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May 18, 2007

# CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME PROJECT MUNICIPALITY PROJECT WATERSHED EOEEA NUMBER PROJECT PROPONENT DATE NOTICED IN MONITOR :Chelsea Peak Energy Facility :Chelsea :Boston Harbor: Mystic :13927 :Chelsea Energy, LLC :April 11, 2007

As Secretary of Energy and Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

I have received a number of comment letters that raise significant issues. Most notably, comments by the Department of Environmental Protection indicate that the project does not appear to qualify as a water-dependent use under Chapter 91. At its proposed location, the project appears unlikely to be able to be permitted. If the proponent chooses to continue through the MEPA process, it does so at its own risk.

Furthermore, the Department of Public Health does not believe that the proponent has adequately addressed potential air quality impacts of the proposed facility. The FEIR must provide additional information regarding project alternatives, air quality impacts, and commitments to mitigation as described in this Certificate.

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# Project Description

According to the DEIR, the project is designed to enhance the reliability of the regional energy supply system during peak power demand periods. The project has been proposed in response to a request from the Independent System Operator for the New England (ISO-NE) electric grid for additional quick-start resources in the Northeast Massachusetts area (NEMA). Similar to the Expanded Environmental Notification Form (EENF), the proponent asserts that the project will have minimal impact on the community and the environment through the use of Ultra-Low Sulfur Distillate (ULSD) fuel, Selective Catalytic Reduction (SCR), and a variety of mitigation measures to offset environmental impact. The proponent contends that the establishment of this type of peak energy facility in the NEMA region will achieve net regional air quality benefits by displacing existing 'spinning reserve' sources of electricity, including the Mystic 7 and Salem 4 turbines at Mystic Station in Everett and the Salem power plant.

The project involves the construction of a peak power generating facility, consisting of two combustion turbines, each capable of producing a net output of 125 megawatts (MW) (for total net output of 250 MW; gross output is 260 MW), fueled by ULSD on a 6.45-acre industrially-zoned site located on Eastern Avenue in Chelsea. The project will also consist of an approximately 34,000 square foot (sf), 62' tall equipment building, two, 20' diameter, 135' tall stacks, a 500,000 gallon above ground ULSD fuel storage tank, a 20,000 gallon above ground aqueous armonia storage tank, and a 1.000,000 gallon above ground water storage tank. The facility will contain a switchyard to connect to the existing 115kV power transmission lines located adjacent to the project site and will obtain its fuel via a pipeline connection to the Gulf Oil tank farm located to the immediate south of the project site. Additional on-site equipment will include a small warehouse and maintenance building, trailer for water purification systems, auxiliary cooling water heat exchangers (fin-fan coolers), and an onsite switchyard. Within the DEIR, the proponent has committed to limiting the facility operation to no more than 1,600 turbine hours per year. Such limits will be outlined within the air quality permit to be issued by MassDEP.

Since the filing of the EENF, the project has been modified to further minimize potential damage to the environment. These changes presented in the DEIR include:

- Building height reduced from 89.25' to 62';
- Size of on-site switchyard reduced to reduce visual impacts and impacts in wetland buffer zones;
- Main building and perimeter road relocated to eliminate impacts in riverfront resource area;
- More efficient emissions control systems added to further reduce emissions of nitrogen oxides (NOx) from 45 tons per year to 30 tons per year maximum potential annual emissions; and

• Additional noise abatement measures added to further reduce sound impacts to affected receptors.

## **Jurisdiction**

The project is undergoing review and requires the preparation of an EIR pursuant to Section 11.03 (7)(a)(l) of the MEPA regulations because the project requires a State Agency action and involves the development of a new electric generating facility with a capacity greater than 100-megawatts. The project also requires MEPA review due to the proposed alteration of 1/2 or more acres of Bordering Land Subject to Flooding (Section 11.03 (3)(b)(1)(f)). The project will require numerous State, Federal and local permits including: a Certificate of Environmental Impact and Public Need from the Energy Facilities Siting Board (EFSB); a Non-Major Comprehensive Plan Air Approval from the Massachusetts Department of Environmental Protection (MassDEP); a Chapter 91 License from MassDEP; an MCP Release Abatement Measure (RAM) Plan from MassDEP; a Permit for Above Ground Storage Tanks from the Office of the State Fire Marshal; an Order of Conditions from the Chelsea Conservation Commission, and in the case of an appeal, a Superseding Order of Conditions from MassDEP; a Section 10 and Section 404 permit from the United States Army Corps of Engineers (U.S. ACOE); a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the United States Environmental Protection Agency (U.S. EPA); and a Notice of Proposed Alteration or Construction from the Federal Aviation Administration. The project may also require a Special Permit from the Chelsea Zoning Board of Appeals; Site Plan Approval from the Chelsea Planning Board; and a Municipal Water Supply Connection and Alteration from the Chelsea Department of Public Works. The project may also require a Sewer Use and Discharge Permit from the Massachusetts Water Resources Authority (MWRA).

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 are likely to directly or indirectly cause Damage to the Environment and that are within the subject matter of required or potentially required state permits or agency actions. Given the numerous permits and agency actions (and the broad scope of the EFSB and MassDEP permit reviews), MEPA subject matter jurisdiction exists over virtually all of the potential environmental impacts of the project.

I have received many comment letters in opposition to the project with requests that I deny the project because of its potential impacts to the City of Chelsea and surrounding communities. MEPA is not a zoning process, nor is it a permitting process. Rather, it is a process designed to ensure public participation in the state environmental permitting process, to ensure that state permitting agencies have adequate information on which to base their permit decisions and their Section 61 Findings, and to ensure that potential environmental impacts are described fully and avoided, minimized and mitigated to the maximum extent feasible. Many commenters have written with thoughtful and detailed recommendations regarding additional information and analysis needed, and I appreciate all the comments received, which were helpful in refining a scope for the FEIR.

