

# The Commonwealth of Massachusetts

Executive Office of Energy & Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

> Tel: (617) 626-1000 Fax: (617) 626-1181 http://www.mass.gov/envir

Ian A. Bowles SECRETARY

January 9, 2009

# CERTIFICATE OF THE SECRETARY OF ENERGY & ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Target

PROJECT MUNICIPALITY : Wilmington
PROJECT WATERSHED : Shawsheen
EEA NUMBER : 14302R

PROJECT PROPONENT : Target Corporation
DATE NOTICED IN MONITOR : November 24, 2008

Pursuant to the Massachusetts Environmental Policy Act (G.L. c. 30, ss. 61-621) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a Draft and Final Environmental Impact Report (DEIR, FEIR).

# **Project Description**

The project involves the demolition of an existing 12,000 square foot (sf) vacant industrial building and the construction of a new 138,500 sf Target retail store, approximately 500 surface parking spaces, and new stormwater management infrastructure on a 16.3-acre parcel of industrial-zoned property bounded by Ballardvale Street to the east, Interstate I-93 to the west, and Old Ballardvale Street to the south and privately-owned commercial property to the north in Wilmington.

# Permits and MEPA Jurisdiction

The project is undergoing environmental review and requires the preparation of an Environmental Impact Report (EIR) pursuant to Section 11.03(6)(a)(6) of the MEPA regulations because it requires state permits and because the project will generate more than 3,000 new average daily trips on roadways providing access to a single location. The project requires an Indirect Vehicular Access Permit from the Massachusetts Highway Department (MassHighway) for access to Interstate 93 (1-93), and a U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharges from a construction site of over one acre. The project may also require a Section 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP) and a Section 404 Programmatic General Permit (Category 11) from the U.S. Army Corps of Engineers (ACOE). The project requires an Order of Conditions from the Wilmington Conservation Commission (and, on appeal only, a Superseding Order from the Massachusetts Department of Environmental Protection (MassDEP)). An air quality mesoscale analysis for ozone will be needed for this project to assess the total volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions associated with all project-related vehicle trips. The project is subject to the EEA Greenhouse Gas (GHG) Emissions Policy and Protocol because it requires an EIR and a Vehicular Access Permit from the Massachusetts Highway Department (MassHighway).

Because the Proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction is limited to those aspects of the project that may cause Damage to the Environment as defined in the MEPA regulations and that are within the subject matter of required or potentially required state permits. In this case, jurisdiction extends to transportation, wetlands and stormwater.

#### **SCOPE**

#### General

The Proponent should prepare a DEIR in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations as modified by this Scope. The DEIR should include maps and plans at a reasonable scale, a project summary and schedule, and a description of any changes since the filing of the Environmental Notification Form (ENF). The DEIR should include existing and proposed conditions plans. Site plans should clearly show all proposed project elements including the fire pond expansion and relocation of the existing stormwater detention basin from the project site to the abutting 200 Ballardvale property. Site plans for the proposed project and its alternatives should delineate wetland resource areas and buffer zones, and mapped state-listed species habitat to evaluate potential impacts.

#### <u>Alternatives</u>

The DEIR should include an evaluation of all feasible alternatives and describe how the preferred alternative will avoid, minimize and mitigate environmental impacts to the maximum extent feasible.

represent the state of the second

The alternatives analysis should include a clear comparison (quantified to the extent feasible) of the impacts of each alternative and its project components (including but not limited to acres of land alteration, impervious area, wetlands, habitat impacts, traffic and parking, and greenhouse gas emissions). The DEIR should provide a rationale to explain why certain alternatives are selected and others ruled out for further consideration. For the Proponent's preferred alternative, the DEIR should include a discussion of the Proponent's proposed use of fill material to achieve final grades, and the proposed final disposition of the existing Olde Ballardyale Street.

The DEIR should consider alternative site layouts and building configurations, and include an analysis of alternatives to avoid and minimize impacts to wetlands resource areas as well as alternatives to reduce greenhouse gas emissions as further detailed in the Scope below. The ENF proposes 501 parking spaces. The DEIR should identify the total number of parking spaces required for the project under current Town of Wilmington bylaws. The DEIR should indicate how the parking supply was developed and demonstrate that the parking supply is the minimum necessary to accommodate project demand without encouraging additional single occupant vehicle trips. As discussed elsewhere in this Certificate, implementation of transportation demand management (TDM) measures and provision of good bicycle and pedestrian access can further reduce the amount of parking needed.

