

Cricket Valley Energy



*Town of Dover Special Use Permit
Code Conformance Assessment*

Corporate Office:
31 Milk Street, Suite 1001
Boston, MA 02109
617-456-2210

Community Office:
5 Market Street
Dover Plains, NY 12522
845-877-0596

Contents

Introduction	3
1. Land Use Districts.....	4
1.1. Industrial/Manufacturing Land Use District.....	5
1.2. Resource Conservation Land Use District	5
1.3. Floodplain Overlay District.....	5
1.4. Stream Corridor Overlay District.....	6
1.5. Aquifer Overlay District.....	8
2. Off-Site Impacts	14
2.1. Noise	14
2.2. Dust	17
2.3. Odors.....	19
2.4. Solid Waste	20
2.5. Glare.....	22
2.6. Vibration.....	22
2.7. Heat.....	23
2.8. Electromagnetic Fields.....	23
3. Traffic	24
4. Accessibility to Emergency Vehicles	27
5. Impact on Public Water, Drainage, Sewer, or Municipal Facilities	27
6. Water and Natural Resources – Aquifer Protection	28
7. Site Suitability	29
8. Compatibility with Surrounding Land Use	30
9. Buffer from Residential Properties	31
10. Housing Availability.....	31
11. Site Plan Criteria.....	32
12. Residential Districts.....	36
Conclusions; Request for approval	36

INTRODUCTION

This submission supplements and amends Cricket Valley Energy's (CVE's) Special Use Permit Application, dated November 4, 2009, to the Town Board of the Town of Dover (Town Board) for Special Use Permit approval to develop a state-of-the-art electric generating facility (Project or Facility) on an industrially-zoned parcel within the Town. The application was submitted in accordance with the Town of Dover Town Code (Town Code) §145-10(B) and §145-61. The following narrative assesses the Project's conformance with applicable Dover zoning requirements, and provides information to support the findings the Town Board must make in order to grant Special Use Permit approval under Section 145-63(B) of the Town Code, as well as additional information pertaining to relevant Site Plan requirements (Site Plan drawings are included with this submission as Exhibits A14, B5, and C6).

The Project will be located on a 193.5-acre parcel of land (the Property). The portion of the Property on which the Facility will be constructed lies within the Town of Dover's Industrial/Manufacturing Land Use District (M), which permits industrial and related uses. Since CVE first submitted its Special Use Permit application, it has secured an option to purchase an additional 57 acres (formerly utilized by Rasco Materials LLC), to the south of the proposed development area. While part of the 193.5 acre Property, this 57-acre addition is referred to as the Former Rasco Parcel in this submission.

The Facility will have the capacity to generate approximately 1,000 megawatts (MW) of electricity utilizing clean-burning natural gas. In addition to being zoned for industrial uses, the proposed site is uniquely well-suited for the proposed Facility. Immediately to the north of the Property is an existing Consolidated Edison Company of New York (ConEd) electric transmission right-of-way, which also abuts an Iroquois Gas Transmission Company (Iroquois) natural gas pipeline. The Property is bounded to the east by New York State Route 22; to the south by Rural-zoned property; and to the west generally by the Swamp River. A Metro-North railroad track transects the Property in a north-south direction.

The Project has completed the State Environmental Quality Review (SEQR) process with the New York State Department of Environmental Conservation (NYSDEC) acting as Lead Agency, which coordinated with the Town of Dover as an Involved Agency. Following a public process to identify an appropriate study scope, a Draft Environmental Impact Statement (DEIS) was prepared and accepted by NYSDEC on May 25, 2011. Copies of the DEIS and the Final Environmental Impact Statement (FEIS) have been submitted to the Town Board and can be found online at <http://www.cricketvalley.com/study-process/documents.aspx>.

On May 25, 2011, the NYSDEC issued a public notice determining that the DEIS was complete, that draft air and wetlands permits were available and inviting public comment. Two public hearings were held by NYSDEC at the Dover Middle School Auditorium on June 28, 2011 and an additional public hearing was held by the Town Board at Town Hall on July 9, 2011. The written public comment period closed on August 5, 2011.

All written and oral comments were compiled and have been responded to as part of the FEIS, which was accepted and a Notice of Completion was issued by NYSDEC on July 25, 2012. See http://www.dec.ny.gov/docs/permits_ej_operations_pdf/cvnotice.pdf

NYSDEC issued a SEQR Findings Statement on September 26, 2012. The Findings Statement is included at the end of this submittal.

1. Land Use Districts

§145-63(B)(1): The proposed major project will comply with all land use district, overlay district, and other specific requirements of this chapter and other local laws and regulations and will be consistent with the purposes of this chapter and of the land use district in which it is located.

The Project will comply with, and be consistent with, all land use districts and overlay districts in which the Project is located, as defined by the Town Code. In addition, the Project will replace an existing industrial use, predominantly utilizing the same disturbed footprint, while cleaning up and remediating a contaminated site that consists of numerous dilapidated and fire-damaged buildings in various states of disrepair. The site is also littered with solid waste from historical dumping that will be cleaned as part of Project demolition and site preparation.

Property cleanup and remediation will include the remediation of areas where contamination exceeds applicable soil cleanup objectives, the removal of solid waste piles, and surveying, identification, removal and abatement of asbestos-containing materials in accordance with 12 NYCRR Part 56. These efforts are detailed in the Project's Demolition Plan.

Once remediated, the existing site will be placed back into productive use through construction of a state-of-the-art electric generating facility that complies with all applicable state and federal environmental laws and regulations. The facility will produce substantial economic benefits and employment opportunities for Dover and the surrounding communities and become the Town of Dover's largest taxpayer by a wide margin.

The Property (or portions of it) lies within the following land use and overlay districts:

- (1) Industrial/Manufacturing Land Use District (see Exhibit A4);**
- (2) Resource Conservation Land Use District (see Exhibit A4);**
- (3) Floodplain Overlay District (see Exhibit A6);**
- (4) Stream Corridor Overlay District (see Exhibit A7); and**
- (5) Aquifer Overlay District (see Exhibit A5)**

1.1. Industrial/Manufacturing Land Use District

§145-8(A)(8):Industrial/Manufacturing District (M). The purpose of this district is to allow industrial and related uses and adult entertainment, uses that are not compatible with most commercial, office, or residential uses, in isolated and well-buffered locations.

The Property is comprised of five (5) parcels totaling 193.5 acres, and is primarily located within the Town of Dover Industrial/Manufacturing (M) Land Use District. The Project is consistent with the “M” use district as the Property sits in relative isolation, and the proposed development will allow existing topographic and tree buffers to be maintained.

The portion of the Property to the east of the Metro North railroad line has a long history of industrial use and numerous dilapidated, partially destroyed, and vacant industrial structures and associated debris are located in the proposed project development area. This portion of the Property has previously been identified by Dutchess County as the Mica Products Critical Environmental Area (CEA) due to the need for clean-up associated with its former uses.

The Dover Master Plan calls for restoration and rehabilitation as a catalyst for economic revitalization. The Project will replace the existing, partially destroyed industrial structures with a new facility that will produce jobs and generate significant tax revenues for the town. The Property is specifically recommended to maintain its industrial designation in the Master Plan, which references the proposed Project location as the “Mica plant.”

1.2. Resource Conservation Land Use District

§145-8(A)(2): Resource Conservation District (RC). The purpose of this district is to encourage forestry, recreation, land conservation, and very-low-density residential uses where agriculture is not a significant use and intensive residential development is undesirable.

A small portion of the Property extends west of the Swamp River and is located within the Resource Conservation (RC) District; however, this land will not be disturbed by Project activities. CVE is also in discussions with local conservation groups to place this land into permanent conservation trust, thus furthering the goals of the RC District.

1.3. Floodplain Overlay District

§145-8(B)(1)(a) Floodplain Overlay District (FP). The purpose of this overlay district is to control development within the one-hundred-year floodplain in order to minimize flood damage and protect water resources. This district also incorporates by reference the town's existing Floodplain Protection Local Law.

The Floodplain Overlay District was recently revised to reflect the latest Federal Emergency Management Agency's (FEMA) 100-year flood maps which were adopted by the Town of Dover Town Board in April 2012 and became effective on May 2, 2012.

While a small portion of the Property is located within the revised 100-year FEMA floodplain and the FP District, the affected area is located entirely west of the Metro-North railroad track where no Project development activity will occur (see Exhibit A6). The proposed use of the Property, and specifically the location of the proposed development outside the boundaries of this district, ensures conformance with the requirements of the district.

Further, the Project will incorporate a Stormwater Pollution Prevention Plan (SWPPP) and an Erosion and Sediment Control Plan during both construction and operation that will manage stormwater to attenuate stormwater runoff and protect water resources.

1.4. Stream Corridor Overlay District

§145-8(B)(1)(b) Stream Corridor Overlay District (SC). The purpose of this overlay district is to protect the scenic character and water resource values of the Ten Mile River and its tributaries.

§145-14(B) The Stream Corridor Overlay District includes all land lying within 150 feet of the mean high water line of the Ten Mile River, the Swamp River, and all other streams classified by the New York State Department of Environmental Conservation, as shown on the Overlay District Map.

While a small portion of the Property is located within 150 feet of the mean high water line of the Swamp River, the affected area is located entirely west of the Metro-North railroad track where no Project development activity will occur (see Exhibit A7). The proposed use of the Property, and specifically the location of the proposed development outside the boundaries of this district, ensures conformance with the requirements of the Stream Corridor Overlay District.