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#### SCOPE

## <u>General</u>

The FEIR should follow the general guidance for outline and content contained in section 11.07 of the MEPA regulations, as modified by this Certificate.

#### Existing Environment

The DEIR provided a description of the existing environment at the project site including: wetlands, stormwater, noise, hazardous materials cleanup, waterways, topography, geology and soils, groundwater, traffic, cultural resources, and visual setting. The DEIR also included a summary of consistency with existing planning documents and a Federal, State, and potential local permits required for the Preferred Alternative. The FEIR should include additional existing conditions documentation in compliance with 301 CMR 11.07(6)(g)(8) and (9). As required in the Certificate on the EENF, the existing conditions section of the FEIR should provide baseline data on public health conditions in order to effectively assess potential future impacts as a result of air emissions from the project.

#### <u>Waterways</u>

The project is proposed to be located on filled tidelands within the Chelsea Creek Designated Port Area (DPA). The DEIR included a history of previous c.91 licenses for the project site, a plan depicting c.91 jurisdictional areas, and a position of support that the project should be classified as "water dependent" under the c.91 regulations. Because the project is located in a DPA, the proponent is required to establish that the project meets the criteria to be classified as a water dependent industrial project under (310 CMR 9.00) in order to be eligible for a c.91 license. Under the applicable regulations at 310 CMR 9.12(2)(b)(9) and 9.12(c)(1), an electric generation facility may be considered water dependent if it can not reasonably be located at an inland site by demonstrating that it is "dependent on marine transportation." or "requires large volumes of water to be withdrawn from or discharged to a waterway."

In summary, the proponent asserts that the project is dependent upon marine transportation because: 1) as a quick start facility providing peak generation and reserve capacity for the electric grid a consistently reliable fuel source is mandatory; 2) weather conditions or market forces during winter months prevent or divert natural gas or fuel oil from being used for electricity generation purposes to those used for home heating and similar uses; and 3) fuel must be delivered via marine transportation in order to ensure winter fuel delivery reliability.

MassDEP comments question the project's need to have fuel delivered by ship, to provide supply reliability in winter, when the stated need for additional reserve capacity in NEMA for 2009-2010 is only in the summer. In addition, MassDEP notes that the preferred

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alternative includes a 500,000 gallon on-site fuel storage tank, capable of supplying sufficient fuel to operate both turbines over 22 continuous hours. That run time is approximately one-half of the average run time for an existing peaking facility for all of 2006, which does not reflect the additional reliability provided by the NSTAR 345kV transmission line. MassDEP concludes that there is no information provided on the operating history of the grid that suggests that the project's generation capability based on stored fuel would be insufficient to be considered by ISO-NE to be a source to support system reliability. MassDEP comments therefore note serious reservations with an interpretation of the c.91 regulations that would grant the water dependent status to a use which, at best, may be dependent on marine transportation for only a small portion of the year in extreme and unusual circumstances.

MassDEP believes that the proponent's contention of marine dependency implies that only peaking facilities sited on tidelands in order to gain direct access to marine supplied fuel will be capable of meeting the electric system's future peaking and reliability needs. MassDEP does not believe that that implication is supported by ISO-NE, the fleet of existing capacity, or current proposals for new capacity.

Based on its analysis, MassDEP does not believe that the information contained in the DEIR, or additional information that may be provided in the FEIR, will support a finding of water dependency.<sup>1</sup> MassDEP states that it appears unlikely that the proponent will be able to demonstrate that the project's operational objectives with regard to peak period capacity or system reliability cannot be reasonably achieved at either an upland site or by reliance on fuel delivered by truck. If the proponent chooses to proceed with the preferred alternative, it therefore does so at risk of denial of required permits on completion of MEPA review.

# Alternatives

The DEIR does not fully describe and compare the alternatives as required by the Certificate on the EENF. Therefore, regardless of which alternative the proponent chooses to advance in the FEIR, the accompanying alternatives analysis must meet the criteria stated in the MEPA regulations for assessment of project alternatives. The alternatives analysis should describe the environmental impact of each alternative, including the no-build alternative, and their ability to meet the objectives of the project. The alternatives analysis must be structured in such a manner that allows for a comparative analysis of environmental impacts across alternatives in accordance with 301 CMR 11.07(6)(f)(4) and 11.07(6)(h). Both quantitative and qualitative data should be used for this comparative analysis. Each alternative should include existing and proposed conditions plans, a discussion of consistency with project siting criteria and a pointed discussion of impacts to each environmental topic subject to MEPA jurisdiction. I remind the proponent that the information provided for each alternative should include anticipated air quality impacts and implications on public health.

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<sup>&</sup>lt;sup>1</sup> The proponent filed comments on May 16, 2007 rebutting MassDEP's analysis and conclusions. I acknowledge the proponent's comments, and note that MassDEP will make its formal determination regarding water-dependency during the c.91 permitting process, if the proponent chooses to proceed to with the preferred alternative.

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The upland example analyzed in the DEIR (using a site in Everett) appears to demonstrate the feasibility of an alternative, permittable site. MassDEP has concluded, and I concur, that the DEIR did not demonstrate that operation of a peaking plant at this site is infeasible. If the proponent chooses to advance the alternative upland site described in the DEIR, the FEIR must include a detailed description of the alternative site and the impacts of siting the facility at the location, pursuant to 301 CMR 11.07. If the upland site alternative is advanced, the proponent should meet with MEPA Office staff to discuss filing expectations and content prior to submission of the FEIR.