# Permitting and Consistency with State, Local and Regional Policies

The DEIR should discuss applicable permits and regulatory requirements, and describe how the project will meet relevant performance standards. The DEIR should include a list of required permits and approvals and provide an update on the status of each permit and/or approval. The DEIR should describe the project's consistency with Executive Order No. 385, Planning for Growth and the Commonwealth's Ten Sustainable Development Principles. The DEIR should also demonstrate consistency with the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol in accordance with the GHG section of the Scope below.

#### Wetlands

The project site contains Bordering Vegetated Wetlands (BVW) located along the western boundary of the project site adjacent to I-93, and two isolated wetland resource areas located adjacent to the project site's northern and eastern property lines, respectively. As currently proposed, the project will result in the permanent alteration of approximately 10,000 sf of isolated wetlands to accommodate the construction of the project site drive, the Target building and internal roadways. The project will also result in the alteration of the 100-ft wetlands buffer resulting from site grading and roadway construction, buildings, and stormwater management infrastructure. According to the Proponent, the Wilmington Conservation Commission issued an Order of Resource Area Delineation (ORAD) in October 2005 that determined that these two isolated wetland resources areas are non-jurisdictional and not subject to review under the Wetlands Protection Act.

The DEIR should include a reasonably scaled plan that identifies the wetland resource areas (including any banks, intermittent streams, perennial streams, land under the water, bordering land subject to flooding, and isolated land subject to flooding) and buffer zones present in the proposed project. The DEIR should identify the significance of the resources present, including value to public and private water supply, flood control, storm damage prevention, prevention of pollution, riverfront area, and fisheries and wildlife habitat.

The DEIR should include a description of the project's construction activities and potential impacts to all wetland resource areas including wetland buffers located on the project site and within the northwestern portion of the adjacent 200 Ballardvale property. The Proponent should analyze both direct and indirect (i.e. changes in drainage patterns) impacts on wetlands resulting from the project, and demonstrate that the Proponent has minimized impacts to resource areas including, but not limited to on-site and adjacent off-site wetland resource areas to the maximum feasible extent. The DEIR should discuss the applicability and consistency of the Proponent's preferred development scenario with the requirements of the 401 Water Quality Certification for Fill Projects in Waters and Wetlands (314 CMR 9.08), and the Category Il Section 404 Permit from the ACOE. In the event the project is subject to the jurisdiction of MassDEP's 401 Water Quality Certification, the DEIR should contain additional information for MassDEP to evaluate the proponent's efforts to avoid or minimize the potential environmental impacts resulting from each proposed development alternative.

#### Stormwater

As described in the ENF, the project's stormwater management plan has been designed to comply with MassDEP's Stormwater Management Regulations, standards and practices and the Town of Wilmington's requirements for projects located within a Zone II Groundwater Protection District. According to the Proponent's statements made during the MEPA consultation session held for this project on December 10, 2008, the project's stormwater management system will incorporate the use of hooded deep sump catch basins to convey a portion of the project's stormwater runoff to an on-site underground detention basin, to be located underneath the proposed Target parking area, and to a stormwater detention basin to be located in the northwestern corner of the project site. I note that the use of an underground stormwater detention/infiltration basin as a component of the project's stormwater management system may be subject to review under MassDEP's Underground Injection Control (UIC) program and may require a Groundwater Discharge Permit from MassDEP for stormwater discharges into the ground from surface parking areas with high intensity use.

The DEIR should include a detailed description of the proponent's stormwater management plan, including a discussion of the alternatives considered along with their impacts. The DEIR should identify any stormwater discharge points, and describe any drainage impacts associated with proposed on-site and off-site project-related improvements. The DEIR should identify the quantity and quality of flows. The rates of stormwater runoff should be analyzed for the 10, 25 and 100-year storm events.

