

Connecticut Resources Recovery Authority

Transition Plan

Exhibits

- A. CT Public Act No. 13-285: An Act Concerning Recycling And Jobs
- B. CT Solid Waste Management Plan Executive Summary
- C. 5-Year and 10-Year Authority Operating Forecast
- D. Solid Waste Disposal Market Assessment
- E. Out-of-State Disposal Market Assessment
- F. State of CT MSW Supply Assessment
- G. Ensuring Capacity for Connecticut's Municipal Solid Waste and Recyclables in Changing Market Conditions
- H. New and Emerging Technology Assessment
- I. Cost Estimate for Dismantling the South Meadows Facility
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- L. CRRA Landfill Property, Infrastructure, and Operational Information
- M. Summary of Public Comments
- N. La Capra Associates Summary Letter and Qualifications

Exhibit I

Cost Estimate for Dismantling the South Meadows Facility



RE POWERTM PLAYBOOK

FOR THE

DECOMMISSIONING

OF THE

CONNECTICUT RESOURCES RECOVERY AUTHORITY (CRRA)

SOUTH MEADOWS RESOURCE RECOVERY FACILITY (RRF)

IN

HARTFORD, CONNECTICUT







EXECUTIVE SUMMARY

TRC has prepared this **RE** POWERTM Playbook for the decommissioning of the Connecticut Resources Recovery Authority (CRRA) South Meadows Resource Recovery Facility (RRF) in Hartford, Connecticut. This site encompasses an approximately 80 acre property, including the Power Block Facility (PBF) and the Waste Processing Facility (WPF). This Playbook does not include the four twin pack jet turbine peak electrical generation units and its supporting facilities located on the site nor does it include the electrical switchyard operated by Connecticut Light & Power (CL&P) It is intended to support the requirements of Public Act 13-285, Section 9 for preparing a transition plan addressing (i) The closure or sale of the Mid-Connecticut Resource Recovery Facility, or (ii) the transition of such facility to an alternative use such as a solid waste management facility.

The **RE** POWERTM Playbook is an engineering study that is designed to identify the plant-specific issues that will drive the scope, cost and schedule of decommissioning the facility. The scope of the Playbook encompasses the following elements:

- ✤ Health and Safety
- ✤ Structural Safety
- ✤ Asbestos
- Hazardous and Regulated Materials
- ✤ Asset Valuation
- Permitting Requirements

- Abatement and Demolition Means and Methods Constraints
- Environmental Considerations
- Utilities
- Cost Estimate
- Schedule

The table at the end of the Executive Summary presents a summary of key issues and recommended actions associated with decommissioning the South Meadows Facility.

ESTIMATED COSTS

The costs to perform pre-demolition surveys, develop plans and specifications, abate, decommission, and demolish the plant are estimated between \$12.9 million and \$19.3 million net after scrap/salvage (estimated between \$3.4 million and \$5.0 million). Site restoration costs to allow commercial/industrial use are included in these estimates. TRC has also developed a take-out price of \$952,920 should the WPF



building be maintained intact for alternate use. This take out price assumes that the building is abated and process equipment removed.

Power plant decommissioning costs vary widely, and TRC recommends development of pre-demolition surveys to define the scope of work, performance of a formal asbestos and hazardous material survey, preparation of plans and specifications for competitive bid, prequalification (safety, financial, prior experience, insurance, etc.) of contractors for abatement, decommissioning, demolition, and restoration, and full documentation of the entire process.





SCHEDULE CONSIDERATIONS

The decommissioning process includes the activities and time frames listed below. Actual abatement and demolition activities on site take 18–24 months. The entire process can take 30 to 36 months after a decision is made to proceed.