§145-14(D) Setbacks. No principal structure shall be located within 100 feet of a watercourse, and no accessory structure 200 square feet or larger shall be located within 50 feet of a watercourse.

As shown on the Project Site Plan included as Exhibit (A14), no principal or accessory structure is proposed to be located within 200 feet of the Swamp River. All Project development will occur east of the Metro-North railroad track and a permanent buffer of 79 acres will be preserved to the west of the railroad track.

§145-14(E)(3) Within the SC District, the Planning Board may grant site plan approval only if it finds that, with appropriate conditions attached, the proposed activity:

No development is proposed within the SC District; therefore, the specific findings are not required. Nevertheless, the Project is consistent the SC District's required findings.

(a) Will not result in degradation of scenic character and will be aesthetically compatible with its surroundings.

CVE recognizes that the rural character of Dover and its surrounding communities is of high local value. As described in Section 6.2 of the DEIS and Section 6.3.2 of the FEIS, although portions of the Project (e.g., the Project stacks) will be visible from certain locations, the Property possesses a number of qualities that will minimize visual impacts to its surroundings including its isolated location within a valley removed from high density residential areas, a substantial buffer of mature trees, and a hillside that will shield the majority of the Project structures from view. The Project has been purposefully located within a compact footprint to reduce potential aesthetic impacts, including co-locating the three stacks in order to minimize their visual impact on surrounding vantage points. In addition, the Project attributes which will be visible (e.g., Project stacks) are consistent with industrial structures that currently exist on or in the vicinity of the Property; mainly the on-site water tower, stacks, and surrounding Con Ed transmission towers.

It should be noted that elements of the existing structures, notably the destroyed water tower and existing stacks, can currently be seen from the Swamp River. The Project will improve the Property's aesthetic value by removing these existing structures to eliminate the current "eyesore" on the Project site, which currently degrades the scenic character of the Town. Utilizing the same disturbed footprint, CVE will replace the dilapidated structures with a modern industrial facility meeting or exceeding all state and federal environmental laws and regulations, thereby enhancing the scenic character of the existing site while providing numerous public benefits to the Town.

At least eight (8) existing structures on the site currently exceed the Town Code's 35 feet height limitation for buildings in the Industrial/Manufacturing District (Zone M). The Project will be required to obtain a variance from the Town Code's 35 feet height limitation in Zone M from the Zoning Board of Appeals (ZBA) for five (5) new structures in excess of 35 feet in height which will replace the existing eight nonconforming structures. The Project has prepared an application for a variance to be submitted to the ZBA in October, 2012 which explains that the benefit to be achieved through redevelopment of the Property, including the structures that require a variance from the Town Code's height limitation, far outweighs any perceived impact or detriment to the community resulting from such redevelopment.

(b) Will not result in erosion or stream pollution from surface or subsurface runoff. In making such determination, the Planning Board shall consider slopes, drainage patterns, water entry points, soil erosivity, depth to bedrock and high water table, and other relevant factors.

The CVE Project will submit an Erosion and Sediment Control Plan to the Town for approval pursuant to Chapter 65 of the Town Code to ensure water quality and quantities are properly controlled. The Erosion and Sediment Control drawings are included in this submittal as Exhibits A21, B9, and C10.

The SWPPP noted above incorporates Best Management Practices relating to stormwater control. The Project design incorporates control of stormwater discharge from the Project Development Area with three bio-retention facilities and one stormwater management basin. These facilities have been

designed to provide quantity controls by attenuating stormwater runoff and releasing runoff to off-site locations at a rate equal to or less than that which existed prior to development of the Property. For all design points and design storms the peak rate of runoff will not be increased. As a result, the Project will not have a significant impact on the adjacent or downstream properties or receiving water courses.

(c) Will comply with other applicable provisions of this chapter.

The Project's compliance with other applicable provisions of Chapter 145 of the Town Code is addressed herein.

§145-14(F) Erosion and stormwater control plan requirement. For any special permit, site plan, or subdivision application in which the area to be disturbed lies partially within the SC District, an erosion and sediment control permit shall be required pursuant to Chapter 65 of the Dover Town Code if the total disturbed area (including portions outside the SC District) exceeds 10,000 square feet.

While the Project will not disturb any area that lies within the SC District, as noted above, CVE will still submit an Erosion and Sediment Control Plan to the Town for approval. The Erosion and Sediment Control drawings are included in this submittal as Exhibits A21, B9, and C10. These plans will protect the Swamp River from harm or degradation as a result of Project development activities.

1.5. Aquifer Overlay District

§145-8(B)(1)(c) Aquifer Overlay District (AQ). The purpose of this overlay district is to protect groundwater resources that provide both public water supplies and drinking water for private wells.

§145-15(C) Delineation and description of the Aquifer Overlay District. The Aquifer Overlay District is divided into two zones, the Principal Aquifer Zone (PAZ) and the Upland Aquifer Zone (UAZ), and shall include all land, existing structures, and improvements within the boundaries delineated on the Aquifer Overlay District Map.

The CVE Property is located entirely within Dover's Principal Aquifer Zone (PAZ), and more specifically, within the Valley Bottom Aquifer System (see Exhibit A5).

§145-15(D) General provisions for the Aquifer Overlay District.

(1) The manufacture, use, storage, or discharge of any products, materials or by-products subject to these regulations, such as wastewater, solid waste, hazardous materials, or any pollutant, must conform to the requirements of these regulations.

(2) Any person or entity preparing an environmental assessment form or an environmental impact statement per 6 NYCRR 617 shall file a copy with the nearest public water system owners (as identified to the applicant by the Secretary of the Town of Dover Planning Board), the Town of Dover Planning Board, and the Town of Dover Conservation Advisory Commission.

(3) Any person who is responsible for a discharge of a hazardous substance, hazardous waste, petroleum product, or radioactive material shall immediately notify the Town Clerk of such discharge.

The Project has filed its Environmental Assessment Form and Draft and Final Environmental Impact Statements with the appropriate parties as identified in 145-15(D). The DEIS includes a detailed discussion of the Project's Zero Liquid Discharge system (see Section 5.5.3), which will recycle all process wastewater and ensure no process wastewater is released.

In addition, the Project has prepared a Spill Prevention Control and Countermeasure (SPCC) Plan, included as Exhibit E2, which adheres to all provisions of the Aquifer Overlay District. This includes procedures and notice to the Town Clerk and other emergency officials in the event of a release.

§145-15(C)(3) Within both the PAZ and the UAZ, any wells for identified and declared public water systems shall be protected by a circular wellhead buffer with a two-hundred-foot radius. These areas shall be designated "wellhead buffers" and shall be protected as detailed below.

§145-15(E)(1) Wellhead buffers.

(a) Wellhead buffers at all public water systems, including community water systems, installed after the effective date of this § 145-15 shall be protected and controlled through direct ownership of the land or through the acquisition of protective easements or other appropriate measures by the supplier of water in order to prevent contamination...

CVE will have ownership of all lands on which its supply wells are located. In addition, all water from the supply wells will be directed to the Project's water pre-treatment facility to remove any potential contaminants before use. The potable water will comply with the applicable performance standards and maximum containment levels set forth in the New York State Sanitary Code and by the Dutchess County Commissioner of Health.

(b) The development of new water supply sources for public water systems installed and operated after the effective date of this § 145-15 shall be designed, constructed and maintained subject to the approval and enforcement authority of the Dutchess County Health Department, New York State Department of Environmental Conservation and New York State Department of Health so as to eliminate the opportunity for pollution to enter the water sources.

CVE has drilled six separate on-site wells, with depths ranging from 600 to 1,000 feet deep. During the long-term pumping test, which concluded that there would be no discernible drawdown effects (see DEIS Appendix 5-E), the water quality of the Project wells was tested by a Dutchess County Department of Health (DCDOH) listed laboratory to ensure that no contaminants were present. The laboratory assessment of the current water thresholds indicated that the water was potable, although some wells did contain "total coliform," which is a group of naturally-occurring bacteria. The coliform will be treated by the Project's potable water system, as required by DCDOH drinking water

requirements. In addition, appropriate water withdrawal permits will be obtained from the DCDOH, NYSDEC, and NYSDOH.

CVE will use, on average, about 15 gallons of water per minute during cooler months and up to 60 gallons per minute during the hotter summer months. By way of comparison, a garden hose uses an average of 5 to 10 gallons per minute. Wells drilled on the CVE site into the bedrock aquifer have produced sufficient water to meet the needs of the facility and have been tested to ensure that impacts to neighboring wells, the surface aquifer, the Swamp River and associated wetlands are insignificant. A full discussion of CVE water use and an analysis of the well tests are available in Section 5 and Appendix 5-E of the DEIS.

Studies conducted by Russell Urban-Mead, Senior Hydrogeologist and author of the 1999 Harlem Valley Aquifer Study have found that even during drought conditions CVE will have a small impact on the water budget, with sufficient water available for future projects in the area. This study is available as Appendix 5-C of the DEIS.

(c) The physical pumping facilities and controls for all public water systems shall be protected against damage from tampering by fencing or other enclosures or by their manner of construction and installation.

The Project's primary well (B-4) will be located the within the perimeter fencing which secures the complete operations of the Project. Three on-site wells will be located outside of the secure, fenced Project area (B-3, B-5, and B-6). All on-site wells currently have locks and will continue to be protected by padlocked steel well caps to protect against tampering; these will be periodically checked by operational staff to confirm locks are secure. In addition, Well B-3 (due to its location proximate to Route 22) will also be protected by bollards, pursuant to the requirements of Chapter 145-15.E(1)(c) of the Town of Dover Zoning Code.