The Proponent should provide calculations, proposed best management practice (BMP) plans, and supporting information sufficient to demonstrate that the design of the project's drainage system can accommodate stormwater water flows during severe storm events. The DEIR should demonstrate that the design of the drainage system is consistent with MassDEP's Stormwater Management regulations for water quality, recharge to groundwater, and peak runoff impacts in Critical Areas, and consistent with the Town of Wilmington's Storm Water Program and its National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater General Permit. In the alternative, the DEIR should explain why the proponent is proposing a drainage system design not recommended by MassDEP. If the Proponent proposes to tie into an existing municipal stormwater system or the MassHighway system, the DEIR should clarify the permits required and whether there will be a recharge deficit on-site. The DEIR should identify where the Ballardvale Street, Olde Ballardvale Street and I-93 drainage systems discharge in this area. The DEIR should discuss compliance with MassDEP's proposed revisions to 314 CMR 5.00 Groundwater Discharge Permitting Program Regulations. The proposed revisions would require an Individual or General Permit for stormwater discharge into the ground from parking lots with high intensity use (more than 1,000 trips per day). The Proponent should consult with MassDEP during the preparation of this section of the DEIR.

The project also involves the removal and relocation of an existing stormwater retention pond that serves the abutting office building property located at 200 Ballardvale Street. Stormwater from the 200 Ballardvale Street property is currently conveyed to this retention pond prior to discharging to the 1-93 stormwater drainage system. The Proponent proposes to relocate this retention pond onto the southwest corner of the 200 Ballardvale Street property. The relocated retention pond will continue to discharge to the I-93 drainage system via a pipe drain easement to be located across the southwestern corner of the project site. The DEIR should include a detailed description of the proposed relocation of the stormwater detention basin for the 200 Ballardvale property.

The DEIR should include a description of the Proponent's proposed Stormwater Pollution Prevention Program (SWPPP) including a Sedimentation and Erosion Control Plan that outlines measures that will be implemented to minimize and mitigate construction period impacts. The Proponent should ensure that hay bales are not used for erosion control as they may contain seeds from invasive species. The Proponent should commit to implementing a SWPPP that will exceed the minimum requirements established for SWPPPs in accordance with EPA's NPDES General Permit. Any dewatering of the construction site should include monitoring to ensure that there is no impact to the groundwater level. The DEIR should outline the monitoring program of groundwater levels. It should summarize existing pre-construction groundwater conditions, and propose groundwater monitoring to address any impacts. The DEIR should investigate feasible methods of reducing the project's impervious surfaces to increase the points of infiltration within the project site. The Proponent must implement a long term Operation and Maintenance Plan (O&M Plan) to ensure that Best Management Practices (BMPs) are maintained to function as designed. The O&M should incorporate MassDEP's Snow Disposal Guidelines (http://mass.gov/dep/water/laws/policies.htm) and require that no snow will be placed in or adjacent to wetland resource areas, and commit to using a minimal amount of deicing and abrasive agents.

I encourage the proponent to consider using a non-sodium based deicer on pavement surfaces. This O&M Plan should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems.

The Proponent should continue to evaluate opportunities for incorporating sustainable design alternatives including Low Impact Development (LID) techniques in the project's site design and stormwater management plans. LID techniques incorporate stormwater best management practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas, which encourage detention, infiltration and filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. LID can also protect natural resources by incorporating wetlands, stream buffers and mature forests as project design features. For more information on LID, visit <a href="http://www.mass.gov/envir/lid/">http://www.mass.gov/envir/lid/</a>. Other LID resources include the national LID manual (Low Impact Development Design Strategies: An Integrated Design Approach), which can be found on the EPA website at: <a href="http://www.epa.gov/owow/nps/lid/">http://www.epa.gov/owow/nps/lid/</a>. The DEIR should include a discussion and evaluation of integrated stormwater management techniques for redevelopment sites with significant surface area parking.