| Decommissioning Activity | Typical Duration |
|------------------------------|------------------|
| Pre-demolition Surveys | 3 months |
| Plans and Specifications | 3 months |
| Procurement | 4 months |
| Work Plans & Permits | 6 months |
| Abatement and Hazmat Removal | 6 months |
| Structural Demolition | 15 months |
| Site Restoration | 2 months |





| Table ES-1 – Key Issues and Recommended Actions | | | | | | |
|--|--|---|--|--|--|--|
| Category | Issues | Recommendations | | | | |
| Health and Safety | Goals include Protection of Workers and the Public Health and Safety and Protection of Private Property. | Site-Specific Health and Safety Plan, amended by Job Safety Analyses for new tasks and phases of work. | | | | |
| Structural Safety | Identify structural safety issues prior to decommissioning. | Isolate and /or barricade structurally deficient areas. | | | | |
| Asbestos, Hazardous and Regulated Materials (within the building structures) | Asbestos, hazardous and regulated materials are present within the building structures, but a formal inventory has not been performed. Removal is regulated under federal and state laws. | Complete pre-demolition asbestos, hazardous materials, and regulated materials surveys. Properly remove and dispose of regulated materials prior to demolition. | | | | |
| Asset Valuation | The South Meadows Facility may have operational equipment that can be placed into service or inventory at another RDF facility. Need strategy to recover scrap and salvage value. | Inventory the equipment and determine potential uses (i.e., re-use within CRRA or scrap). | | | | |
| Permitting | Closure or modification of facility permits will be required. Facility personnel, contingency planning, and petroleum/chemical spill risks will change as a result of facility decommissioning. Permits will be required for plant demolition. Closure of the hazardous waste less than 90-day storage unit within the facility will be required. | Close or modify facility permits as required. Apply for new permits to address decommissioning activities. Update existing contingency and spill response plans to address facility personnel and procedures applicable to facility demolition. Prepare and implement a less than 90-day hazardous waste management closure. | | | | |
| Abatement and Demolition Means and Methods Constraints | Removal of the existing above ground structures will require development of plans and specifications for demolition and site restoration. | Confirm scope and complete surveys and investigations required to support preparation of demolition design drawings and specifications. Prepare bid package identifying project requirements and solicit competitive bids. | | | | |
| Utilities | The plant can be isolated from the switchyard which will remain in operation. | Identify the service requirements and develop plan for providing temporary service for demolition. | | | | |





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RE POWER[™] Playbook CRRA South Meadows Mid-Connecticut Facility



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1. INTRODUCTION

The State of Connecticut has passed Public Act 13-285, Section 9 which requires the preparation of a transition plan addressing (i) The closure or sale of the Mid-Connecticut Resource Recovery Facility, or (ii) the transition of such facility to an alternative use such as a solid waste management facility The Connecticut Resources Recovery Authority (CRRA) South Meadows Resource Recovery Facility (RRF) plant in Hartford, Connecticut encompasses an approximately 80 acre property, including the Power Block Facility (PBF) and the Waste Processing Facility (WPF). In support of this transition plan, CRRA contracted TRC to develop a **RE** POWERTM Playbook. This Playbook specifically addresses the PBF and WPF and does not include the four twin pack jet turbine peak electrical generation units and their supporting facilities or the active Connecticut Light & Power (CL&P) operated electrical switchyard.



A. RE POWERTM Playbook

RE POWERTM Playbooks are engineering studies based on existing information. The purpose of the Playbook is to identify the plant-specific issues that will drive the scope, cost and schedule of decommissioning the facility.

The Playbook begins with an understanding of the existing plant and property, considers environmental conditions and the re-use as a commercial industrial property after plant decommissioning, and identifies the key issues associated with decommissioning the plant. The scope of the **RE** POWERTM Playbook encompasses the following elements:

- ✤ Health and Safety
- ✤ Structural Safety
- Asbestos
- Hazardous and Regulated Materials
- ✤ Asset Valuation

- Permitting Requirements
- Abatement and Demolition Means and Methods Constraints
- Environmental Considerations
- ✤ Utilities
- ✤ Cost Estimate
- Schedule

TRC staff visited the South Meadows Facility on September 12, 2013 to perform a visual inspection and interview facility personnel. TRC was provided with available drawings and documents pertinent to the scope of work.