§145-15(E)(2) Principal aquifer and upland aquifer zones.

(a) Wastewater treatment systems.

(1) All wastewater treatment systems, including residential septic systems for domestic use, which discharge to groundwater and receive wastewater without the admixture of industrial or other wastes, as those terms are defined in 10 NYCRR 100, Subpart 112.5, in quantities of less than 1,000 gallons per day, shall be designed, installed and maintained in accordance with the standards established in 10 NYCRR 75 (Appendix 75A). The operation of these wastewater treatment systems shall also comply with all wastewater disposal standards promulgated by the Dutchess County Health Department where such standards are more stringent than those defined in 10 NYCRR 75 (Appendix 75A).

Consistent with NYSDOH requirements, a septic system will be used for the Project's sanitary wastewater disposal. Based upon a review of Dutchess County soil mapping, anticipated wastewater

quantities (500 gpd), and previous soil borings, it is recommended that on-site sanitary wastewater be treated through a preliminary subsurface treatment system using a fill pad based upon Dutchess County Department of Health (DCDOH) standards. Additives such as stimulators or enhancers (e.g., chemicals) are not required in a properly designed and maintained system. The plant will have periodic monitoring and maintenance as required to ensure the septic system is operating per design standards.

(2) All other wastewater treatment systems, including design, installation and maintenance, are subject to and must comply with permits issued by the New York State Department of Environmental Conservation.

The Project will comply with all applicable permit requirements.

(b) Point source discharges. Point source discharges, other than discharges authorized by permits issued by the New York State Department of Environmental Conservation, are prohibited.

The Project plans to incorporate technologies to minimize water use to the greatest extent possible, including a water treatment facility with a Zero Liquid Discharge system to recycle process wastewater. With the implementation of this advanced design feature, there will be no industrial wastewater discharge from the Project. As this Project will not discharge process wastewater, it is not subject to industrial wastewater discharge permitting requirements.

Note that a byproduct of the Zero Liquid Discharge system is dewatered crystal solids, which will be disposed of by licensed contractors at licensed disposal sites as described in Section 5.5.3 of the DEIS.

(d) Sediment generation

(2) Land disturbing activities which may result in deterioration of the quality or quantity of private and public water supply sources, including but not limited to general construction, highway construction, access road construction and maintenance, are prohibited except where measures have been put in place to manage stormwater runoff during and after construction and to prevent erosion and sediment production.

The Project will obtain coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity, administered by NYSDEC. To obtain coverage under this permit, a preliminary SWPPP has been developed and will be implemented, as required under the General Permit, to address potential impacts associated with stormwater drainage and runoff during construction.

It is anticipated that the Project will operate under a SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity issued by NYSDEC. The SWPPP prepared pursuant to this general permit will also mitigate potential stormwater quality impacts and prevent

soil erosion and sedimentation resulting from stormwater runoff generated during the Project's operation.

(3) Practices detailed in the most current edition of "Reducing the Impacts of Stormwater Runoff from New Development," published by the Bureau of Water Quality Management, Division of Water, shall be followed to the greatest extent practicable.

The preliminary SWPPPs for the Project Development Area, Former Rasco Parcel, and the Remote Laydown Site are included as Appendices 5-A, 5-B, and 5-C of the FEIS. The practices detailed in these documents follow the latest relevant guidelines and standards, including requirements published by the Bureau of Water Quality Management, Division of Water.

Moreover, as discussed above and in Section 5 of the DEIS and FEIS, the Project has been designed to avoid or minimize potential impacts of stormwater runoff. The elements of the stormwater management systems are incorporated in the preliminary SWPPPs and will be enforceable through the Project's coverage under the SPDES General Permits for stormwater associated with construction and industrial activities.

(4) Site plans submitted to the Town of Dover Planning Board shall clearly describe all land disturbing activities and sediment reduction measures to be implemented during all phases of construction, and the plans for ground disturbance shall be in accordance with Chapter 65 of the Town Code and shall be approved by the Town Engineer before any construction is to begin or permit is issued.

As noted above, the CVE Project will submit an Erosion and Sediment Control Plan to the Town for approval. Erosion and Sediment Control drawings are included in this submittal as Exhibits A21, B9, and C10.

(5) Individuals responsible for oversight of the land uses on private lands should consult with the Dutchess County Soil and Water Conservation District and the Natural Resource Conservation Service for proper selection and implementation of Best Management Practices.

A hydraulic analysis of the pre- and construction phase conditions was performed using the Natural Resources Conservation Service Technical Release 20 (TR-20) and Technical Release 55 (TR-55) methodologies. In addition, the United States Department of Agriculture (USDA) Soil Conservation Service Soil Survey for Dutchess County was reviewed. See the Preliminary SWPPPs provided in FEIS Appendices 5-A, 5-B, and 5-C for further detail.

(e) Petroleum storage

(1) Aboveground or underground petroleum storage tanks, including design, installation and maintenance, are subject to the approval of and must comply with the regulations of the New York State Department of Environmental Conservation.

CVE is committed to preventing discharges of oil to the environment, and to maintaining the highest standards for spill prevention control. All CVE petroleum storage tanks will be above ground and will be maintained and controlled in accordance with the SPCC Plan included as Exhibit E2 to this submittal. The SPCC Plan has been prepared to meet the requirements of Title 40, Code of Federal Regulations (CFR), Part 112 (40 CFR 112) and will be submitted to the NYSDEC Region 3 Petroleum Bulk Storage Section for review and approval.

As detailed in the SPCC Plan, Table 3: AST Inventory, there will be fourteen (14) aboveground storage tanks, six (6) of which are more than 1,100 gallons in capacity. All of these tanks are constructed of steel with secondary containment in accordance with 40 CFR 112.7 and 112.8. Storage tanks will be registered under the NYSDEC Petroleum Bulk Storage program as required.

(2) Abandoned aboveground or underground petroleum storage tanks must comply with the closure requirements of 6 NYCRR 613.9.

All abandoned aboveground or underground petroleum storage tanks will be properly closed and disposed of off-site as part of the Project's demolition phase. Closure will comply with the requirements of 6 NYCRR 613.9.

(3) Any storage tank(s) installed or replaced after the effective date of this section, where storage capacity is less than 1,100 gallons, must be above ground or fully visible for inspection within a basement or other interior space. Delivery lines must be as short as practicable and in good condition.

All CVE petroleum storage tanks will be above ground and will be managed in accordance with a SPCC Plan. Section 5 of the SPCC Plan details the procedures and spill prevention mechanisms in place for deliveries. Line lengths will not be excessive and have been designed to support the intended use within the parameters of the Facility layout and design. Lines will be maintained in good condition.

(4) Aboveground or underground petroleum storage tanks over 1,100 gallons and subject to New York State Department of Environmental Conservation (DEC) regulations must comply with DEC's regulations, including those pertaining to berms, dikes, and other appropriate secondary containment construction to prevent the ingress of stored materials into the ground in the event of a tank leak or discharge.

The SPCC plan included as Exhibit E2 of this submittal, has been prepared to meet the requirements of Title 40, Code of Federal Regulations (CFR), Part 112 (40 CFR 112). As detailed in the SPCC Plan, Table 3: AST Inventory, there are six aboveground petroleum storage tanks over 1,100 gallons in capacity. All of these tanks are constructed of steel with secondary containment in accordance with 40 CFR 112.7 and 112.8. The tanks will also conform to applicable NYSDEC regulations.

§145-35 (A)... The applicant shall submit copies to the town of any application to or correspondence with ACOE and DEC concerning required wetland permits for the project.

In January 2010, CVE submitted a joint wetlands permit application to the U.S. Army Corps of Engineers (ACOE) and NYSDEC for approval under the Freshwater Wetlands Act, Article 24 of the Environmental Conservation Law. After thorough review, a draft Wetlands Permit for the main Project site was issued by NYSDEC on May 25, 2011.¹

However, when the temporary use of the Former Rasco Parcel was added to the Project, additional wetlands were added to the Property as identified in FEIS Figure 3-4 and discussed in FEIS Section 3.3.1. With the addition of these wetlands, the Project was required to revise its wetlands permit. As such, formal wetlands jurisdictional determinations were amended and an amended wetlands permit application was submitted to NYSDEC and USACE on July 2, 2012.

The Town of Dover has been copied on all wetland permit correspondence, including the most recent filing on July 2, 2012. A revised Article 24 wetland permit was issued by NYSDEC on September 27, 2012.

§145-35 (B) Required watercourse and wetland mapping and delineation....

As noted above, wetland delineation for the entire Property as well as the Remote Laydown Site has been completed and confirmed by both NYSDEC and ACOE. Formal jurisdictional determinations were received from NYSDEC on December 14, 2011 and ACOE on April 11, 2012. As the result of these determinations, CVE has submitted a joint wetlands permit application under the Freshwater Wetlands Act, Article 24 of the Environmental Conservation Law.

2. Off-Site Impacts

Town Code §145-63(B)(2): The proposed major project will not result in excessive off-premises noise, dust, odors, solid waste, or glare or create any public or private nuisances

A detailed discussion for each of these items is provided below and supplemented by the detailed environmental studies included as part of the Project's DEIS and FEIS.