# Water Supply and Wastewater Management

According to the ENF, the project will require 6,900 gallons per day (gpd) of potable water supply and will generate approximately 6,900 gpd of wastewater flow. Both water and wastewater needs will be met through existing municipal systems, administered by the Town of Wilmington. In its comment letter, the Massachusetts Water Resources Authority (MWRA) has indicated that the Town of Wilmington's sewer collection system collects and conveys Wilmington's wastewater flows to MWRA's Wilmington Trunk Sewer and along the Aberjona and Mystic Rivers to the Chelsea Creek Headworks and onto the Deer Island treatment plant for treatment and discharge to Massachusetts Bay. According to MWRA, the capacity of its sewer collection system is exceeded during wet weather conditions due to excessive infiltration and inflow (I/I) that enters the sewer system in Wilmington and other MWRA communities resulting in sanitary sewer overflows (SSOs) to local streams and rivers and surface flooding. As a member community to the MWRA's sewer system, the Town of Wilmington is required to assist in the ongoing coordinated efforts of MassDEP and MWRA in reducing infiltration and inflow (I/I) to ensure that the additional wastewater flows will be offset by the removal of I/I flows.

I ask that the Proponent consult with MassDEP, the Town of Wilmington and MWRA to identify opportunities to participate in Wilmington's ongoing I/I removal program to offset the project's wastewater flows. I encourage the Proponent to commit to incorporating water conservation in the project design to comply with the Massachusetts state plumbing code. As part of that commitment, the Proponent should commit to using efficient commercial water conservation technologies for the Target building including water saving devices, low flow toilets, and low flow appliances.

# **Transportation**

The Proponent has prepared a Traffic Impact and Access Study (TIAS) in accordance with Executive Office of Energy & Environmental Affairs (EEA)/Executive Office of Transportation and Construction (EOTC) guidelines. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual's land use code 815 (Free-Standing Discount Store), the Proponent estimates a total of 7,840 new vehicle trips per day (vtd) associated with the proposed project. The main access to the site will be provided via a new 3–lane site drive located on Ballardvale Street. The DEIR should provide a site circulation plan that clearly demonstrates how cars, trucks, bicycles, and pedestrians will circulate safely throughout the project site.

The Proponent has outlined and committed to a transportation mitigation program in the ENF to address potential project-related traffic impacts and to help address existing operational and safety deficiencies. The following mitigation measures are proposed:

# Ballardvale Street/Project site driveway intersection

- construction of a new signalized 3-lane Project site driveway/Ballardvale Street intersection;
- construction of geometric improvements include widening and re-striping of Ballardvale Street to provide an exclusive left-turn lane and through lanes on the Ballardvale Street southbound and eastbound approaches; and,

# Route 125/I-93 northbound off-ramp intersection

- construction of a new traffic signal and corresponding geometric modifications at the Route 125/I-93 northbound off-ramp intersection;
- synchronization of signal timing with existing Route 125/Ballardvale Street signal.

In its comments, MassHighway has recommended that the Proponent's mitigation commitments be further developed in the DEIR to improve safety and mobility in the vicinity of the I-93/Route 125 interchange. Specifically, the DEIR should include an analysis of additional traffic mitigation measures identified by MassHighway including:

- widening the Route 125/Ballardvale Street and Route 125/I-93 northbound ramps intersections to provide exclusive left-turn lanes; and,
- completing the signal timing synchronization with the existing Route 125/1-93 southbound ramps intersection signal.

The Draft EIR should include conceptual 80-scale plans depicting the proposed mitigation to verify the feasibility of constructing such improvements including lane widths and offsets, layout lines and jurisdictions, and adjacent land uses in the proposed improvement area. All proposed mitigation located within the state highway layout must conform to MassHighway Standards. The DEIR should identify those mitigation measures to be implemented during project construction and prior to occupancy of the proposed project. The Draft EIR should include a commitment to implement the recommended mitigation measures and should describe the timing and cost of their implementation based on project phasing.

# Transportation Demand Management (TDM)

While I recognize the challenges inherent in developing a successful Transportation Demand Management (TDM) program for a commercial retail site, I remind the Proponent of its obligation to develop the maximum mitigation feasible for traffic impacts. I note that proponents for other similar retail developments (BJ's of Quincy, EEA #14233 – September 12, 2008, Shoppes at Harrington Farms #14158 – June 13, 2008) committed to programmed traffic mitigation measures including TDM that were designed to support that project's anticipated traffic impacts. I ask that the Proponent evaluate all feasible TDM measures for store employees and patrons to reduce peak employee traffic demand and to encourage alternative transportation modes for retail customers including, but not limited to:

- appointment of an on-site TDM Coordinator;
- subsidized transit passes for employees;
- the development of on-site amenities including an on-site breakroom with refrigerators, direct deposit of employee paychecks, on-site ATMs/banking services, and secured bicycle storage racks;
- providing pedestrian crosswalks and walkways at the Ballardvale Street/Target driveway intersection;
- installation of bicycle storage racks near the front doors of the retail building to facilitate bicycle access to the site;
- the implementation of an employee ride-matching program (carpooling and vanpooling) program;
- providing comprehensive commuter information;
- establishment of a partnership with MassRIDES, the statewide travel options program;
- membership and active participation in the Junction Transportation Management Organization (JTMO); and,
- participation with JTMO and other project area residents to identify and implement cost-sharing opportunities for supporting a shuttle service linking the North Wilmington commuter rail station with Target and other project area businesses.

The TDM plan should describe any monitoring necessary to ensure the success of the program. The Draft EIR should demonstrate the Proponent's commitment to implement, monitor, and fund the proposed TDM plan. All project tenants should be required to participate in the proposed TDM plan. The Draft EIR should continue to evaluate additional feasible TDM measures to further reduce vehicle trips to and from the site. The Proponent should consult with the Town of Wilmington, MBTA and MassHighway before filing the DEIR to discuss coordination of this project with any existing or proposed transit and/or shuttle services to promote transit use by employees and patrons. The Proponent should provide a report on this consultation in the DEIR. The Proponent's TDM plan should be incorporated as part of the Proponent's transportation mitigation program.

#### Transit

According to the information provided in the ENF, the Massachusetts Bay Transit Authority's (MBTA's) North Wilmington Commuter Rail Station is located approximately 1.0 mile from the project site in Wilmington and provides commuter rail service from Haverhill to Boston (North Station) via the Haverhill commuter rail line.

The Proponent should consult with the MBTA, the Town of Wilmington, and MassHighway to identify opportunities for providing bus and/or shuttle service to the project site. The DEIR should identify opportunities to incorporate transit amenities including bus shelters and shuttle stops in closer proximity to the project site and the proposed Target building. The DEIR should demonstrate the support of the Massachusetts Bay Transit Authority (MBTA) for any existing and proposed transit amenities in the project area. The DEIR should include an update of the proponent's discussions with JTMO and others for providing bus and/or shuttle service to the project area. As described above, the Proponent should evaluate TDM measures for store employees and patrons to encourage alternative transportation modes including increased ridership of the MBTA's North Wilmington Commuter Rail Station and the Haverhill line.

# Pedestrian and Bicycle Facilities

The proponent has committed to provide sidewalks along the project site driveway from the Ballardvale Street/site driveway intersection to the Target retail building. The DEIR should describe the internal vehicular and pedestrian circulation plans for the project site. The DEIR should show on a reasonably scaled map of the project site, where the Proponent proposes new sidewalks, pedestrian crossings and vehicle/pedestrian safety signage in a map of the area. The Proponent should discuss the feasibility of providing sidewalks along the project site's frontage on Ballardvale Street. I strongly encourage the Proponent to continue to identify opportunities for any additional traffic, transit, pedestrian, and bicycle improvements within the project area in response to the regional and local traffic concerns that may arise out of the proposed mixed-use office/retail development project.

# Parking

The ENF proposes to construct approximately 500 new surface parking spaces. The DEIR should indicate how the parking supply was developed and demonstrate that the parking supply is the minimum necessary to accommodate project demand without encouraging additional single occupant vehicle trips. Implementation of TDM measures and provision of good bicycle and pedestrian access can further reduce the amount of parking needed.

#### Air Quality

The project's projected vehicle trips triggers MassDEP's requirement that the Proponent conduct an air quality mesoscale analysis to determine if the proposed project will increase the amount of volatile organic compounds (VOCs) and nitrogen oxides (NOx) in the project area and to assess the project's consistency with the Massachusetts State Implementation Plan (SIP). The DEIR should include the results of the Proponent's mesoscale air quality analysis.

# Greenhouse Gas Emissions Policy and Protocol

# Opt-Out Proposal

Because the project requires the preparation of a mandatory EIR and requires a Vehicular Access Permit from MassHighway, it is subject to the EEA Greenhouse Gas Emissions (GHG) Policy and Protocol.

