



STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF ENVIRONMENTAL REVIEW

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To: Colleen Kissane - Transportation Assistant Planning Director
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From: David J. Fox - Senior Environmental Analyst **Telephone:** 860-424-4111

Date: November 20, 2009 **E-Mail:** david.fox@ct.gov

Subject: Greater Bridgeport Transit Maintenance/Operations Facility

The Department of Environmental Protection has received the Notice of Scoping announcing preparation of an Environmental Impact Evaluation for expansion and improvements to the Greater Bridgeport Transit Authority's maintenance and administrative facility at 1 Cross Street in Bridgeport. The following commentary is submitted for your consideration.

The proposed project is not within Connecticut's coastal boundary as defined by section 22a-94 of the Connecticut General Statutes (CGS). The site is not within the 100-year or 500-year flood zone on the community's Flood Insurance Rate Map. The Natural Resources Conservation Service's Soil Survey of Fairfield County does not depict any wetland soils in the project area; the entire site is classified as urban land or udorthents soil.

Pursuant to section 16a-38k of the CGS, any new construction of a state facility that is projected to cost five million dollars or more, or renovation of a state facility that is projected to cost two million dollars or more must comply with or exceed compliance with the silver building rating of the Leadership in Energy and Environmental Design's (LEED®) rating system for new commercial construction and major renovation projects, as established by the United States Green Building Council, or an equivalent standard, such as a two-globe rating in the Green Globes USA design program. Although since this is not a state facility and this requirement does not apply, the Greater Bridgeport Transit Authority web site describing the project indicates that the expansion will be designed to achieve a silver (LEED®) rating. The Department endorses this commitment.

The description on the web site also notes sustainable design elements for the facility, including a green roof and landscape irrigation with stormwater. The Department strongly encourages the use of these types of Low Impact Development (LID) measures. The description mentions using water collected from the green roof for irrigation. It should be noted that, at least during the first few years after installation, the green roof will likely require watering until the plants are established and, depending on the design of the roof, limited excess water may available thereafter, except during larger storm events.

LID site planning principles involve controlling stormwater/snowmelt runoff volume at the source and hydrologically functional landscaping. Key strategies for effective LID include:

conserving and restoring vegetation and soils, designing the site to minimize impervious surfaces, managing stormwater close to where the rain/snow falls, and providing for maintenance and education. Consequently, we typically recommend the utilization of one, or a combination of, the following measures. As noted in the project description, the site's size and location limits the applicability of some measures. However, they are provided below for your consideration.

- the use of pervious pavement or grid pavers (which are very compatible for parking lot and fire lane applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas,
- the use of vegetated swales, tree box filters, and/or infiltration islands to infiltrate and treat stormwater runoff (from building roofs and parking lots),
- the minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface,
- if soil conditions permit, the use of dry wells to manage runoff from the building roofs,
- the use of vegetated roofs (green roofs) to reduce the runoff from buildings,
- proper treatment of special activity areas (e.g. loading docks, covered maintenance and service areas),
- the installation of rainwater harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation, and
- providing for pollution prevention measures to reduce the introduction of pollutants to the environment.

The effectiveness of various LID techniques that rely on infiltration depends on the soil types present at the site. The siting of areas for infiltration must also consider any existing soil or groundwater contamination.

Development plans in urban areas that entail soil excavation should include a protocol for sampling and analysis of potentially contaminated soil. Soil with contaminant levels that exceed the applicable criteria of the Remediation Standard Regulations, that is not hazardous waste, is considered to be special waste. The disposal of special wastes, as defined in section 22a-209-1 of the Regulations of Connecticut State Agencies (RCSA), requires written authorization from the Waste Engineering and Enforcement Division prior to delivery to any solid waste disposal facility in Connecticut. If clean fill is to be segregated from waste material, there must be strict adherence to the definition of clean fill, as provided in Section 22a-209-1 of the RCSA. A fact sheet regarding disposal of special wastes and the authorization application form may be obtained at: http://www.ct.gov/dep/cwp/view.asp?a=2709&q=324202&depNav_GID=1646.

The Waste Engineering & Enforcement Division has issued a *General Permit for Contaminated Soil and/or Sediment Management (Staging & Transfer)*. It establishes a uniform set of environmentally protective management measures for stockpiling soils when they are generated during construction or utility installation projects where contaminated soils are typically managed (held temporarily during characterization procedures to determine a final disposition). Temporary storage of less than 1000 cubic yards of contaminated soils (which are not hazardous waste) at the excavation site does not require registration, provided that activities are conducted in accordance with the applicable conditions of the general permit. Registration is required for on-site storage of more than 1000 cubic yards for more than 45 days or transfer of

more than 10 cubic yards off-site. A fact sheet describing the general permit, a copy of the general permit and registration forms are available on-line at:

http://www.ct.gov/dep/cwp/view.asp?a=2709&q=324210&depNav_GID=1643#ContSoilSedMgmtGP.