As requested in the Certificate on the EENF, the FEIR should project operating hours by spinning reserve units and peak reliability expectations for the year 2015 (as recommended by MassDEP) based only on the NSTAR 345kV line. The same information plus related net emissions benefit expectations should be identified for a scenario that incorporates the proposed project.

MassDEP concurs that it appears to be economically infeasible to secure a supply of natural gas as an alternative to ULSD proposed as the preferred alternative. As requested by MassDEP, the FEIR should contain a complete economic analysis, pursuant to the natural gas supply issue in its 310 CMR 7.02 plan allocation submitted to MassDEP.

## Cumulative Impact

The FEIR must continue to assess (in quantitative terms, to the maximum extent practicable) the direct and indirect potential environmental impacts from all aspects of the project that are within MEPA jurisdiction. This assessment should include both short-term and long-term impacts for all phases of the project and cumulative impacts of the project, any other projects, and other work or activity in the immediate surroundings and region. As described elsewhere in this Certificate, the FEIR should include a cumulative impact assessment that specifically addresses the public health impacts associated with the quality of air emissions from the proposed project.

The proponent included an impact analysis of the project to support the premise that it will contribute to improvements to regional air quality. The underlying premise of the claim to benefits is that power plants in the NEMA area are being operated at environmentally and economically inefficient modes solely for the purpose of providing reserve capacity that could be better met by the quick start capability of the project. The analysis included comparisons of air emissions in NEMA with and without the Chelsea Energy Project, and further evaluated the impact of the new NSTAR 345kV line (Phase I and II). The conclusion of this analysis presented in the DEIR is that in the year 2009, the project will have the effect of further reducing the total operating hours and spinning reserve operations of the Mystic 7 and Salem Harbor 4 units beyond reductions achieved through the addition of the NSTAR 345kV line alone.

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Concerns have been expressed regarding the validity of the assumptions and accuracy of the predictions presented in the DEIR in relation to the future regional air quality emissions analysis. The FEIR should provide refined data in accordance with the MassDEP comment letter as discussed below. The FEIR should conduct a sensitivity analysis that would identify the most sensitive variables in terms of emission outputs and generate a range of emission outputs based on appropriate confidence levels. Furthermore, the model should evaluate whether there would be significant changes to Chelsea's (and nearby affected communities) air quality at sensitive receptors based on the regional projections.

The FEIR should include supplemental data related to the potential project impact on public health. The Massachusetts Department of Public Health (DPH) states that the results generated from the SCREEN3 modeling presented in the DEIR air quality analysis do not provide sufficient information for assessing the public health impacts of the proposed facility. DPH recommends that refined dispersion modeling using the AERMOD model should be conducted to better characterize the distribution of exposures associated with the operations of this facility. I expect the FEIR to contain refined air quality modeling that is responsive to both MassDEP and DPH comments.

The proponent has indicated, and should confirm in the FEIR, that upon consultation with DPH, sufficient data sets are presently unavailable for use with regards to a study of the potential health effects from emissions generated by activities at Logan Airport. If data becomes available from this report prior to the preparation of the FEIR, the proponent should use these data in air modeling studies associated with emissions within the project vicinity. Furthermore, as part of this analysis, the connection between this existing use and the potential for project impacts on air quality characteristics should be discussed in the FEIR.

## Air Quality

The DEIR presented an air modeling analysis based on the assumption of a 1,600 hour per year operational limit for the facility. Additionally, it appears that the proponent has also assumed, for modeling purposes, a maximum 8-hour operating time per day (or 24-hour period). Also, the Preferred Alternative assumes fuel supply solely from the adjacent Gulf Oil facility, thereby eliminating the need for numerous truck traffic trips to the project site. The FEIR must clarify these assumptions and commit to these operating limits and delivery methods within its draft Section 61 Findings. The FEIR should provide information on the energy market to support the assumption that a peak facility can effectively operate and is financially feasible within the current and future (through 2015) energy market with these operational limitations. The proponent should continue to work with MassDEP's Division of Air Quality to demonstrate that the project meets the requirements for MassDEP's Non-Major Comprehensive Plan Approval pursuant to 310 CMR 7.02 prior to project construction.

I have received numerous comments questioning the validity of the air quality modeling and subsequent analysis. MassDEP has indicated in its comment letter that it believes that the monitoring stations from which data were acquired to establish background concentration of

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pollutants were appropriate. Based upon the modeling conducted for the DEIR, the proponent has concluded that the project's impacts will fall below the Significant Impact Levels (SILs) established by the U.S. EPA to protect public health. Furthermore, the proponent has concluded that, when considered in combination with impacts from existing sources, as determined from background monitoring data approved by MassDEP, the project would not cause or contribute to any exceedances of the National Ambient Air Quality Standards (NAAQS) criteria pollutants.

Most concerns regarding modeling methodologies, as confirmed by the MassDEP comment letter, focused on the proponent prorating EPA scaling factors associated with the SCREEN3 model to generate maximum estimated impacts for 3-hour, 8-hour, 24-hour, and annual average periods. Prorating of EPA scaling factors is not an accepted procedure for quantifying maximum pollutant impacts for less than continuous operation without a technically sound justification. Therefore, as noted above, the FEIR must include a revised air quality model and analysis that presents a revised emissions profile as recommended by MassDEP and DPH comments. The proponent should consult directly with MassDEP and DPH in developing appropriate modeling assumptions and methodology prior to the preparation of models.