2.1. Noise

§145-40(B) Purpose of Performance Standards. Consistent with the general purposes of this chapter, performance standards shall set specific controls on potentially objectionable external aspects of all uses in order to: ...

(2) Control noise and light perceptible beyond the boundaries of the site of the use

¹ See http://www.cricketvalley.com/Libraries/Wetlands_Permit_Application/CVE_Draft_Wetlands_Permit.pdf

§107-1 (Noise Ordinance) It is hereby declared to be the policy of the town to prevent excessive, unnecessary or unusually loud noises. It is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of preserving, protecting and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the Town of Dover and its inhabitants.

CVE has carefully considered noise impacts to the surrounding community in developing the Project location and layout and in the selection of Facility components and orientation. To demonstrate consistency with NYSDEC noise guidelines and compliance with the local Town of Dover Zoning Code, CVE conducted a sound evaluation study to quantify and characterize the existing acoustic environment in the vicinity of the proposed Project. Results of the noise modeling for operation of the facility, included as Appendix 6-E of the DEIS, indicate that sound produced by the Project will be below the NYSDEC guidelines of an increase of 6 dBA at all nearby receptors. As such, the Project will not violate the requirements of Town Code 107-1.

§145-40 (C) Noise. No noises shall be emitted in violation of Chapter 107 of the Dover Town Code. In addition, the following specific standards apply to noise:

(1) Sound levels shall be determined at the property line of the lot from which the noise is emitted. Sound measurements shall be accomplished through a sound-level meter having an A-weighted filter and constructed in accordance with specifications of the American National Standards Institute or other generally accepted standard for the measurement of sound.

As noted above, CVE conducted a sound evaluation study to quantify and characterize the existing acoustic environment in the vicinity of the proposed Project.

Once the facility is fully operational, CVE will measure the actual Project operational sound levels at nearby residences and the Property's boundaries. These measurements and an associated report will be conducted by a third party licensed acoustical engineer in accordance with industry practices and any applicable state and local regulatory requirements.

(2) No person, firm or corporation shall allow the emission of sound which, as measured at the property lines, has a sound level in excess of:

(a) Sixty decibels on the A-weighted scale between the hours of 7:00 a.m. and 8:00 p.m.; and

(b) Fifty decibels on the A-weighted scale between the hours of 8:00 p.m. and 7:00 a.m.

The Project will comply with the most restrictive night-time sound level limit (50 dBA) of the Town of Dover Zoning noise standards at the north, south and east property lines, which are the three property lines nearest to residential receptors. The Town of Dover Zoning Noise Standards will also be met at the Project's westernmost Property boundary.

However, the Town of Dover Zoning noise standards will not be met at the Metro-North railroad line which extends through the Property, and which is considered a separate property line even though

CVE will own approximately 500-1,000 feet of additional property on the other side of the railroad line. (The Project will comply with the noise standards at the western property line beyond the Metro North railroad.) Because the Metro-North railroad line is considered a separate parcel, the Project will need to secure an amendment to the Town of Dover Zoning Code to permit the anticipated noise levels at the Metro-North property line.

Note that the Metro-North railroad line is not a noise-sensitive receptor, and people traveling through the site by train will not experience any significant noise impacts due to the Project and likely will not hear the Project at all.

In order to support strict compliance with the requirements of *Town Code §145-40 (C)(2)*, CVE has petitioned the Town Board to amend the noise ordinance to allow for a higher decibel level at the property boundaries of rail lines in the “M” district (see Exhibit A23). This amendment recognizes the legislative intention of permitting certain properties to be used for industrial uses while not negatively affecting community character and residential uses, and not compromising the underlying purpose and goals of the Town’s noise standards. The proposed amendment would place the Project in full compliance with the Town Code and allow for the beneficial re-use of the Property.

Note that the Project’s construction management firm will be contractually obligated to meet these noise standards and is required to include a “noise guarantee” in their obligations for construction of the plant. This will include baseline monitoring during commissioning and start-up of the plant.

For a detailed discussion of Project noise studies, see Section 6.4 and Appendix 6-E of the DEIS and Section 6.3.4 of the FEIS.

(3) Sounds emitted at levels lower than those prohibited by Subsection C(2) above shall not be permitted if, because of the type or frequency of the noise emitted, such sounds are offensive, disruptive or in continual disharmony with the character of an adjoining or nearby residential neighborhood.

The Project will be a state-of-the-art facility with industrial controls that will ensure noise emissions are low frequency and imperceptible to adjoining neighborhoods.

(4) Exemptions. The following shall be exempt from the noise level regulations:

(a) Noises not directly under the control of the property user.

(b) Noises emanating from construction and maintenance activities between 8:00 a.m. and sunset, Monday through Friday.

(c) The noises of safety signals, warning devices, emergency pressure-relief valves or other emergency warning signals.

Estimates for Project-related *construction* sound levels are included in the DEIS within Table 6.4-2. “Worst case” estimates of construction sound levels at the nearest residential receptors are 61 dBA or lower. Construction-related sound at more distant residential properties, as well as the Dover

Middle/High School complex, is expected to be consistent with typical daytime background sounds. At the school complex, which is approximately 4,000 feet from the Project, sound produced by construction of the power plant will likely be unnoticed (outdoors or indoors).

Most construction activities will be limited to daylight hours when the background sound in the surrounding area increases significantly due to traffic activity on Route 22. However, there are some construction noises that may be required as an urgent necessity to the Project or in the interest of public safety. Examples of activities that will be required at night include:

- Concrete pours, which must be continuous for structural integrity, and which would not be anticipated to be particularly noisy;
- Transfer of materials from the Remote Laydown Site to the CVE Property, timed to avoid the evening commuter period and no later than 9:00 p.m., which would involve trucking noise;
- Hauling of heavy loads (such as the turbines), which per NYSDOT regulation must occur during late night hours to minimize effect on existing roadway use; and
- Construction finish work, as necessary, during later construction phases, which would predominantly occur indoors and would therefore not produce significant noise levels.

2.2. Dust

§145-40 (B) Purpose of Performance Standards. Consistent with the general purposes of this chapter, performance standards shall set specific controls on potentially objectionable external aspects of all uses in order to:

(1) Reduce to a reasonable minimum the dissemination of smoke, gas, dust, odor or other atmospheric pollutants outside the building in which the use is conducted.

§145-40 (E) Smoke, dust and other atmospheric pollutants.

(1) General control. The emission of smoke and other particulate matter shall not be permitted in violation of applicable regulations of the New York State Department of Environmental Conservation (DEC), including but not limited to 6 NYCRR 201. Pollutants that are not regulated by DEC shall not be emitted if they pose a substantial risk to public health, safety, or welfare.

The Project will meet all applicable regulations of the NYSDEC, including but not limited to permitting provisions under 6 NYCRR Part 201.

The Project is classified by the United States Environmental Protection Agency (USEPA) and NYSDEC as a new major source of air emissions under the Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) programs. The Project is classified as a major source of nitrogen oxides (NO_x) and volatile organic compounds (VOC).

The Project will minimize its air emissions by utilizing highly efficient combined cycle generation technology and using only clean-burning natural gas to power the combustion turbines. In addition, CVE has incorporated Lowest Achievable Emission Rate (LAER) / Best Available Control Technology (BACT) features into the Project's design and will represent the lowest emitting power plant of its kind ever constructed. Additional detail on Project air emissions and air modeling can be found in DEIS Section 4 and FEIS Section 4.3.3.

The DEIS and air permit applications have carefully considered air quality impacts. These analyses were conducted using the best tools and information available and were thoroughly reviewed by USEPA and NYSDEC meteorologists and engineers at various points in the process. As demonstrated in the DEIS and FEIS, the Project will not cause or significantly contribute to a violation of federal or state air quality standards nor significantly degrade air quality currently in compliance with those standards.

These findings on air quality have been reviewed by Dr. Bruce Egan, an air-quality consultant who was hired by the Town of Dover Town Board to conduct an independent analysis of the Project's *DEIS Section 4 – Air Resources*. Dr. Egan's report concludes by stating, "I find that the demonstrations for compliance follow regulatory procedures and are complete and seem to be without errors." This is consistent with the findings of the NYSDEC and the USEPA who have together approved the Project's air permit application and issued a Draft Air Permit.

(2) Method of measurement of smoke. For the purpose of grading the density of smoke, the Ringelmann Smoke Chart or EPA Method 9 or 22 shall be used to determine the total smoke emitted. Where the Ringelmann method is used, a reading shall be taken every minute for an hour or, if less than an hour, until the total smoke emitted exceeds that allowed by these regulations. Each reading shall be multiplied by the number of minutes during which it was observed and the product added.

The Project has applied for and obtained an air permit under the PSD and NNSR programs administered by the USEPA and NYSDEC. Condition 10 of that permit (see Exhibit A24) applies specifically to opacity requirements and is based upon EPA Method 9 (visual observation by a certified smoke reader). Note that the USEPA stopped using Ringelmann numbers when the revised EPA Method 9 was promulgated in 1974.

(3) Maximum permitted emission of smoke. There shall be no measurable emission of smoke, gas or other atmospheric pollutant, except as authorized by a permit granted pursuant to applicable state and federal regulations. The emission of one smoke unit per hour and smoke with discernible density of No. 1 on the Ringelmann Smoke Chart shall be prohibited.

As stated above, the Project's air permit governs the visibility of emissions. Specifically, Condition 10 of that permit states:

“No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity... The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.”