B. Plant Decommissioning

The basic assumption for this estimate is that decommissioning of the South Meadows Facility will entail demolishing existing structures with the exception of the switchyard and the jet turbine facilities, implementing regulatory required closures, and performing site restoration to a commercial/industrial standard such that portions of the property may be retained or sold/leased for redevelopment. Regardless of the final redevelopment plans, the following tasks will be required:

- Structurally unsafe locations will be identified, access will be barricaded, and physical security established at the site.
- Operational equipment that may be placed in service or inventory at another facility (e.g., transformers, cranes, etc.) will be prepared for over-road transport and removed.
- Asbestos, regulated materials and petroleum products will be identified and removed. Oil-filled equipment will be drained in preparation for removal.
- Facility permits for air and water discharges will be revoked, terminated, or modified with applicable regulatory agencies. Facility-specific contingency and spill plans will be modified to address decommissioning activities.
- Connections to the transmission network will be disconnected and on-site utilities will be decommissioned (e.g., electric service to the plant, water, sewer, etc.).
- Plans and specifications for demolition and site restoration will be developed. As a base scope, the demolition will include the removal of on-site structures to the top of concrete slabs and foundations. Slabs at grade level will remain in place. The structures located in the Connecticut River (e.g., barge dock, intake and discharge structures, etc.) are subject to US Army Corps of Engineers (USACE) jurisdiction and it is assumed they will be maintained or site conditions restored in accordance with permit requirements. Terrestrial at-grade and below-grade structures will be properly closed and abandoned in-place (e.g., basement areas will be filled with processed or crushed concrete rubble or fill, to grade). The grade will be finished consistent with the environmental land use restrictions (ELURs) discussed below. This plan assumes that no above-grade structures will remain after plant decommissioning other than those related to the jet engine facility and the switchyards.
- It is assumed that, at the time of demolition, the Site has been remediated and verified pursuant to the Connecticut Transfer Act [Conn. Gen. Stat. § 22a-134 et seq.] and the State of Connecticut Remediation Standard Regulations (RSRs), per the Transfer Act Form III filings of April 26, 2001 and April 15, 2009, either pursuant to commercial/ industrial standards or pursuant to approved alternate standards.

The following sections present the key issues identified with the decommissioning of the South Meadows Facility and discuss the potential cost and schedule implications. A preliminary schedule and cost estimate for demolishing the plant and restoring the property is presented. In addition, recommendations for the actions that would be required to proceed with plant decommissioning are presented.







2. SOUTH MEADOWS FACILITY

The South Meadows Facility initially entered commercial service in 1921 with a 20 megawatt (MW) generating facility owned by Hartford Electric Light Company, which later became CL&P and Northeast Utilities (NU). The \$5 million plant was a marvel of efficiency at that time, one of the first to be equipped with coal conveyors and automatic stokers and burned 150 tons of coal daily. Four additional units were added between 1927 and 1937, another in 1942 and in 1949.



A jet engine powered facility was added in 1962 with four Pratt & Whitney jet engines added in 1970.

The facility was shutdown in 1975 and the original four generating units retired.

In 1985, the two abandoned coal fueled units were reactivated by CRRA and CL&P, in a joint effort to build a trash-to-energy facility with a total capacity of 64 MW of electricity. The Mid-Connecticut Resource Recovery facility was designed and constructed by Combustion Engineering, Inc. (C-E). Construction began in the spring of 1985 with startup in the fall of 1987 and full scale commercial operation in the fall of 1988.

The new waste processing facilities were built on land adjacent to the existing generating station.

The majority of the property was owned from circa 1916 to April 30, 2001 by CL&P (and its predecessor companies) and has been used for electrical power generation since the early 1920s. CRRA purchased the property in 2001 from CL&P and under their agreement; CL&P retains easements and leaseholds for portions of the property that are critical to their operations. It is assumed in this evaluation that CL&P retains additional leaseholds (such as for the electrical switchyards) and easements.

A. Site Setting

The CRRA South Meadows Facility property is located at Gate 20 Reserve Road and 300 Maxim Road in Hartford, Connecticut (see Figure 1). The property consists of approximately 80 acres of land which is zoned for commercial/industrial usage. Approximately two-thirds of the property (the northern portion) is known as the Power Block Facility (PBF) at which there is an electrical generating station, while the remaining one-third of the property (the southern portion along Maxim Road) is known as the Waste Processing Facility (WPF) and is used to prepare municipal solid waste for combustion at the PBF.





B. PBF



The PBF is occupied by multiple structures, including: a small guard building adjacent to the Gate 20 driveway entrance; the administrative building; PBF main building which includes substructures added onto over the course of the history of the plant (the turbine hall, the boiler area, the electrical area, the cable vault, the former NU offices, the control room); the ash load- out building; the warehouse; the jet shop; the jet fuel pump house; the coal pond pump house; several screen houses; the conveyor building; truck wash building, and a warehouse storage building in the far southwestern portion of the property. The warehouse storage building is currently used as a less than 90day hazardous waste storage area.