The air quality analysis provided in the FEIR must include a clear explanation and supporting data of what scaling factors were applied, how various modeled concentrations were derived based upon raw output from new modeling, and the relationship of emissions concentrations to applicable SILs. Since a revised air quality analysis will be required, the FEIR should again demonstrate that the project will not cause or contribute to any exceedances of NAAQS criteria pollutants when a refined model is performed without prorating U.S. EPA scaling factors.

The DEIR included a Top-down Best Available Control Technology (BACT) Analysis for the Preferred Alternative and MassDEP has stated in its comment letter that the information provided adequately addresses BACT for simple cycle peaking power projects. As part of the required 310 CMR 7.02 plan application filing the proponent will be required to propose the top-BACT case for all criteria pollutants. The DEIR indicates that by limiting operation of the facility to no more than 1,600 total operating hours per year, maximum potential annual emissions will be limited to the following:

Pollutant	Maximum Potential Annual Emissions (TPY)
Nitrogen Oxides (NO <sub>x</sub> )	30
Particulate Matter (PM 10 and PM 2.5)	37
Carbon Monoxide	12
Volatile Organic Compounds (VOC)	5
Sulfur Dioxide (SO <sub>2</sub> )	4

The DEIR included an air toxics analysis of the project's predicted worst-case emissions, including U.S. EPA-approved air quality computer dispersion modeling results for the applicable non-criteria air pollutants (i.e., metals, ammonia, sulfuric acid, and formaldehyde). MassDEP has concurred that the predicted, worst-case impacts for the proposal's air toxics emissions fall

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below MassDEP's Allowable Ambient Limits (AALs) and Threshold Exposure Limits (TELs) for all applicable air toxics emissions.

MassDEP typically handles the issue of computer dispersion modeling of a complete ammonia storage tank failure and subsequent accidental ammonia releases (related to storage of <20percent ammonia in water solution to be used in the project's SCR NOx air pollution controls) as part of its review of the required 310 CMR 7.02 plan application. However, due to concerns raised during review of the project's DEIR, MassDEP requests that the project proponent conduct this assessment as part of the FEIR. The proponent should consult MassDEP if they have specific questions regarding this assessment.

Modeling within the DEIR assumed that all  $PM_{10}$  was also  $PM_{2.5}$ , thereby assuming a worst-case scenario in light of limited data and specific air quality modeling techniques for  $PM_{2.5}$ . MassDEP did not cite any concerns with this portion of the air quality analysis methodology.

The FEIR should address issues raised by DPH regarding the potential health impacts associated with exposure to diesel exhaust, ammonia slip, and ultrafine particles (UFPs).

The DEIR provides a brief summary of the relationship of the proposed project to the newly established Regional Greenhouse Gas Initiative (RGGI). The proponent notes that as the RGGI Model rule that lays out a framework for potential future regulations has not been approved by MassDEP to date, specific requirements and how they apply to the project are uncertain. The DEIR estimates that Chelsea Peak Energy's annual potential CO2 emissions would total less than 1% of the Massachusetts emissions cap under RGGI. The DEIR fails, however, to quantify this amount. The FEIR should include projections of annual carbon dioxide emissions in a non-percentage format.

## <u>Noise</u>

Due to a revised Preferred Alternative that modified the site layout and building dimensions, the DEIR included a revised noise modeling study that reflected changes since the EENF. The noise analysis consisted of: baseline measurement procedures and current ambient sound levels in the project vicinity, proposed conditions and potential impacts, consistency with MassDEP's Noise Policy and Chelsea's Noise Ordinance, a noise BACT analysis, and mitigation measures during both plant operation and the construction period.

The DEIR clarified the location of each sensitive receptor site and added an additional analysis point to evaluate the project's noise impact on the nearest receptor southeast of the site, across the Chelsea River. The DEIR outlined specific noise-related mitigation measures and provided a cost-analysis of each potential mitigation scenario. Mitigation measures should be clearly defined in the FEIR in accordance with the criteria outlined in the "Mitigation" section of

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this Certificate. MassDEP has indicated that as presented in the DEIR, the project is in compliance with the MassDEP Noise Policy.

## Stormwater

The DEIR included an existing and proposed conditions analysis of the Preferred Alternative including drainage patterns, proposed Best Management Practices (BMPs), and discharge points. Site plans conveyed the relationships of on-site storage tanks to stormwater BMPs and infrastructure. The DEIR narrative outlined how the project will be designed in accordance with the MassDEP Stormwater Management Policy (SMP), including avoidance of impact to wetland resource areas and maintenance or improvement to stormwater quality and quantity in a post-construction condition.

MassDEP has indicated in its comment letter that the Chelsea River tidal flats contain shellfish growing areas, which are identified as critical areas for the purposes of compliance with the SMP. The FEIR should include updated stormwater management calculations and design plans to demonstrate compliance with SMP Standard 6, requiring treatment of one inch of runoff in lieu of the capture of one-half inch of runoff as presented in the DEIR. The proponent is also reminded that a source control and pollution prevention plan is required for compliance with the SMP. This source control and pollution prevention plan should specify that snow disposal be performed in accordance with the MassDEP Snow Disposal Guidelines.

While the DEIR states that a pollution prevention plan will be prepared prior to construction and outlines construction period erosion and sedimentation controls, the FEIR should demonstrate that the project will be constructed and operated in a manner consistent with the anticipated NPDES Construction General Permit and more specifically, Chelsea's Storm Water Program under the NPDES Storm Water General Permit. Furthermore, the FEIR should explicitly address how operation of the stormwater management system upon completion of construction will function in a manner consistent with the Activity and Use Limitation (AUL) and will not contribute to a deterioration of on-site subsurface conditions. The FEIR should address the concerns listed in the MassDEP comment letter regarding fuel and ammonia storage tanks and their relationship to the site stormwater management system.