20 percent opacity is the equivalent of No. 1 on the Ringelmann Smoke Chart, therefore, the Project’s compliance with its air permit will ensure compliance with Town Code §145-40 (E)(3).

(4) Maximum permitted emission of dust.

(a) The emission of dust related to combustion for indirect heating from any source shall not exceed 0.30 pound of dust per 1,000 pounds of flue gas adjusted to fifty-percent excess air for combustion.

(b) There shall be no measurable emission of dust or other particulate matter not related to combustion for indirect heating.

(c) Properties shall be suitably improved and maintained with appropriate landscaping, paving, or other materials to minimize windblown dust and other particulate matter.

There will be no dust emissions associated with the operation of CVE Facility.

During construction, stabilized construction entrances will be installed at points of entry and egress from both the Project site and the Remote Laydown Site to reduce the tracking of soil onto public roadways. Construction traffic must enter and exit the site at the stabilized construction entrance. The intent of the stabilized points of entry is to trap dust and mud that would otherwise be carried off-site by construction traffic. For more information, please reference Section 4.1.1 (*Stabilized Construction Entrance*) of the Project’s SWPPP included in the FEIS as Appendix 5-A.

Also during construction, water trucks will be used as needed to reduce dust generated on the site. Dust control will be provided by the general Contractor to a degree that is in compliance with the applicable state and local dust control requirements (e.g., §145-40(E)(4). For more information, please refer to Section 4.1.2 (*Dust Control*) of the Project’s SWPPP included in the FEIS as Appendix 5-A.

2.3. Odors

§145-40 (B) Purpose of Performance Standards. Consistent with the general purposes of this chapter, performance standards shall set specific controls on potentially objectionable external aspects of all uses in order to:

(1) Reduce to a reasonable minimum the dissemination of smoke, gas, dust, odor or other atmospheric pollutants outside the building in which the use is conducted.

§145-40 (F) Odor. No land use shall be permitted which emits any discernible obnoxious odor outside the lot on which the use is conducted.

§145-40 (G) Toxic or noxious matter. No use shall be permitted which will cause the release of toxic or noxious fumes or other matter outside the building in which the use is conducted.

There will be no odor associated with the operation of the CVE facility. Emissions from the facility will predominantly consist of water vapor and odorless gases such as CO₂ and N₂.

In addition, the Project has studied the potential accidental release of hazardous materials and a discussion is included in Section 4.1.9 of the DEIS. Specifically, the accidental release of aqueous ammonia, which will be stored on-site and utilized as part of the Project's emissions control system, was studied and is detailed in Section 4.6.3 of the DEIS. The ammonia tanks have been purposefully located in the center of the Property to minimize off-site risks and an air dispersion modeling analysis was conducted to assess the potential hazards of air emissions from an accidental spill from an ammonia storage tank.

The storage tanks will be surrounded by a reinforced concrete containment dike filled with plastic balls, which, in the event of an accidental release, will rise to the surface to reduce evaporation. USEPA's Areal Locations of Hazardous Atmospheres (ALOHA) model is designed especially for simulating chemical releases, as a tool for emergency planning and training. A hypothetical worst-case spill scenario was modeled using ALOHA, assuming the entire contents of one storage tank was released into the 50 foot by 25 foot diked containment area. The results show that potential impacts would remain well below exposure levels of concern at all off-site locations (see DEIS Section 4.6.3 for further detail).

2.4. Solid Waste

§145-40(B) Purpose of Performance Standards. Consistent with the general purposes of this chapter, performance standards shall set specific controls on potentially objectionable external aspects of all uses in order to:

(3) Limit the discharge of treated wastes and prohibit the discharge of untreated wastes into any watercourse.

§145-40(M) Liquid and solid wastes. The discharge of any or all wastes shall be permitted only if in complete accordance with all standards, laws and regulations of the Dutchess County Health Department, New York State Department of Environmental Conservation or any other regulatory agency having jurisdiction. Facilities for the storage of solid waste shall be so located and designed as to be screened from the street or from any adjoining property and so as to discourage the breeding of rodents or insects.

The Project will limit its discharge of liquid wastes by installing a Zero Liquid Discharge system so that no process wastewater will be discharged from the Facility. This will ensure that Project wastewater will not affect nearby drainage or sewer facilities.

During both construction and operation of the CVE facility, all solid waste materials will be collected and placed in containers prior to being disposed of off-site. Solid waste will be transported off-site by licensed haulers and will be disposed of at licensed facilities. There will be no solid or liquid waste materials discharged with stormwater.

Facilities for the storage of solid waste will be located to the southwest of the Administration Building and will be screened from the street by the building itself (see Exhibit A14). In addition, the Project has added a screened fence that surrounds the facilities per discussions with Town of Dover officials.

§145-50 (B) Solid Waste Management facilities and industrial uses. All industrial uses and municipal solid waste management facilities shall satisfy the following requirements

(1) All operations, including loading and unloading, shall occur within fully enclosed buildings with an impermeable floor system. Any leachate shall be collected in an impermeable collection system and hauled off site for disposal as required by applicable laws. There shall be no outdoor storage of hazardous materials or of materials regulated under 6 NYCRR 360 in a manner that could allow them to become airborne, leach into the ground, or flow into any watercourse.

(2) No materials shall be disposed of into the ground, air, or into any watercourse, except pursuant to applicable permits and approvals issued by state and county health and environmental agencies.

(3) Procedures shall be in place to inspect all materials upon arrival at the facility to ensure that they are appropriate to the permitted operation and to ensure that deliveries of materials that cannot be safely handled and processed at the facility are not accepted.

(4) The operation shall comply with all applicable provisions of this chapter, including the environmental performance standards in § 145-40 and the aquifer protection provisions in § 145-15 if the use is located within the Aquifer Overlay District.

While located in the industrial/manufacturing land use zone, the Project would not be considered a Solid Waste Management Facility. However, the Facility operation will satisfy the requirements of Section 145-50(B) through implementation of a detailed SPCC plan included as Exhibit E2. The SPCC is designed to meet all NYSDEC regulations regarding the storage of hazardous materials.

The Project will not treat or dispose of waste material on-site, nor will it store waste material for more than 90 days. Waste materials will be placed in a designated dumpster, which will be located atop a concrete pad, and will be hauled off-site by licensed transporters for final disposal at permitted facilities.

2.5. Glare

§145-40 (L) Exterior illumination and glare. No use shall produce glare so as to cause illumination beyond the boundaries of the property on which it is located in excess of 0.5 footcandle. All exterior lighting, including security lighting, in connection with all buildings, signs or other uses shall be directed away from adjoining streets and properties. The Planning Board may require special efforts to reduce the impacts of exterior lighting, such as limiting hours of lighting, planting screening vegetation, or installing light shields to alleviate the impact of objectionable or offensive light and glare on neighboring residential properties and public thoroughfares

The Project will comply with this standard because illumination will not exceed 0.5 footcandle at any Property boundary. Lighting, both for normal operation and emergency or temporary shutdown will be provided throughout the Facility. The Project’s proposed lighting design will minimize offsite impacts, while providing sufficient lighting to ensure worker safety during routine operations and maintenance. Site lighting has been designed to meet the standards of the Illuminating Engineering Society Lighting Handbook and the Town Code.

Details of the Lighting Plan intended to eliminate off-site glare are provided in DEIS Section 1.5.1.4.2 – Lighting, DEIS Section 6.2.3 – Visual Characteristics of the Project, and DEIS Appendix 6-C – Exterior Illumination & Glare Mitigation Plan. In addition, CVE has developed a Lighting Plan for both temporary construction parking and storage areas. These are included as FEIS Appendix 6-A – Former Rasco Parcel Lighting Plan and FEIS Appendix 6-B – Remote Laydown Site Lighting Plan.

Detailed drawings of the lighting plans are included as Exhibit A18, B7, and C8 to this submittal. As confirmed by these drawings, no Project related use will cause off-site glare in excess of 0.5 foot-candle.

2.6. Vibration

§145-40 (B) Purpose of Performance Standards. Consistent with the general purposes of this chapter, performance standards shall set specific controls on potentially objectionable external aspects of all uses in order to:

(4) Limit the dissemination of vibration, heat or electromagnetic interference beyond the immediate site on which the use is located.

§145-40 (D)(2) Maximum permitted steady-state and impact vibration displacement. No activity shall cause or create a steady-state or impact vibration displacement by frequency bands in excess of that indicated in the following table:

<i>Frequency (cycles per second)</i>	<i>Steady-State (inches)</i>	<i>Impact (inches)</i>
<i>Under 10</i>	<i>.0005</i>	<i>.0010</i>
<i>10 to 19</i>	<i>.0004</i>	<i>.0008</i>

20 to 29	.0003	.0006
30 to 39	.0002	.0004
40 and over	.0001	.0002

The Project will comply with the Vibration Displacement table detailed in §145-40(D)(2) which will be guaranteed by the construction management company.

2.7. Heat

§145-40(B) Purpose of Performance Standards. Consistent with the general purposes of this chapter, performance standards shall set specific controls on potentially objectionable external aspects of all uses in order to:

(4) Limit the dissemination of vibration, heat or electromagnetic interference beyond the immediate site on which the use is located.

§145-40(K) Heat. There shall be no emission of heat which would cause an air temperature increase in excess of 1° F. along any adjoining lot line

As noted in FEIS Section 4, temperatures at the Project property and surrounding properties will not be affected by the exhaust temperatures from the facility. Hot air exhaust will rise and cool at heights significantly higher than the 282.5-foot stacks or 113-foot air cooled condensers, such that ground level temperatures will not be changed as a result.