The Power Block consists of three (3) C-E VU40 boilers that: generate 231,000 lb/hr (105,000 kg/h) of steam while firing 100% refuse derived fuel (RDF); generate 188,000 lb/hr (85,455 kg/h) steam while firing 100% coal; or with co-fire RDF and coal in any combination, generate up to 231,000 lb/hr (105,000 kg/h) steam. Currently, the facility is powered solely by RDF. Steam is headered to either of two (2) 45 MW, 465,000 lb/hr (211,364 kg/h) turbine generators.

Two electrical substations (one 23 kV and one 115 kV) are located in the central portion of the PBF. The substations deliver electricity to the City of Hartford through a 115 kV cable which runs through the northwestern portion of the property. A transformer switchyard was formerly located just to the south/southeast of the 115 kV switchyard. In addition, there are four jet turbines located to the south/southwest of the main PBF building which are on standby for a "black start" in the event of a major outage. Jet fuel to power the turbines is stored in a newly-constructed (2011) 550,000-gallon welded steel aboveground storage tank (AST) which is located to the west of the jet turbines. Decommissioning of the jet engine facility (Jet Facility), including the AST, is outside the scope of this playbook.



The areas of the PBF which are not occupied by buildings or other features as described above are covered by grass, parking areas (asphalt or gravel) or by the two other noteworthy features at the PBF; the lined coal pond/coal pile and the wetlands. The lined coal pond/coal pile, constructed in the late 1980s, is located in the southern portion of the PBF, approximately 100 feet north of the security fence that separates the WPF from the PBF. This feature is underlain by a 100-mil liner installed to facilitate the storage of coal piles and stormwater

There are several small, low-lying, poorly drained, and seasonably wet areas located in the southwestern portion of the PBF that have been delineated as wetlands by a Certified Wetland Scientist. These wetlands receive stormwater run-off via overland flow from a portion of the property.





C. WPF

The WPF is occupied by two buildings. The first is an approximately 202,000 square foot building which houses the administrative offices, the processing equipment, the Maneuver Hall and the refuse derived fuel (RDF) storage area. An approximately 38,000 square foot storage building is located to the north of the administrative offices at the WPF. At the time of the Phase I environmental site assessments conducted by HRP and M&E in the late 1990s, the portion of the WPF building known as the Maneuver Hall had not yet been constructed. This portion of the building was constructed in the early 2000s. Other notable features at the WPF include the truck scale and scale house located to the south of the WPF building and the stormwater detention basin located to the west of the WPF building. The remainder of the WPF not occupied by the buildings or stormwater detention basin are covered by grass or paved driveways and parking areas.



Municipal solid waste is accepted into the WPF building for sorting and processing in preparation for transfer as a fuel for combustion at the PBF.

The WPF has a maximum equipment processing capacity of 3,700 tons of acceptable waste per day under a permitted 888,888 tons per year permit limitation. Processible waste is processed to produce RDF.

The refuse derived fuel technology prepares solid waste for combustion by first removing non-combustible materials such as

dirt, metals and glass and then sizing the fuel for improved combustion. The municipal solid waste (MSW) processing scheme includes five main components:

- (a) Inspection / picking ahead of processing
- (b) Flail shredding
- (c) Magnetic separation
- (d) Screening
- (e) Secondary shredding



The facility has two parallel, separate identical processing lines each with a nominal capacity rating of 100 tons/hr.

The waste is transferred between the two facilities by an approximately 200 foot long, enclosed conveyor that runs south to north between the RDF storage building and the main PBF building.





D. Topography

The topography of the property can be characterized as variable, with the majority of both the WPF and PBF being relatively flat. As indicated on Figure 2, the Site Plan, there are four main areas of the PBF where topographic relief is prominent, these include: the flood control dike; the transition area between the filled upper portion of the property and the lower portion of the property where the fuel farm formerly existed; the lined coal pond/coal pile berm and the area known as the former vanadium pile located in the southern portion of the PBF. Likewise, topographic relief is prominent in particular areas of the WPF including: along the flood control dike; in the grassed areas to the south, east and west of the WPF building; and in the transition from the paved area to the west of the building down to the stormwater detention basin.