## Wetlands

The project site is located adjacent to the Chelsea River and contains expansive areas of land subject to coastal storm flowage, as well as limited area of Salt Marsh, Coastal Bank, and Riverfront Area. The Chelsea River is tidally influenced within the reach adjacent to the project site. The DEIR included improved plans that clarified the location of each wetland area regulated under the Wetlands Protection Act (WPA). The DEIR characterized each wetland resource area and riverfront area according to 310 CMR 10.00 and provided a measurement of impact to each wetland resource area under the Preferred Alternative.

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The revised Preferred Alternative presented in the DEIR has avoided additional wetland impacts than that reviewed under the EENF by reducing the development area and pulling the development away from the Riverfront Area. As recommended by MassDEP, I encourage the proponent to further refine the site layout to remove the ammonia tank containment area in its entirety from wetland resource area buffer zones, and present a modified layout in the FEIR. The DEIR addressed compliance of project construction with applicable Performance Standards for on-site wetland resource areas. It should be noted that some wetland resource areas did not have Performance Standards under the WPA Regulations (310 CMR 10.00). The DEIR also addressed the significance of the wetland resources on site, including public and private water supply; riverfront areas; flood control; storm damage prevention; fisheries; shellfish; and wildlife habitat, as they relate to the Preferred Alternative.

Due to the nature of the proposed use and its location within Land Subject to Coastal Storm Flowage (LSCSF), I strongly encourage the proponent to consider providing additional information regarding the potential offsite impacts associated with filling on the project site, including changes in flood storage capacity, and alteration of existing flooding and drainage patterns.

The DEIR provides a discussion of construction mitigation, erosion control measures and other BMPs to reduce impacts to wetland resource areas during the construction period. Impacts associated with the removal and installation of stormwater outfalls was quantified and mitigation measures identified to reduce impact to wetland resource areas during the temporary alteration period. The FEIR should include additional information as requested in the MassDEP comment letter related to stormwater outfalls, impact of ongoing maintenance activities on wetland resource areas, and site grading activities in the vicinity of coastal bank and intertidal resource areas. The project does not appear to require replication of wetland areas in accordance with local or State wetland regulations and would be exempt from the requirements for the Riverfront Area, pursuant to 310 CMR 10.58(6)(i).

#### Water Supply

The DEIR stated that the project will be supplied with water via the municipal water system which is operated by the Massachusetts Water Resources Authority (MWRA) and maintained by the City of Chelsea Water Department. Water will be required by the project turbines to cool the combustion process and minimize emissions of NO<sub>x</sub>. The proponent has estimated maximum water consumption of the facility to be approximately 217,000 gallons per day (gpd), based upon a daily operation schedule of four to six hours per day. The maximum water consumption rate for both turbines is 900 gallons per minute (gpm). Water used on-site will be stored in a one million gallon storage tank, which will gradually be replenished from water drawn from the municipal water system. This water is treated by an on-site water purification system, which is capable of handling up to 400 gpm.

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The FEIR should confirm that sufficient water supply is available to service the project based on City allotments or permitting thresholds, and evaluate water consumption, availability, and storage tank replenishment capabilities, during a period of extended operation (i.e. the longest permitted operational duration).

#### <u>Wastewater</u>

The DEIR stated that minimal amounts of sanitary waste will be discharged to the MWRA sewer system that runs along Eastern Avenue near the project site, and industrial wastewater will be collected in an underground storage tank and trucked off for disposal. Industrial wastewater will be generated on-site through process related operations or equipment cleaning. Industrial wastewater will be shipped off-site to an appropriate disposal facility. Discussions with the proponent have indicated that industrial wastewater generation will be approximately 3,000 gallons per year, which will be removed off-site to an appropriate disposal facility in one truck trip per year. This estimate is based upon the maximum plant operating hours of 1,600 hours per year. The FEIR should confirm industrial and sanitary wastewater generation estimates and treatment locations.

## Hazardous Waste

Under existing conditions and subject to the provisions of the current AUL, the property may not be used for residential, agricultural, or recreational purposes. The DEIR included a copy of the existing Activity and Use Limitation (AUL) applicable to the project site and a draft Release Abatement Measure Plan (RAM). The RAM outlined a soil management plan, dewatering requirements and worker safety protocols during the construction period. As required by the AUL, a Health and Safety Plan and Soil Management Plan will be prepared by a Licensed Site Professional (LSP) prior to construction at the project site. Construction, operation and maintenance activities must be conducted in accordance with these plans; the DEIR included requirements and performance standards for each of these plans, as well as groundwater management. In accordance with the proposed Environmental Monitoring Plan and 310 CMR 40.0444(1)(E), air monitoring will be performed during construction to ensure that these activities do not pose a significant risk to construction workers or nearby receptors given the history of hazardous materials on-site. Dust and air monitoring procedures were outlined in the DEIR as part of the proposed Requirements for Health and Safety Plan within the draft RAM.

The project site will feature hazardous material storage areas provided with secondary containment designed to hold the contents of the largest container. Exterior storage tanks and equipment will be contained within berms designed to hold 110 percent of the maximum quantity of material stored in each location. Given the nature of hazardous materials that will be stored and delivered to the project site, as well as adjacent industrial uses and sensitive receptors, I am requesting that the FEIR include a plan outlining what site design and safety measures will be incorporated into facility, storage and delivery operations. The FEIR should outline an

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Emergency Response Plan developed in coordination with the City of Chelsea and adjacent communities to ensure effective means are available to mitigate any environmental or human health impacts that may be associated with a potential spill or incident involving hazardous materials. Safety evaluations should address the relationship of hazardous materials on-site with adjacent uses (including the Gulf Oil storage facility, the Glyptal facility and the Burke Elementary School). The Emergency Response Plan and safety protocols should specifically address the use of ammonia on-site, as well as other regulated chemicals, and how on-site operations will be conducted in accordance with applicable local, State and Federal regulations.