2.8. Electromagnetic Fields

§145-40(B) Purpose of Performance Standards. Consistent with the general purposes of this chapter, performance standards shall set specific controls on potentially objectionable external aspects of all uses in order to:

(4) Limit the dissemination of vibration, heat or electromagnetic interference beyond the immediate site on which the use is located.

§145-40(I) Electromagnetic interference. No operation shall be permitted which produces any perceptible electromagnetic interference with normal radio or television reception in any area, unless federal or state regulation requires such operation to be permitted.

The NYS Public Service Commission (PSC) has established interim standards to be applied at the edge of rights-of-way for high voltage electric transmission lines. The interim standards were established by the PSC to avoid unnecessary increases in existing levels of EMF exposure.

The PSC applicable electric field strength standards are stated in Opinion No. 78-13 (issued June 19, 1978). The PSC has also set forth magnetic field standards under the PSC's Interim Policy Statement on Magnetic Fields, issued on September 11, 1990.

As described in Section 6.5 of the DEIS, the Project's electrical interconnection will occur entirely within Project and ConEd property and is buffered from public access by approximately 300 feet of trees and vegetation. Nonetheless, the maximum field strengths were calculated at edge of the outer right-of-way, approximately 75 feet from the centerline of the structure, and compared to the PSC interim standards. The maximum electric and magnetic field strengths calculated at the edge of the right-of-way were well below the PSC interim standards. Thus, anticipated impacts associated with EMF relating to the project are insignificant and imperceptible.

3. Traffic

§145-63(B)(3): The proposed major project will not cause significant traffic congestion, impair pedestrian safety, or overload existing roads, considering their current width, surfacing, and condition, and any improvements proposed to be made to them by the applicant.

The Project has been designed to minimize all potential traffic impacts and ensure public safety.

§145-40 (N) Traffic. For the purpose of preventing congestion in the streets, promoting the safe and efficient use of public transportation, protecting air quality, promoting fuel conservation, and otherwise protecting the public health, safety and welfare, the following specific traffic standards are hereby established to serve as a guide for town officials and agencies in the review of applications for development approvals:

(1) No decision shall be made to approve the construction of any development which would contain in excess of 20,000 gross square feet of new nonresidential floor space or 50 or more new residential dwelling units if the reviewing board, acting on the advice of a qualified traffic engineer, determines that the result of such development will be to create one or more of the following peak-hour traffic impacts within two miles of any vehicular access point to the subject site during the first year of operation of the proposed project or, in the case of phased construction, during the first year of operation of any phase for which approval is sought:

(a) A reduction in level of service to less than Level D at any street intersection.

(b) A significant adverse impact on the operation of streets or intersections projected to be operating during the target year, at Level of Service E or below.

(c) Traffic volumes significantly over the capacity of the mainline (nonintersection) highway sections.

A detailed traffic analysis has been completed and is discussed in Section 6.3 of the DEIS and Section 6.3.3 of the FEIS. The traffic analysis concludes that, once operational, all intersections in the vicinity

of the Property will operate at an acceptable level of service (Level C or better). See Table 6.3-26A of the Amended Traffic Study (included as Appendix 6-C to the FEIS) for further detail.

During the Peak Construction Year (estimated to occur in 2014), all intersections in the vicinity of the Property will operate at an acceptable level of service, with the exception of the Project's entranceway. CVE is currently working with NYSDOT to identify appropriate temporary measures to implement during construction to mitigate impacts to LOS at the Project driveway. These potential measures include a temporary traffic light at the entranceway, as well as northbound and southbound turning lanes on Route 22.

(2) In projecting future levels of service and the capacity of mainline highway sections, accepted traffic engineering procedures, as determined satisfactory by the reviewing board, shall be utilized, using the following requirements as a guide:

(a) Base-year traffic conditions, including peak-hour traffic volumes and turning movements, must be documented either through direct field surveys or from other available current data sources.

(b) Projected volumes must include estimated traffic generation from the proposed development during peak hours of on-site traffic activity as well as peak hours of street system activity.

(c) Daily trip generation estimates must be provided. Information published by the Institute of Transportation Engineers (ITE) will generally be relied upon as a basis for estimating trip generation, although the reviewing board may allow or require a departure from the use of specific ITE averages where the board determines that such departure is warranted by unique characteristics which may be present in the proposed project.

(d) Allowance shall also be made for traffic which is expected to be generated by other projects already approved or under construction within the town or within neighboring communities, as well as an additional allowance for general regional traffic volume changes.

(e) Estimated traffic generation must be distributed throughout the access network in accordance with clearly stated distribution assumptions determined acceptable by the reviewing board.

(f) The capacity analysis of the intersections or mainline highway section roadway system shall be calculated both with and without site-generated traffic. In analyzing such capacity, the applicant shall use methods generally recognized by national authorities, such as the Transportation Research Board of the National Academy of Sciences, and/or methods accepted by the New York State Department of Transportation. Traffic capacity estimates may take into account improvements planned

by the applicant or by others, provided that, in either case, a specific commitment to construct such improvements has been made.

(g) In determining overall intersection level of service at signalized intersections, optimum practical signal timing may be assumed. Overall intersection level of service shall be determined, for both signalized and unsignalized intersections, based upon a volume-weighted average of each intersection approach level of service.

As detailed in Section 6.3 and Appendix 6-D of the DEIS, peak-hour traffic volumes were documented through use of direct field surveys which included:

- (1) 24-hour tube counts along Route 22 during both weekday and weekend conditions; and**
- (2) turning movement counts during the morning rush hour (6:15 – 8:15 a.m.) and evening rush hour (4:00 p.m. to 6:00 p.m.) and major intersections in the vicinity of the Property (see Section 6.3.2.5.1 of the DEIS for further information).**

Daily trip generation estimates for both construction and operations have been provided as part of Appendix 6-D of the DEIS (see Appendix F – *Trip Generation Basis* within Appendix 6-D – *Traffic Study Appendices*).

As described in Section 6.3.1.1 of the DEIS, proposed developments in the Town of Dover, which may impact traffic operations in the study area during Project construction and operation were considered in the CVE traffic evaluation. These projects include the Dover Knolls development (apartment, condominium, office, and retail), 22 West Properties (industrial), Plum Hill (industrial), Stony Brook Estates (condominium), lands of Furnia (single-family residence), and Sherman Hills (single-family residence) developments.

All generated trips except shuttle bus trips were distributed to the approaches on Route 22 based on the estimated a.m. and p.m. peak-hour background traffic volumes. Shuttle buses were assumed to have one origin and one destination and travel between the Project Development Area and the Remote Laydown Site only.

The capacity analysis was calculated both with and without site-generated traffic for both the operation and construction. See Tables 6.3-16 through 6.3-21 of the DEIS for a comparison of traffic impacts with and without site generated traffic.

The traffic analysis concludes that, once the Project is operational, all intersections in the vicinity of the Property will operate at an acceptable level of service (Level C or better).

During the Peak Construction Year (estimated to occur in 2014), all intersections in the vicinity of the Property will operate at an acceptable level of service, with the exception of the Project's entranceway. As noted above, CVE is currently working with NYSDOT to identify appropriate temporary measures to implement during construction to mitigate impacts to LOS at the Project driveway.

4. Accessibility to Emergency Vehicles

Town Code §145-63-B(4): The proposed major project will be accessible to fire, police, and other emergency vehicles.

As described in Section 1.3.6 of the Project's FEIS, the Project will be accessed by the existing driveway off of Route 22. Major improvements to the driveway will include widening and grading to improve stormwater flow. A ring road will be constructed inside the secured area to provide access to the various equipment areas and to allow emergency response equipment to access all areas of the Project Development Area. An alternate secured entrance will be located south of the administrative and warehouse building.

The continuously staffed control room will include equipment for communications with local fire and rescue teams, emergency services, the Dutchess County Sheriff's Office, and the New York State Police. In addition, the J.H. Ketcham Hose Company will have the ability to fully access the Property in the event of an emergency.

The Project has coordinated with the J.H. Ketcham Hose Company and prepared a detailed *Site Maneuvering Plan* to ensure that all on-site areas are accessible by their equipment both during construction and operation. The *Site Maneuvering Plan*, which is included as Exhibit A15, is designed to accommodate the J.H. Ketcham Hose Company's (and surrounding town's) largest truck (42.5').

5. Impact on Public Water, Drainage, Sewer, or Municipal Facilities

Town Code §145-63-B(5): The proposed major project will not overload any public water, drainage, or sewer system, or any other municipal facility.

The Project includes a Zero Liquid Discharge system so that no process wastewater will be discharged from the Facility into nearby surface waters. This will ensure that wastewater from the Project will not affect nearby drainage or sewer facilities. See Section 5.3.3 of the DEIS for a discussion of the Zero Liquid Discharge system.

As noted in Section 5.1 of the FEIS, a SWPPP utilizing Best Management Practices has been developed. The design incorporates control of stormwater discharge from the Project Development Area by three bio-retention facilities and one stormwater management basin. These facilities have been designed to provide quantity controls by attenuating stormwater runoff and releasing runoff to off-site locations at a rate equal to or less than that which existed prior to development of the Property. For all design points and design storms the peak rate of runoff will not be increased. As a result, the Project will not have a significant impact on the adjacent or downstream properties or receiving water courses.

