07</p> <p>The HDD of Ash Creek and associated wetlands in Fairfield and Bridgeport is underway. 12/05/07</p> <p>The HDD of the Housatonic River and associated wetlands in Stratford and Milford is underway 12/05/07</p>	<p>Continue to implement the approved monitoring plan for the crossing of the Saugatuck River provided in the D&M plan in order to avoid impacts to the resource areas. 12/05/07</p> <p>Continue to implement the approved monitoring plan for the crossing of Ash Creek provided in the D&M plan 12/05/07</p> <p>Continue to implement the approved monitoring plan for the crossing of the Housatonic provided in the D&M plan. 11/28/07</p>	<p>NA</p>
<p>Staging, Storage, and Parking Areas Saugatuck River</p>	<p>A staging area remains on either side of the Saugatuck River to accommodate the HDD activities. On the east side of the river, the staging area is within a gravel parking area. On the west side, staging is within a paved parking lot of a church. 12/05/07</p> <p>On the east side of the river, several hoses are being used in the HDD operation and are located outside of the contained, silt fence limits of the staging area. Hoses also appear to be placed under the silt fence at one point. 10/25-12/05/07</p>	<p>See erosion control section for more details. Contain all material within the established limits of both yards. 12/05/07</p> <p>Wherever feasible, relocate hoses within the staging area, using the silt fence to protect surrounding areas from potential spills or leaks. When hoses need to leave the contained area, construct forked or Y-shaped stakes to prop the hoses over the silt fence</p>	<p>NA at this time.</p> <p>Continue to monitor and evaluate.</p>

Areas of Inspection	Observation	Recommended Action	Corrected Action
<p>Ash Creek</p> <p>Housatonic River</p>	<p>The contractor states a natural berm here will provide additional containment.</p> <p>A temporary work zone has been established along Old Post Road on both sides of Ash Creek to accommodate the HDD activities. 12/05/07</p> <p>A staging area has been established within a paved parking lot in the back of a shopping plaza on the west side of the Housatonic River to accommodate the HDD activities. A drill pit/work area is also located to the east of the River within a paved access. 12/05/07</p>	<p>rather than under the controls. 10/25-12/05/07</p> <p>See erosion control and spills/material storage sections for more details. Contain all material within the established limits of work zone. 12/05/07</p> <p>Contain all material within the established limits of work zone. Further containment and planning may be necessary here. See erosion control and soils sections for more details. 12/05/07</p>	<p>NA at this time.</p> <p>See spills/material storage section.</p>
<p>Soils</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. A few spills of the drilling mud were noted in each location. 12/05/07</p> <p>Drilling work has begun on the second hole at the Saugatuck River. The drilling pit within the east side staging yard was adequately sized for the drilling operations. 12/05/07</p> <p>The drilling pits have been excavated on both sides of Ash Creek. 12/05/07</p>	<p>Monitor for dust as previously indicated. See the spills and material storage section. 12/05/07</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. 12/05/07</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. 12/05/07</p>	<p>NA</p> <p>Requires regular attention and monitoring</p> <p>NA</p>

Areas of Inspection	Observation	Recommended Action	Corrected Action
	<p>Drilling pits are excavated on both sides of the Housatonic River. Drilling pits on the west side of the Housatonic River have a small dirt/sand berm around portions of the perimeter. Drilling mud is less than 6" from overtopping the pit in some locations. 12/05/07</p>	<p>Ensuring adequate storage capacity for drilling muds is essential. Impacts from storm events and related run-off must also be considered. A large amount of stormwater could result in a serious discharge from the pit to the resource area. Consider expanding the pit, additional containment, or a contingency plan for large storms 12/05/07</p>	<p>Needs evaluation.</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>None.</p>	<p>NA</p>
<p>Vegetative clearing (including trees to save or danger trees noted) or stabilization</p>	<p>Although not marked on the D&M, a row of hedges/shrubs was removed (9/18) 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. 12/05/07</p> <p>Shrubs were removed a few weeks ago from the west side of the river near sta. #234+50 as per the D&M Plan 12/05/07</p>	<p>If shrubs were removed by the property owner prior to HDD work, then discuss and reach an agreement with the property owner regarding the final restoration measures. 12/05/07</p> <p>When work is completed, restore the area as indicated in the D&M plan. 12/05/07</p>	<p>Contractor states the property owner removed the shrubs. Needs evaluation for restoration.</p> <p>NA at this time.</p>
<p>Dewatering</p>	<p>Dewatering activities were not observed at this time. However vac trucks were used to attend to some frac-outs. 12/05/07</p>	<p>Continue to ensure that material is contained appropriately and treated according to the groundwater handling plan as referenced in the D&M. 12/05/07</p>	<p>NA</p>
<p>Blasting</p>	<p>No blasting has been proposed. 12/05/07</p>	<p>None 12/05/07</p>	<p>NA</p>
<p>Spills and Material Storage</p>	<p>Reserve spill cleanup materials/kits were observed in the staging area. 12/05/07</p>	<p>Continue to bring spill kits to active work sites. 12/05/07</p>	<p>NA</p>