That policy requires quantification and analysis of the project's direct and indirect GHG emissions, and the DEIR must demonstrate consistency with the analysis and mitigation provisions therein. The policy contains an "Opt-Out" provision that allows proponents on a case-by-case basis to opt out of the quantification analysis if the proponent commits to extraordinary mitigation measures in advance. In discussions with the MEPA Office subsequent to the filing of the ENF, the proponent has expressed an interest in this opt-out alternative.

As a retail establishment with multiple current and planned future locations in Massachusetts, the Proponent has the ability to review options for mitigating project-related GHG emissions at locations beyond the proposed project site and to achieve significant reductions in its overall energy usage and greenhouse gas emissions state-wide. The Proponent has agreed to investigate opportunities for committing in advance to exceptional GHG-reduction measures at the proposed project or other Target locations in order to opt-out of the GHG quantification analysis for this and/or future proposed stores. I commend the Proponent for its commitment to explore this option and I encourage it to work closely with the MEPA Office and the Department of Energy Resources (DOER) and MassDEP in developing an opt-out proposal that would provide sufficient technical analysis and support to justify the avoidance of future emissions modeling and analysis. The proposal should be guided by the requirements presented below for a GHG emissions analysis, but should go beyond those requirements to consider options for mitigation emissions at other current or future Target locations in Massachusetts. In particular, I encourage the proponent to consider incorporation of renewable energy into its proposal and note that a commitment to installation of solar photovoltaic (PV) systems would be consistent with the Governor's recently announced goals of encouraging the installation of solar PV for all large retail projects. In addition, I note that the proposal should be compared to a project baseline that incorporates the recent amendment to the Massachusetts State Building Code which establishes more stringent requirements for energy efficiency. The Proponent should present its proposal along with supporting documentation in the DEIR.

#### GHG Emissions Analysis

In the event the Proponent elects not to pursue the Opt Out provision of the GHG Policy, the Proponent should prepare an analysis of GHG emissions and mitigation measures in accordance with the standard requirements of the MEPA GHG Policy and Protocol. The DEIR should quantify the direct and indirect GHG emissions associated with the project's energy use and transportation-related emissions. Direct emissions include on-site stationary sources, which typically emit GHGs by burning fossil fuel for heat, hot water, steam and other processes. Indirect emissions result from the consumption of energy, such as electricity, that is generated off-site by burning of fossil fuels, and from emissions associated with vehicle use by employees, vendors, customers and others. The DEIR should outline and commit to mitigation measures to reduce GHG emissions. 1 refer the Proponent to the GHG Emissions Policy and Protocol for additional guidance on the analysis. In addition, the appendix to the GHG policy and the comment letter from MassDEP and DOER include suggestions for GHG mitigation measures. Other energy efficient measures, as explained below, also should be considered. Additional information on building design energy reduction measures and standards is available on many websites, including the following: http://www.eere.energy.gov/, http://www.nahb.org, www.sbicouncil.org, http://www.aceec.org, http://www.ashrae.org/, http://www.coolroofs.org/ and http://www.ornl.gov.

The DEIR should include a GHG emissions analysis that calculates and compares GHG emissions associated with:1) a Massachusetts Building Code-compliant baseline (the sum of direct emissions from stationary sources and indirect emissions from energy consumption and transportation); 2) the proposed Preferred Alternative (the sum of direct emissions from stationary sources, indirect emissions from energy consumption, and transportation for the project as proposed); and 3) a project alternative with greater GHG emissions-related mitigation than the preferred alternative.

The baseline code compliant quantification of CO<sub>2</sub>-related emissions must reflect the recent amendment to the Massachusetts State Building Code that incorporates the performance standards of the International Energy Conservation Code (IECC) as further detailed in the MassDEP/DOER comment letter. The DEIR should indicate which energy modeling tool was used and present the data used to model the energy use in buildings. The DEIR should also identify TDM measures proposed for each of the alternatives and the corresponding emission reductions expected.