# Traffic

The DEIR indicated that upon completion, the project is anticipated to result in a minor increase in traffic (12 vehicle trips per day (vtd)), as a result of daily trips from the one to two employees on site for each shift. Additional traffic trips will be generated by trucks for the delivery of chemicals (i.e. ammonia), or the removal of industrial wastewater that will be collected in tanks on site. The proponent has estimated these additional truck trips to be approximately one to two trucks per week, on average. Deliveries of ammonia to the site will occur less than 12 times per year based on the maximum permitted hours of facility operation.

During the 14-month construction period, project-related traffic has been estimated to crest during the ninth month at 230 vehicles trips per day (115 in the morning, 115 in the evening). The construction period and operational period traffic impacts are not anticipated to have negative impacts on the capacity or functionality of nearby roadways or intersections. No structural improvements appear necessary to accommodate the Preferred Alternative.

The DEIR included a statement by the proponent that operation of the project is not expected to require any additional vessel traffic in the Chelsea River. The proponent states that since nearly all the oil supplied to regional energy peak facilities comes from the tank farms along the Chelsea River, if the project is not constructed, the energy it would have supplied will be provided by other existing peak energy resources, nearly all of which run on oil. Therefore, the proponent concludes that the net change in vessel supply traffic is unchanged, with or without the project. Given that project will increase demand for ULSD beyond existing conditions, I believe that this assumption may be flawed. Therefore, I am requesting that as part of the FEIR, the proponent provide an analysis of the anticipated increase in fuel tanker trips within the Chelsea River to the Gulf Oil tank farm based upon the maximum amount of fuel needed to operate the plant at its maximum permitted capacity (1600 hours). This analysis should be compared to existing conditions (i.e. the No-Build Alternative), to allow for comparisons to be made about potential yearly increases in vessel traffic along the Chelsea River.

The FEIR should clarify the distribution of construction traffic versus delivery routes during periods of operation for delivery of hazardous materials and the removal of industrial wastewater. I encourage the proponent and the City of Chelsea, as well as local residents, to

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work together to establish these designated traffic routes. Any proposed truck distribution route should concentrate on using major thoroughfares (i.e., Eastern Avenue, or other suitable route) and should avoid use of residential roadways, and roadways abutting schools and open space recreational areas. Commitments to these proposed construction and operational traffic routes should be outlined within the mitigation section of the FEIR.

#### Construction Management

The DEIR included a discussion of potential construction related impacts associated with the project including temporary and permanent impacts to wetlands, traffic, noise, and stormwater management. The DEIR outlined a commitment to the use of On-Road Low Sulfur Diesel (LSD) fuel in construction equipment, and provided a soil management plan that addressed mitigation measures associated with dust and noise impacts during the construction period.

The proponent must supplement the mitigation measures outlined in the DEIR with the preparation of a National Pollutant Discharge Elimination System (NPDES) Construction General Permit and an associated Stormwater Pollution Prevention Plan (SWPPP) prior to the commencement of construction. The SWPPP must clearly define how erosion and sedimentation controls will be employed on site to minimize impact to sensitive resource areas during the construction period.

Given the concern about local air quality within the community, I strongly encourage the proponent to make a full commitment in the FEIR to require contractors to retrofit diesel powered equipment with emissions controls, such as particulate filters or traps, in addition to the commitment made to use ULSD fuel. The FEIR should clarify proposed construction traffic trucking routes, and outline how the proponent will manage idling of trucks or other equipment used on site.

#### **Mitigation**

The Certificate on the EENF required that the DEIR contain a separate chapter on mitigation measures and Draft Section 61 Findings for all state permits. The DEIR presented a summary table of mitigation measures identifying State Agency actions, mitigation actions, and schedule. The FEIR should expand this section to include draft language for use by State Agencies to be incorporated into each State permit required for the project. The proponent must refine efforts to reduce emissions outlined in Section 5.6 of the DEIR and fully commit to on-site and off-site air quality mitigation measures that would lead to concrete, local pollution reductions within the immediate area of the project site. This Section must include a clear commitment to mitigation, an estimate of the individual costs of each proposed mitigation. The FEIR should provide a schedule for the implementation of the mitigation, based on the construction phases of the project. The Section 61 Findings will be included with all state

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## **DEIR** Certificate

permits issued for this project, and will be considered binding upon the proponent as mitigation commitments.

Additionally, I encourage the proponent to include within this section of the FEIR a summary of additional mitigation measures proposed outside the scope of required State agency actions (i.e. traffic mitigation during construction, establishment of safety plans, etc.), or those focused specifically on mitigating public health impacts. I expect that those mitigation measures presented in the FEIR that may require coordination with the City of Chelsea, MassDEP or DPH, will be presented upon completion of consultation with relevant parties to ensure feasibility and practicality.

## Response to Comments / Circulation

The FEIR should include a copy of each comment received in response to the DEIR. Additionally, the FEIR need not reproduce every form letter, but should include one "template" from each form letter category. The FEIR should respond to the substantive comments received, including the substantive issues raised in the form letters, to the extent that it is within MEPA jurisdiction. The proponent should circulate a hard copy of the FEIR to each state agency from which the proponent will seek permits or approvals. The proponent should also circulate a copy of the FEIR to those submitting individual written comments.