Areas of Inspection	Observation	Recommended Action	Corrected Action
Saugatuck River	<p>Slurry material was previously spilled in the staging area on the east side of the Saugatuck River near the bentonite reclamation machine, the drilling pit, and a frac tank. Some since 11/15. 12/05/07</p>	<p>Remove and properly dispose of slurry material where possible to minimize unnecessary impacts. 11/21-12/05/07</p>	<p>Needs attention.</p>
	<p>Sand material has been stockpiled near the entrance to the staging area on the east side of the Saugatuck River. No controls are in place around the stockpile. 11/15-12/05/07</p>	<p>Install erosion controls to properly contain the stockpiled material. 11/15-12/05/07</p>	<p>Needs attention.</p>
	<p>On the east side of the Saugatuck River, a small frac out occurred near the access driveway adjacent to the staging area. A sand berm was placed to contain the material and crews appeared to be adequately handling the situation. 12/05/07</p>	<p>Continue to proactively monitor areas during drilling activity and maintain containment. Ensure the soil from the berm cannot run-off to resource areas. 12/05/07</p>	<p>A frac-out was observed and contained on land. Needs evaluation.</p>
	<p>Several bags of Max-Gel had torn spilled on the ground near the entrance to the staging area on the east side since 11/08. The materials have been cleaned up. 12/05/07</p>	<p>Although Max-Gel is non-toxic, use caution to prevent future spills and minimize unnecessary impacts. 12/05/07</p>	<p>Spilled Max-Gel was cleaned up.</p>
Ash Creek	<p>Spilled slurry material remains on the pavement behind the bentonite reclamation machine near Ash Creek as a result of disconnected hoses. 11/28-12/05/07</p>	<p>Sweep and remove slurry material even though the catch basin is protected. Use caution when disconnecting hoses to prevent incidental slurry spills. 11/28-12/05/07</p>	<p>Needs attention.</p>
	<p>Drilling slurry/mud has spilled on the pavement on the east side of Ash Creek adjacent to the drilling pit. 12/05/07</p>	<p>Even though the catch basin is protected, the slurry material needs to be removed ASAP. Use caution to contain drilling slurry and avoid</p>	<p>Needs attention.</p>

Areas of Inspection	Observation	Recommended Action	Corrected Action
Housatonic River	On the east side of the Housatonic River, two holes approximately 5' to 10' in diameter formed in the paved parking area due to pressure from the HDD operation (similar to a frac out). Crews excavated the area and used a vac truck to contain any remaining material. 12/05/07	unnecessary impacts. 12/05/07 Continue to monitor the area for future material releases. Modify control measures accordingly as the conditions change. 12/05/07	NA
	On the west side of the Housatonic River excavated asphalt, soil, and other debris has been temporarily stockpiled near the perimeter of the protected work zone. 12/05/07	Relocate temporary stockpile to a location within the work zone where the material can be adequately contained. See erosion control section 12/05/07.	Needs attention.
	Drilling pits on the west side of the Housatonic River have combined into one large drill pit. At the time of the inspection the containment appeared to be adequate, but the drill pit's storage capacity was reaching its limit. 12/05/07	Provide additional containment measures to minimize unnecessary impacts throughout the staging area. See soils section for more detail. 12/05/07	Pits were combined but area still needs evaluation.
Additional Observations	None. 12/05/07	None. 12/05/07	NA

Next likely scheduled inspection: Wednesday, December 12, 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: Gregory Sommer & Margaret Washburn, BSC Group

Reviewer: Diana Walden, BSC Group



The silt fence around the drilling pit on the east side of the Saugatuck River is sagging and needs attention. Drilling fluid splashed beyond the contained limits of the silt fence.



On the east side of the Saugatuck River, a small frac out occurred near the access driveway adjacent to the staging area. A sand berm was in place to contain the material and crews appeared to be adequately handling the situation. Ensure exposed sand from the berm will not migrate toward the river.



Slurry material was previously spilled in the staging area on the east side of the Saugatuck River near the bentonite reclamation machine, the drilling pit, and a frac tank.



A significant amount of drilling slurry has spilled on the pavement on the east side of Ash Creek near the drilling pit. Although the catch basin has been protected, sweep and remove the material.



The small area of soil excavated on the northeast side of Ash Creek near the water valve has been contained with silt fence and haybales to minimize the potential for sediment entering the creek.



On the east side of the Housatonic River, holes formed in the pavement due to pressure from the HDD operation (similar to a frac out). Crews excavated the area and used a vac truck to remove any remaining material. Haybales were placed around the area to provide additional containment.



Drilling pits on the west side of the Housatonic River have a small dirt/sand berm around portions of the perimeter. Drilling fluid/mud is less than 6" from overtopping the drilling pit in some locations. Ensure that capacity is adequate.



On the west side of the Housatonic River, excavated asphalt, soil, and other debris has been temporarily stockpiled at the perimeter haybales containing the work zone. Pull the material back to ensure the controls remain effective.