The alternatives analysis helps identify and assess opportunities for energy savings achievable by varying building design and layout strategies. These assessments can inform an analysis of the feasibility of LEED and/or ENERGY STAR elements. If the Proponent chooses not to select certain energy efficient techniques that would provide a greater reduction in emissions compared with the preferred alternative, the DEIR should explain why certain alternatives were rejected. The alternatives analysis should clearly demonstrate consistency with the objectives of MEPA review, one of which is to document the means by which the Proponent plans to avoid, minimize, or mitigate damage to the environment to the maximum extent feasible. The Proponent should fully explain any trade-offs inherent in the GHG analysis, such as increased impacts on some resources to avoid impacts on others. Similarly, the DEIR should also evaluate the feasibility of purchasing power generated by renewable energy sources for any portion of the electricity use on the site. I encourage the Proponent to consult with the MEPA Office early in the design process regarding the scope and methodology of the analysis, including the modeling parameters to be reported in the Draft EIR.

MassDEP and DOER have reviewed the ENF and identified several measures listed below that should be analyzed in the Draft EIR and incorporated into the project, where feasible. The DEIR should include additional information and analysis in response to the MassDEP/DOER comments and the energy efficient measures listed below. In the event that the Proponent is not able to adopt one of these measures, the DEIR should provide technical and cost analyses to document the rationale for not making a commitment to a mitigation recommendation. Also, it is recommended that the Proponent contact the New Construction division of its electricity utility in Wilmington, Reading Municipal Light Department and its natural gas utility, National Grid, to take advantage of potential rebates available for the installation of highly energy efficient equipment.

<sup>1</sup> I note that LEED certification for New Construction/Retail requires a 35 percent to 50 percent contribution of green power.

11

1

The following are among the energy efficient measures identified by MassDEP and DOER. They should be considered and incorporated into the project to the greatest extent feasible.

<u>Building Orientation</u> - The DEIR must provide a detailed description of the proposed building orientation for the project and how this orientation will impact energy usage.

Energy Efficient Interior Lighting – T-8 lighting is the baseline in accordance with the MA Building Code. DOER recommends the installation of enhanced or "Super T8" lighting, T5 or metal halide lighting, and for all exit signs, LED lighting.

<u>Maximize Interior Day-lighting</u> – DOER recommends that this measure be thoroughly investigated, given that other big-box retailers have incorporated interior day lighting successfully into their retail space.

<u>Duct Insulation</u> - Duct insulation is the baseline required by code. The DEIR should note, and construction plans should reflect that all ducts would be sealed with mastic, tested, and then insulated, since duct leakage can be a major factor in energy losses.

Roof and Wall Insulation - According to DOER, providing the best building envelope possible will provide the greatest cost-effective gains in energy savings for building operations. The Proponent should evaluate using the highest R-value insulation available for the Target building.

<u>High-Efficiency HVAC Systems</u> - Compared to typical rooftop units, more efficient technologies may be feasible without a first-cost penalty. It should be noted that more efficient units provide definite economic benefits over the life of the system.

<u>Windows</u> - The DEIR should identify the U-value of the windows proposed for the Target building which should be greater than the Massachusetts Building Code for this project application.

<u>High Albedo Roofing Materials</u> – DOER recommends that the DEIR fully consider the use of high-albedo roofing materials for the proposed Target building.

<u>Third Party Building Commissioning</u> – Building commissioning is required by the MA Building Code but should be performed by a third party to ensure that the commissioning process is thorough and the energy performance of the building is maximized.

Lighting Motion Detectors, Climate Control and Building Energy Management Systems - To ensure that energy systems function as designed long term, DOER recommends that a strategy be developed for monitoring energy performance of the building, possibly through a building management system. A building energy management system can incorporate basic energy saving measures such as lighting and climate control. A system or strategy for monitoring energy performance would be expected to pay for itself by eliminating potential inefficient building energy operations, such as operating heating and cooling systems simultaneously in January. The DEIR should describe the proponent's strategy for monitoring energy performance of buildings to ensure the energy systems function as designed over the long-term.

Incorporate on-site renewable energy sources – MassDEP and DOER further recommend that a life-cycle cost analysis for renewable energy sources (solar photovoltaic, geothermal, wind) be completed in the DEIR, considering the support of subsidies through the Commonwealth Solar and Renewable Portfolio Standard (RPS) Program and federal tax credits.