To save paper and other resources, I will allow the proponent to circulate the FEIR in CD-ROM format to individual commenters, although the proponent should make available a reasonable number of hard copies available on a first come, first served basis, to accommodate those without convenient access to a computer. In the interest of broad public dissemination of information, the proponent should send a notice of availability of the FEIR (including relevant comment deadlines, locations where hard copies may be reviewed and electronic copies obtained, and appropriate addresses) to those who submitted letters. This notification may be made by email in the instance that e-mail addresses are available in association with many commenters. A hard copy of the FEIR should be made available for review at the Chelsea, Revere, East Boston, and Everett Public Libraries.

<u>May 18, 2007</u> Date

Ian A. Bowles

# Comments Received:

04/17/2007	John Markley
04/23/2007	Sylia Lorin
04/23/2007	David Prusky (2 letters)
04/27/2007	Dan, Sarah and Abby Cronin
05/01/2007	Richard Oliveras
05/01/2007	Martha Santana
05/01/2007	Kelvin Hernadez
05/01/2007	Gladis Yanes
05/01/2007	Jonathan Luna
05/01/2007	Jose Ulloa
05/01/2007	Magno Garcia
05/01/2007	Xexiel Mejia
05/01/2007	Doug Garcia
05/01/2007	Jill Arnold
05/01/2007	Jan Summa
05/01/2007	Cynthia Matias
05/01/2007	Michael Chung
05/01/2007	Brenda Rosa
05/01/2007	Stephanie Overra
05/01/2007	John Dee
05/01/2007	Rosa Matias
05/01/2007	Diane Washington
05/01/2007	Asianna Milord
05/01/2007	Elisa Vargas
05/01/2007	Wendy Hernandez
05/01/2007	James O'Neill
05/01/2007	Iris Lopez
05/01/2007	Kimberly Mant
05/01/2007	Jean Welson
05/01/2007	Lyweth Martin
05/01/2007	Maria Arriara
05/01/2007	Sarah Alvarado
05/01/2007	Mary Sageth
05/01/2007	Anne Ciahurri
05/01/2007	Gilbert P.
05/01/2007	Mirta Martinez
05/01/2007	Elmer Arriaza
05/01/2007	John Lopez
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05/01/2007	Besaida Comez
05/01/2007	Elaine Patt
05/01/2007	Cheryl Smith
05/01/2007	Michael Molloy
05/01/2007	Andrew Egarman
05/01/2007	J. Targi
05/01/2007	William McCullen
05/01/2007	Marie Boyer
05/02/2007	State Representative Robert DeLeo (19 <sup>th</sup> Suffolk District)
05/07/2007	Massachusetts Office of Coastal Zone Management
05/09/2007	Rob Walling
05/09/2007	Diane Paxton
05/09/2007	Melanie Armstrong
05/09/2007	Adam Schuster
05/09/2007	Paul Teixeira
05/09/2007	Sarah and Jason Forney
05/09/2007	T.J. Hellmann
05/10/2007	State Representative Kathi-Anne Reinstein (16 <sup>th</sup> Suffolk District)
05/10/2007	Nadav Carmel
05/10/2007	LJ Kugler
05/10/2007	Rebekah Keating
05/10/2007	Darlene Lombos
05/10/2007	Kalila Barnett
05/11/2007	Massachusetts Department of Public Health
05/11/2007	Massachusetts Department of Environmental Protection - NERO
05/11/2007	State Senator Jarrett T. Barrios (Middlesex, Suffolk & Essex District)
05/11/2007	Roseann Bongiovanni - President, Chelsea City Council
05/11/2007	City of Chelsea Board of Health
05/11/2007	Forbes Park, LLC
05/11/2007	Alternatives for Community and Environment (ACE)
05/11/2007	Urban Ecology Institute
05/11/2007	Conservation Law Foundation (CLF)
05/11/2007	Gail Miller
05/11/2007	Mary Ellen Welch
05/11/2007	Karen Maddalena
05/11/2007	Mrs. Francesca Runciman
05/11/2007	Rosa Diaz (2 letters)
05/11/2007	Jodi Melichar
05/11/2007	Jeannette Bonner
05/11/2007	Chrystal Bonner
05/11/2007	Dawn Goracy
05/11/2007	Ali Lynch
05/11/2007	Elizabeth Dilling