For more detailed information on the Project's drainage and stormwater controls, please see the Preliminary SWPPPs presented as Exhibit A20, B8, and C9, and the Erosion and Sediment Controls Plans presented as Exhibits A21, B9, and C10.

6. Water and Natural Resources – Aquifer Protection

Town Code §145-63-B(6): The proposed major project will not materially degrade any watercourse or other natural resource or ecosystem or endanger the water quality of an aquifer.

The Project proposes to use on-site, bedrock wells to meet water needs. As discussed above (see Aquifer Overlay District above, Section 1.5, page 7) and in *DEIS Section 5.4.4.5*, the pumping test program approved by NYSDEC confirmed the Project will have no significant impacts on offsite wells, wetland areas, or the Swamp River due to the Project's water withdrawal from the primary well (see *DEIS Appendix 5-E Well Test Report*).

The section of the Swamp River abutting the CVE Property has been identified by stream gauging to experience the most robust stream gain of the entire river. The *Site Water Budget Report* (*DEIS Appendix 5-C*), prepared by The Chazen Companies, concludes that, due to this advantageous location within the watershed, the Property is fully capable of supporting the Project's proposed average water consumption under both average and drought conditions, with no permanent off-site drawdown impacts of any type. It should be noted that this conclusion is conservative, as it does not take into consideration the additional water that is expected to be generated from CVE's 3.4-acre rooftop rainwater capture system. That additional water, which is not part of the assessment, is estimated to supplement the water budget by an annual average of more than 7 gpm.

In addition, CVE has committed to install a stream gauging station downstream of the Project on the Swamp River to monitor flow. During public meetings with local residents and local environmental groups, attendees concluded that the Route 22 Bridge, where a USGS stream gauging station had been previously sited, would be the most advantageous location for gauging to occur.

§145-33 Water supply. The Planning Board may require an applicant for any subdivision, special permit, or site plan approval to provide evidence of water availability and may require test wells and professional hydrological studies sufficient to establish that a proposed development will have adequate supplies of potable water and will not adversely affect any aquifer resource or the supply or quality of drinking water in the surrounding area.

The Project proposes to use on-site, bedrock wells to meet water needs. As discussed in *DEIS Section 5.4.4.5*, the pumping test program approved by NYSDEC confirmed the Project will have no significant impacts on offsite wells, wetland areas, or the Swamp River due to the Project's water withdrawal from the primary well (see *DEIS Appendix 5-E Well Test Report*).

7. Site Suitability

Town Code §145-63-B(7): The proposed major project will be suitable for the property on which it is proposed, considering the property's size, location, topography, vegetation, soils, natural habitat, and hydrology, and, if appropriate, its ability to be buffered or screened from neighboring properties and public roads.

§145-31 Rural Siting Principles. The following guidelines shall apply to the siting of nonresidential uses that are subject to site plan or special permit approval. They are recommended but not required for the siting of individual residences.

A. Wherever feasible, retain and reuse existing old farm roads and lanes rather than constructing new roads or driveways. This minimizes clearing and disruption of the landscape and takes advantage of the attractive way that old lanes are often lined with trees and stone walls. (This is not appropriate where reuse of a road would require widening in a manner that destroys trees or stone walls.)

B. Preserve stone walls and hedgerows. These traditional landscape features define outdoor areas in a natural way and create corridors useful for wildlife. Using these features as property lines is often appropriate, as long as setback requirements do not result in constructing buildings in the middle of fields.

C. Avoid placing buildings in the middle of open fields. Place them either at the edges of fields or in wooded areas. Septic systems and leach fields may be located in fields, however.

D. Use existing vegetation and topography to buffer and screen new buildings if possible, unless they are designed and located close to the road in the manner historically found in the town. Group buildings in clusters or tuck them behind tree lines or knolls rather than spreading them out across the landscape in a sprawl pattern.

E. Minimize clearing of vegetation at the edge of the road, clearing only as much as is necessary to create a driveway entrance with adequate sight distance. Use curves in the driveway to increase the screening of buildings.

F. Site buildings so that they do not protrude above treetops and crest lines of hills as seen from public places and roads. Use vegetation as a backdrop to reduce the prominence of the structure. Wherever possible, open up views by selective cutting of small trees and pruning lower branches of large trees, rather than by clearing large areas or removing mature trees.

G. Minimize crossing of steep slopes with roads and driveways. When building on slopes, take advantage of the topography by building multilevel structures with entrances on more than one level (e.g., walkout basements and garages under buildings) rather than grading the entire site flat. Use the flattest portions of the site for subsurface sewage disposal systems and parking areas.

The Project will retain and reuse the existing driveway on the Property, which will minimize clearing and disruption of the landscape. Although the driveway will be widened to accommodate the turning movements of construction and emergency vehicles, there are no trees or stone walls that would be impacted. In addition, the existing driveway includes multiple curves which screen the existing buildings from site. These curves will be maintained to aid in screening the CVE facility from view.

As seen on the Existing Conditions drawing included as Exhibit A1, there are no stone walls or hedgerows found on the Property, which was previously cleared and graded by historical operations. In addition, there are no open fields that would be impacted as the Project will be sited predominantly on an existing, disturbed industrial footprint.

The Project will maintain the existing buffers of trees and topography to the greatest extent possible. This includes the commitment to preserve all land west of the railroad track, 57 acres of land to the south of the Project (the Former Rasco Parcel), and up to a 300' of buffer between the Project and Route 22. These buffers will reduce the prominence of the structures.

The Project is suitable for placement on this site because the Project will be consistent with the Dover Master Plan and will be an industrial use appropriately sited within the Town of Dover Industrial/Manufacturing (M) Land Use District. The Project will comply with the Town Code requirements for the applicable land use districts and overlay districts (see Section 1.1 – 1.5 above). The Project will replace an existing industrial use, predominantly utilizing the same disturbed footprint, while serving to clean up and remediate a contaminated site that consists of numerous dilapidated and fire damaged buildings in various states of disrepair.

The Project will remove these existing structures and replace them with a modern industrial facility meeting all state and federal environmental laws and regulations, thereby, enhancing the visual character of the site. The site is also littered with solid waste from historical dumping that will be cleaned as part of Project demolition and site preparation.

Once remediated, the site will be placed back into productive use through construction of a state-of-the-art facility. The Facility will produce substantial economic benefits and employment opportunities for Dover and the surrounding communities and become the Town of Dover's largest taxpayer by a wide margin.

For all these reasons, the Project is exceptionally well suited for its proposed location.

8. Compatibility with Surrounding Land Use

Town Code §145-63-B(8): The proposed major project will be subject to such conditions on operation, design and layout of structures, and provision of buffer areas as may be necessary to ensure compatibility with surrounding uses and to protect the natural, historic, and scenic resources of the town.

The Property was chosen due to its industrial zoning and the ability to re-use an existing, abandoned industrial site, its proximity to an existing high-voltage electric transmission line and existing high pressure natural gas pipeline, and its existing buffer of trees and topography.

The majority of the Property, including the entirety of the Former Rasco Parcel, is located within the Town of Dover's Industrial/Manufacturing District (M), which permits industrial and related uses in isolated and well-buffered locations. The Project will maintain the existing buffers of trees and topography to the greatest extent possible. This includes the commitment to preserve all land west of the railroad track, 57 acres of land to the south of the Project (the Former Rasco Parcel), and up to a 300' of buffer between the Project and Route 22.

Since its initial exploration of the Project, CVE has completed studies, met with community members, including local environmental organizations and conservation groups, and taken steps to affirm or revise its approach in order to ensure its compatibility with surrounding land uses. This includes the addition of the 57-acre Former Rasco Parcel to provide additional buffer to the south.

The Project has, therefore, been carefully designed to be compatible with surrounding land uses and the detailed requirements of the Town Code.

9. Buffer from Residential Properties

Town Code §145-63-B(9): The proposed major project will be consistent with the goal of concentrating retail uses in hamlets, avoiding strip commercial development, and buffering nonresidential uses that are incompatible with residential use.

As noted above, the Project will maintain the existing buffers of trees and topography to the greatest extent possible. This includes the commitment to preserve all land west of the railroad track, and up to a 300' of buffer between the Project and Route 22. As noted above, more recently, CVE acquired an option to purchase the 57-acre Former Rasco Parcel to help preserve and enlarge the buffer between residential properties to the south.

10. Housing Availability

Town Code §145-63-B(10): The proposed major project will not adversely affect the availability of affordable housing in the town.

As discussed in Section 6.7.3.1.4 of the DEIS, the majority of construction jobs are expected to be filled by local (e.g., Dutchess County) workers, who will be able to commute daily to the site. The maximum number of in-migrating workers is estimated to be approximately 75 employees. These employees would be expected to make individual arrangements for housing either through rentals or hotels and motels within Dutchess County. Given the existing vacancy rate in Dutchess County housing (estimated at approximately 6 percent overall vacancy rate and a 3 – 4 percent vacancy rate for

multifamily rental complexes), the in-migration of workers will not affect the availability of affordable housing.

11. Site Plan Criteria

Town Code §145-63-B(11): The proposed major project will comply with applicable site plan criteria in §145-65D. – Specifically required for Special Use Permit Criteria. In reviewing site plans, the Planning Board and Architectural and Community Appearance Board of Review shall consider the criteria set forth below. The Planning Board may also use as approval criteria the three-volume set of illustrated design guidelines published by the Dutchess County Department of Planning in 1994, titled "Hamlet Design Guidelines," "Building Form Guidelines," and "Rural Design Guidelines," and may adapt the recommendations of those documents to the requirements of this chapter. In pertinent part:

(1) Layout and design.