The DEIR should provide a technical feasibility analysis of the installation of a solar (photovoltaic) PV system to generate energy for some of the building's functions under two scenarios: 1) construction, ownership and operation of a PV system by Target; or 2) construction, ownership, and operation of a PV system by a third party that will then enter into a long-term power purchase agreement with Target for the electricity produced by the system. It should be noted that a rooftop PV system operates even more efficiently, due to added reflectivity, when installed on a white roof.

# Construction Period Impacts

The proposed project includes the demolition of an existing industrial building which will generate construction and demolition (C&D) waste. According to the comments received from MassDEP, the Proponent's proposed demolition and construction activities must comply with both Solid Waste and Air Quality control regulations, pursuant to M.G.L. Chapter 40, Section 5. The DEIR should evaluate construction period impacts, including erosion and sedimentation, air quality and solid waste disposal and commit to measures to minimize construction impacts. MassDEP encourages the Proponent to incorporate C&D recycling activities as a sustainable measure for the project.

MassDEP has requested that the Proponent quantify the GHG impacts of materials management for the project development and future operation, which will assist in identifying and targeting GHG mitigation efforts. MassDEP has requested that the proponent commit to developing a construction waste management plan (CWMP) that fully complies with the Massachusetts waste bans and establishes a minimum reuse/recycling goal of 50 per cent. MassDEP also recommends a waste management plan for the operations phase of the project. I refer the proponent to the MassDEP/DOER comment letter for additional guidance. The DEIR should respond to MassDEP comments regarding materials management including plans for waste reduction, environmentally preferable materials use, and storage and collection of recyclables and hazardous materials.

I ask that the Proponent participate in MassDEP's Clean Air Construction Initiative (CACI) and the MassDEP Diesel Retrofit Program to mitigate the construction-period impacts of diesel emissions to the maximum extent feasible. The CACI program helps proponents identify appropriate mitigation for minimizing air pollution from construction vehicles such as retrofit of construction equipment with particulate filters and oxidation catalysts and/or use of on-road low sulfur diesel (LSD) fuel. The Proponent should consult with MassDEP during the preparation of the DEIR to develop appropriate construction-period diesel emission mitigation, which could include the installation of after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs). For more information on these technologies, see: http://www.epa.gov/otaq/retrofit/verif-list.htm.

#### Mitigation and Section 61 Findings

The DEIR should include a separate chapter on mitigation measures, which should include proposed Draft Section 61 Findings (in the form of an updated letter of commitment for the MassHighway Vehicular Access Permit) for all state permits that includes a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation, based on the construction phases of the project, should also be included.

The DEIR should include conceptual plans for the proposed roadway improvements of sufficient detail to verify the feasibility of constructing such improvements. The conceptual plans should clearly show proposed lane widths and offsets, layout lines and jurisdictions, and the land uses (including access drives) adjacent to proposed improvements. Any proposed mitigation located within the state highway layout must conform to MassHighway standards including provisions for lane, median and shoulder widths and bicycle lanes and sidewalks.

#### Response to Comments

In order to ensure that the issues raised by commenters are addressed, the DEIR should include a response to comments to the extent the comments are within are within MEPA jurisdiction and the subject matter of this scope. This directive is not intended to, and shall not be construed to enlarge the scope of the DEIR beyond what has been expressly identified in this certificate. The DEIR should include a copy of this Certificate and a copy of each comment letter received on the ENF. I defer to the Proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to questions raised.

#### Circulation

The DEIR must be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to commenters as listed below, to any state agencies from which the Proponent will be seeking state permits and approvals, and to Town of Wilmington officials. A copy of the DEIR should be made available for review at the Wilmington Public Library.

Based on the review of the ENF and the comments received, I am satisfied that the ENF meets the standard for adequacy contained in Section 11.06 of the MEPA regulations.

January 9, 2009 Date

Ian A. Bowles, Secretary

Comments received: (continued on next page)

# Comments received:

12/11/08	Massachusetts Water Resources Authority (MWRA)
12/15/08	Keith M. Saxon
12/18/08	Town of Wilmington
12/15/08	Junction Transportation Management Organization, Inc. (JTMO)
12/23/08	Department of Environmental Protection (MassDEP) - NERO
01/05/09	Executive Office of Transportation and Public Works, Massachusetts
	Highway Department (MassHighway)

IAB/NCZ/ncz EEA #14302R ENF