There are three underground storage tanks registered at the facility. If any of tanks are to be removed, the procedures outlined in the code of the National Fire Protection Association (NFPA 30, Appendix B) should be followed. Individual soil samples should be obtained from the underlying native soil. A listing of potential contaminants that should be analyzed and suggested analytical methods is available on-line at:

<http://www.ct.gov/dep/cwp/view.asp?a=2692&q=322592>. If contaminated soil, ground water or free product is observed at the site or detected by sample analysis, the DEP must be immediately notified at (860) 424-3338 and corrective action must be undertaken in accordance with section 22a-449(d)-106 of the Regulations of Connecticut State Agencies. Closure reports, including confirmation of sampling and clean-up, are required by Federal and State law. For further information, contact the Bureau of Materials Management & Compliance Assurance, Underground Storage Tank Program at 860-424-3374.

The existing facility has a *General Permit for the Discharge of Vehicle Maintenance Wastewater* (DEP-PERD-GP-010). Registration for a new permit will be required for the expanded maintenance facility.

The facility also has a *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (DEP-PERD-GP-014). The Stormwater Pollution Prevention Plan prepared under this permit will have to be revised to incorporate the expanded facility.

The project description notes the construction of a new paint and body shop. The New Source Review permit program, administered by the Engineering and Enforcement Division of the Bureau of Air Management, regulates emissions released to the air from new and modified stationary sources as enumerated in Section 22a-174-3a(a)(1) of the RCSA, including paint spray booths. Section 22a-174-3b and -3c of the RCSA allow for exemptions from permitting for construction and operation of certain equipment, including automotive refinishing operations. Prior to beginning the actual construction of any stationary source or modification of any source to which Section 22a-174-3a(a)(1) applies, the owner or operator must apply for and obtain an individual permit or elect to operate the source in accordance with the provisions of Section 22a-174-3b or -3c. The automotive refinishing operations may also be subject to federal regulations pursuant to Title 40 of the Code of Federal Regulations Parts 60 and 63. For additional information, contact the Division's Engineer of the Day at 860-424-4152. A fact sheet describing the New Source Review permit program is available on-line at:

http://www.ct.gov/dep/cwp/view.asp?a=2709&q=324136&depNav_GID=1643

The regulations are also available on-line at:

<http://www.ct.gov/dep/lib/dep/regulations/22a/22a-174-1through200.pdf>

In addition to typical mitigation measure to minimize impacts to air quality during construction, the Department also recommends the use of construction equipment with air pollution control devices or the use of "clean" fuels. Equipment, such as diesel oxidation

catalysts or particulate filters, or the use of ultra-low sulfur fuel (15 ppm sulfur) can be effective in reducing exhaust emissions. "Clean" fuels, including compressed natural gas or emulsified fuels (e.g., Purinox, approved by the California Air Resources Board) can also be effective in reducing exhaust emissions. It would be appropriate, at this urban location, that contract specifications contain provisions of DOT's diesel vehicle emissions control language requiring certain non-road construction equipment to be retrofitted with emission control devices. The Department also recommends using newer on-road construction vehicles that meet EPA's latest emission standards or use of diesel oxidation catalysts/particulate filters and clean fuel for pre 2007-model year on-road vehicles typically used in construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites.

Additionally, Section 22a-174-18(b)(3)(C) of the RCSA limits the idling of mobile sources to 3 minutes. This regulation includes on-road vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Adhering to the regulation will reduce unnecessary idling at truck staging zones, delivery or truck dumping areas and further reduce construction equipment emissions. Use of posted signs indicating the three-minute idling limit is recommended. It should be noted that only DEP can enforce Section 22a-174-18(b)(3)(C) of the RCSA. Therefore, it is recommended that the project sponsor include language similar to the anti-idling regulations in the contract specifications (included in DOT's contract specification) for construction in order to allow them to enforce idling restrictions at the project site without the involvement of the Department.

The Natural Diversity Data Base, maintained by DEP, contains no records of extant populations of Federally listed endangered or threatened species or species listed by the State, pursuant to section 26-306 of the CGS, as endangered, threatened or special concern in the project area. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultation with the Natural Diversity Data Base should not be substituted for on-site surveys required for environmental assessments. The extent of investigation by competent biologist(s) of the flora and fauna found at the site would depend on the nature of the existing habitat(s). If field investigations reveal any Federal or State listed species, please contact the Environmental & Geographic Information Center at 860-424-3540.

Thank you for the opportunity to review this project. If there are any questions regarding these comments, please contact me.

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