(a) All structures in the plan shall be integrated with each other and with adjacent structures and shall, where practical, be laid out in the pattern of a traditional hamlet.

(b) Structures that are visible from public roads shall be compatible with each other and with traditional structures in the surrounding area in architecture, design, massing, materials, and placement and shall harmonize with traditional elements in the architectural fabric of the area.

(c) Architectural design shall be in keeping with the small-town architectural character of Dover. In general, the design shall avoid flat roofs, large expanses of undifferentiated facades, and long, plain wall sections.

(d) Where appropriate, setbacks shall maintain and continue the existing setback pattern of surrounding properties.

(e) The Planning Board shall encourage the creation of landscaped parks or squares easily accessible by pedestrians.

(f) Trademarked architecture which identifies a specific company by building design features shall be prohibited, unless the applicant can demonstrate that the design is compatible with the historic architecture of Dover or the Building Form Guidelines.

(g) Impacts on historic and cultural resources shall be minimized.

Please refer to the Site Plan drawings, attached as Exhibit A14, B5, and C6, and Project Rendering, attached as Exhibit A8, for a depiction of the Project's layout and design. CVE has developed its Project on an existing industrial site, utilizing a previously disturbed footprint, while maintaining substantial buffers of trees and topography to screen its buildings from view. The Project has

proposed an architectural design with appropriate colors and facades as to blend in to the surrounding expanse of forest.

The Project has consulted with the Office of Parks Recreation and Historic Preservation and has received a determination of No Effect on historic or cultural resources (see Section 6.6 of the DEIS and Section 6.3.6 of the FEIS for further detail).

Since the details of the Site Plan arrangement are found in Exhibits A14, B5, and C6 and the notes set forth in those drawings, they are not repeated here.

(2) Landscaping.

(a) Landscape buffers shall be provided between uses that may be incompatible, such as large-scale commercial uses and residences. Such buffers may include planted trees and shrubs, hedgerows, berms, existing forest land or forest created through natural succession. The width of such buffer areas will depend upon the topography, scale of the uses, and their location on the property but shall normally be between 50 feet and 200 feet.

(b) Landscaping shall be an integral part of the entire project area and shall buffer the site from and/or integrate the site with the surrounding area, as appropriate.

(c) Primary landscape treatment shall consist of shrubs, ground cover, and shade trees and shall combine with appropriate walks and street surfaces to provide an attractive development pattern. Landscape plants selected should generally be native to the region and appropriate to the growing conditions of the town's environment.

(d) Insofar as practical, existing trees and other vegetation shall be conserved and integrated into the landscape design plan.

(e) If deemed appropriate for the site by the Planning Board, shade trees at least six feet tall and two-inch caliper shall be planted and maintained at twenty- to forty-foot intervals along roads, at a setback distance acceptable to the Highway Superintendent.

(f) For landscaping parking lots, see also § 145-38A(4)(c), which reads:

“Landscaping. Parking areas shall be designed and landscaped to avoid long, uninterrupted rows of vehicles by breaking them into separate parking lots divided by tree lines, alleys, pedestrian areas, or buildings. Parking lots containing more than 40 spaces shall be divided into smaller areas by landscaped islands at least 15 feet wide located no more than 120 feet apart. All islands shall be planted with three-inch minimum caliper shade trees at a density of at least one tree for every 20 linear feet of island. Parking lots containing fewer than 40 spaces shall provide at least one three-inch minimum caliper shade tree per eight spaces.”

Detailed Landscaping Plans are included as Exhibits A17, B6, and C7 of this submittal. The Landscaping Plan is designed to adhere to the requirements of §145-63(B)(11)(2).

Since the details of the Landscaping Plans are presented in Exhibits A17, B6, and C7 they are not repeated here.

(3) Parking, circulation and loading.

(a) Roads, driveways, sidewalks and off-street parking and loading space shall be safe and shall encourage pedestrian movement.

(b) Vehicular and pedestrian connections between adjacent sites shall be provided to encourage pedestrian use and to minimize traffic entering existing roads. The construction of connected parking lots, service roads, alleys, footpaths, bike paths, and new public streets to connect adjoining properties shall be required where appropriate.

(c) Off-street parking and loading standards in § 145-38 shall be satisfied.

(d) Access from and egress to public highways shall be approved by the appropriate highway department, including town, county, and state.

(e) All buildings shall be accessible by emergency vehicles.

As described in Section 1.3.6 of the Project's FEIS, the Project will be accessed by the existing driveway off of Route 22. Major improvements to the driveway will include widening and grading to improve stormwater flow. A ring road will be constructed inside the secured area to provide access to the various equipment areas and to allow emergency response equipment to access all areas of the Project Development Area. An alternate secured entrance will be located south of the administrative and warehouse building.

The continuously staffed control room will include equipment for communications with local fire and rescue teams, emergency services, the Dutchess County Sheriff's Office, and the New York State Police. In addition, the J.H. Ketcham Hose Company will have the ability to fully access the Property in the event of an emergency.

The Project has coordinated with the J.H. Ketcham Hose Company and prepared a detailed *Site Maneuvering Plan* to ensure that all on-site areas are accessible by their equipment both during construction and operation. The *Site Maneuvering Plan*, which is included as Exhibit A15 for Project operations and B11 for construction, is designed to accommodate the J.H. Ketcham Hose Company's largest truck (42.5').

In addition, a *Site Signage and Striping Plan*, included as Exhibit A16, has been developed to meet the requirements of this §145-63-B(11)(3).

Additional details relating to parking, traffic circulation and loading are found in Exhibits A15 and A16.

(4) Parkland – not applicable

(5) Miscellaneous standards.

(a) Buildings and other facilities shall be designed, located, and operated to avoid causing excessive noise on a frequent or continuous basis.

See Section 2.1 – Noise (above) for further detail.

(b) Exterior lighting fixtures shall be shielded to prevent light from shining directly onto neighboring properties or public ways. Light standards shall not exceed 20 feet in height.

See the Section 2.5 – Glare (above) and the detailed lighting plans included as Exhibit A18, B7, and C8 to this submittal. As confirmed by these drawings, no Project related use will cause off-site glare in excess of 0.5 foot-candle.

(c) Drainage of the site shall recharge groundwater to the extent practical. The peak rate of surface water flowing off site shall not increase above predevelopment conditions and shall not adversely affect drainage on adjacent properties or public roads.

See Section 5 – Impact on Public Water, Drainage, Sewer, or Municipal Facilities (above). For all design points and design storms the peak rate of runoff will not be increased. As a result, the Project will not have a significant impact on the adjacent or downstream properties or receiving water courses.

(d) Applicable requirements for proper disposal of construction and demolition waste shall be satisfied, and any necessary permits or agreements for off-site disposal shall be obtained.

See Section 2.4 – Solid Waste (above) and the Demolition Plan included as Exhibit A11.

(e) No materials shall be placed below the finished grade of a site other than sand, gravel, rocks, and soil that are uncontaminated by any solid waste or hazardous materials. Materials that were previously contaminated and have been reconditioned shall not be permitted under this Subsection D(5)(e), except that decontaminated material may be used as a base for road or parking lot construction, provided that such decontaminated material does not pollute groundwater or surface water.

As discussed in Section 2.3.3 of the FEIS, a pre-demolition survey was conducted and included testing of concrete and brick materials using TCLP methods which indicate that the materials are inert and acceptable for use as hard fill onsite. If approved by NYSDEC for beneficial reuse, this material will be crushed and recycled as fill on site, as local zoning or variances permit.

A detailed Demolition Plan is included with this submission as Exhibit A11, and prior to construction, a detailed Demolition Application will be submitted to the Town per Section 145-65(B)(18) of the Town Code. CVE understands that the Demolition Permit required by the Town of Dover may not be issued until a report has been submitted indicating the buildings are free of hazardous materials.

12. Residential Districts

Town Code §145-63-B(12): If the property is in a residential district, will have no greater overall off-site impact than would full development of the property with uses permitted by right, considering relevant environmental, social, and economic impacts

The Property is within the Industrial/Manufacturing (M) Land Use District, therefore the provisions of §145-63(B)(12) do not apply.

CONCLUSIONS; REQUEST FOR APPROVAL

The Project has been designed to ensure it is consistent with all land uses in the Town and will be an industrial use appropriately sited in the Town's Industrial/Manufacturing (M) district. The Project will replace an existing industrial use, predominantly using the same disturbed footprint which currently consists of dilapidated or partially destroyed buildings. The site is littered with solid waste, and represents an eyesore that negatively affects the character of the Town. The Project will demolish the existing buildings which are inactive and dilapidated, clean up the site, and install a modern industrial facility meeting all state and federal environmental laws and regulations. The Project represents a substantial improvement over existing conditions at the site and will be well buffered from surrounding areas. Furthermore, the Project will generate substantial tax revenues for the Town, create up to 750 construction jobs, 28 high-paying permanent jobs, and enhance the aesthetic character of the site and the Town. No other proposed use or project other than the Cricket Valley Energy project is of a scale large enough to afford to clean up this site and bring these benefits to the Town.

Cricket Valley Energy Center LLC respectfully requests that the Dover Town Board grant its Special Use Permit and approve the Project's Site Plan, subject to such conditions as the Town Board may reasonably impose.