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05/11/2007	Anne McDonnell
05/11/2007	Patrice Riley
05/11/2007	Mimi Loss
05/11/2007	Deirdre Dirkman
05/11/2007	Kate DeFronzo
05/11/2007	Norma Amaro
05/11/2007	Krystle Page
05/11/2007	Kevin Gask
05/11/2007	Abigail Caban
05/11/2007	jkilmartin305
05/11/2007	Dr. Terry Kidner
05/11/2007	Olga I. Soto
05/11/2007	Patricia Buchanan Diskard and Daharta Zanaki
05/11/2007	Richard and Roberta Zonghi
05/11/2007	John Kennard
05/11/2007	Yesaeuia Alfin
05/11/2007	Neenah Estrella-Luna
05/11/2007	Karen Maddalena on behalf of the Jeffries Point Neighborhood Assoc.
05/11/2007	Yaritza Gonzalez
05/11/2007	Madeleine Kangsen Scammell Laura Crandall
05/11/2007	Carlos Lainez
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05/11/2007 05/11/2007	Johnny Chanella Brian Mata
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05/11/2007	Jovanny Munuz Rodolfo Ordonez
05/11/2007	Arselia Lopez
05/11/2007	Maria Lopez
05/11/2007	Sabrina Olson
05/11/2007	Megan Williams
05/11/2007	Beatriz Ruiz
05/11/2007	Hecter Marales
05/11/2007	Maria Umana
05/11/2007	Izanar Ganea
05/11/2007	Ashey Jimenez
05/11/2007	Ling Do
05/11/2007	Karen Sayedi
05/11/2007	Joshua Maldonado
05/11/2007	Bianchy Llanos
05/11/2007	Tad Rios
05/11/2007	David Williams
05/11/2007	Josh Rubiera
05/11/2007	Jairo Estrada
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05/11/2007 Catharine McYahey 05/11/2007 Jennifer Rosa 05/11/2007 Jenicia Martinez 05/11/2007 Catherine Rodriguez Adan River 05/11/2007 Maysa Getista 05/11/2007 05/11/2007 Yecsit Rivera 05/11/2007 Nina Scott 05/11/2007 James Chand 05/11/2007 Alberto Yarris Joseph Valentin 05/11/2007 05/11/2007 Gerardo Sarminto 05/11/2007 Iszmin Sanclemente 05/11/2007 Jesabel Galdamez 05/11/2007 S. Hernandez 05/11/2007 Maria Ramos 05/11/2007 Chris Bondeck 05/11/2007 Pedro F. **Daisy Gorrez** 05/11/2007 05/11/2007 Claudia Diaz Larry Thomas 05/11/2007 Gorman Antonia Romero 05/11/2007 Lisbey Ospina 05/11/2007 Erica Downey 05/11/2007 Karthary Sanclemente 05/11/2007 05/11/2007 Jonathan Collado Ceilia Mareliarro 05/11/2007 05/11/2007 Devsi Melgar Donia Cordoba 05/11/2007 Dolores Mejia 05/11/2007 05/11/2007 Maria Vargas 05/11/2007 Edgar Goirre Felix Bezeredy 05/11/2007 Dana Rener 05/11/2007 05/11/2007 Gloria Romero Elaine Martino 05/11/2007 Yeidy Oteeo 05/11/2007 Yeideliz Rodriquez 05/11/2007 05/11/2007 Angel Rodriquez Ann Nieminyh 05/11/2007 05/11/2007 Karina Anas Eric Galdames 05/11/2007 05/11/2007 Rosa Moscat

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05/11/2007 Marisa Solano 05/11/2007 L. Lopera 05/11/2007 Elizabeth Jose 05/11/2007 Joseph Gaeta Jodi D. Fejario 05/11/2007 Joshua Roldan 05/11/2007 05/11/2007 Carlos R. 05/11/2007 Kevin Medina 05/11/2007 Milton Campus 05/11/2007 Brando Antonio 05/11/2007 Luis Serrarreo 05/11/2007 Maria Fernanda Tula 05/11/2007 Remberto Castro 05/11/2007 **Carlos Pembertiny** Mohamed Soltani 05/11/2007 05/11/2007 Edar Fuentes Untony O'hanan 05/11/2007 05/11/2007 Sonia Galdomez 05/11/2007 Joliet Moo 05/11/2007 Sandy Bonilla Alex Nazzaro 05/11/2007 05/11/2007 Susana Ramos 05/11/2007 Rene Lemus 05/11/2007 Jonathan Yepes Sebastian Garcia 05/11/2007 05/11/2007 Ruben Sosa Henry Henriquez 05/11/2007 Stephen Mensah 05/11/2007 05/11/2007 Nicholas R. 05/11/2007 Rajon P. **Emily Webster** 05/11/2007 05/11/2007 Martha Inaldarnez 05/11/2007 Jonathan **Erica** Downey 05/11/2007 05/11/2007 Norma Safaro 05/11/2007 Tyree Marshall 05/11/2007 Elizabeth Bonche Kathryn Banks 05/11/2007 05/11/2007 **Ruth Diaz** 05/11/2007 Andrea Soto 05/11/2007 Fatima Azzahra Daniel Dicela 05/11/2007 05/11/2007 Samantha Kirby

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05/11/2007 Carlos Restrepo 05/11/2007 Leon Yepez Daniel Aguirre 05/11/2007 05/11/2007 Antonio Mira Branelo Sepulleda 05/11/2007 Steven Restrepo 05/11/2007 Eric Galdames 05/11/2007 05/11/2007 Anthony Lemus William Pena 05/11/2007 05/11/2007 Jhon Roic 05/11/2007 Andres Oeouno Santo Rodriquiz 05/11/2007 **Rudilma** Ponce 05/11/2007 05/11/2007 Nuri Garcia Kenio Polareo 05/11/2007 05/11/2007 Farin A. 05/11/2007 Sam Colon 05/11/2007 Albert Zuups Nodin Putino 05/11/2007 05/11/2007 Rosa Martinez 05/11/2007 Samuel Umana 05/11/2007 Fernando Chacess 05/11/2007 Erica Betancur 05/11/2007 Wilmer Morales 05/11/2007 Martha Roges 05/11/2007 Juan Monoz 05/11/2007 Maria 05/11/2007 Alana Ponte-Capellan 05/11/2007 Jinny Lisset 05/11/2007 Liliana Morales 05/11/2007 Daniel Baldor 05/11/2007 Sharon Romeo 05/11/2007 Mario Alfaro 05/11/2007 Cathy Vasquez Susan M. Salie 05/11/2007 05/11/2007 Maritsa Lopez Harold Gregory 05/11/2007 Steven D'Angelo 05/11/2007 Omar Restrepo 05/11/2007 05/11/2007 Alexandro Luna James McConnell 05/11/2007 05/11/2007 Claudia Perez Patricia Fiorelli 05/11/2007

# **DEIR** Certificate

- 05/11/2007 Dorothy Allen
- 05/11/2007 Joseph Yacus
- 05/15/2007 Massachusetts Water Resources Authority (late comment)
- 05/16/2007 Metropolitan Area Planning Council (late comment)
- 05/16/2007 Keegan Werlin, LLP (late comment)

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