The majority of the surface water run-off from the PBF portion of the property discharges into open swales or flows via overland sheet flow to the low-lying wetland areas and the lined coal pond area, all located on the property. The surface water run-off that is captured in the majority of these wetland areas is either subject to evaporation or infiltration into the ground surface, as there is no surface discharge point (with the exception of the wetland located farthest to the west, the smallest of the wetland areas delineated at the property, which discharges off-property into a culvert pipe). A very small portion of the property along the westerly boundary drains off-site to the west and southwest in a series of off-site drainage ditches, most of which are part of the Metropolitan District Commission (MDC) drainage system for the area. It appears that this drainage system drains to the south-southwest, where it eventually discharges to Folly Brook, with the water pumped over the Folly Brook Dike at a pump station operated by MDC, discharged to Wethersfield Cove, and then eventually to the Connecticut River.

The stormwater run-off that is captured in the lined coal pond was used as make-up water for the boiler system at the plant, thereby resulting in a zero discharge scenario for the portion of the property located right around the plant itself. The surface water run-off at the WPF is captured in a series of catch basins across that portion of the property and is ultimately discharged into the stormwater detention basin in the





northwestern corner of the WPF. The water captured in this basin is subject primarily to evaporation and infiltration.

A portion of the PBF roof drainage is piped through the flood control dike at the northeast corner of the building and discharges to the Connecticut River.

E. Security

The primary operational areas of the property (everything to the south of the Charter Oak Bridge) are secured by a combination of chain-link fencing around the northern, southern and western extents, and the flood control dike to the east. Secured entrances exist along Reserve and Maxim Roads. These entrances may be either manned or controlled electronically. Additional security fencing is present between the WPF and PBF portions of the property, as well as around sensitive operational areas such as the switchyards and jet turbine yard. With proper approval/clearance, the property is accessible through one of three gates along Reserve Road (Gates 20, 30 or 40, from north to south) or through the entrance to the WPF off of Maxim Road.

F. Land Use

The surrounding area within 1,000 feet of the property consists primarily of a mixture of industrial and commercial properties. The property is bordered to the north/northwest by the Charter Oak Landing (park and boat launch); to the south by Maxim Road, beyond which is the Brainard Airport and associated businesses; to the west by Reserve Road and the former National Guard property, beyond which is the Regional Market and other businesses; and to the east by the Connecticut River. The Greater Hartford Flood Commission-controlled flood control dike is located along the entire eastern boundary of the property between the facility and the Connecticut River. Immediately to the south/southwest and adjacent to the property is a parcel of land on the corner of Maxim and Reserve Roads owned by CL&P, a portion of which is utilized as an electrical equipment laydown yard. Access to the property off of Reserve Road via Gate 40 is made possible by an easement granted by CL&P in favor of CRRA.

The portion of the Site under and north of the Charter Oaks Bridge has not been used for industrial purposes, though it is part of the CRRA parcel, and is zoned industrial. This portion of the Site is adjacent to the Charter Oak Landing Park. This Playbook assumes that this portion of the Site remains as is, and is consistent with industrial use.

G. Chemical and Petroleum Storage



There are ASTs containing water, petroleum products, used oil and ash, and water treatment chemicals in use at the plant. Table 2-1 summarizes the chemical and petroleum ASTs at the South Meadows Facility and Table 2-2 summarizes ASTs in use at the Jet Turbine facility that are not included in this estimate. No USTs are known to be present at the facility.





| Table 2-1 – Summary of Chemical and Petroleum Storage Tanks/Equipment PBF and RDF | | | | |
|---|--|-------------------|---|--|
| Location | Location Contents (gallons) Shell Capacity Use | | Use | |
| PBF | Sodium Hydroxide | 5,000 | Inactive boiler treatment water | |
| PBF | Sulfuric Acid | 5,000 | Inactive boiler treatment water | |
| PBF | Diesel fuel | 2 @ 500 | Equipment fuel | |
| PBF | Urea | 25,000 | NOx emission control | |
| PBF | Lime Slurry | 15,000 | Ash processing | |
| PBF | Lime Slurry | 3 @ 600 | Ash processing | |
| PBF | Used Oil | 1,200 | Used oil storage | |
| PBF | Turbine Oil | 1,400 | Virgin turbine oil storage | |
| PBF | Lube and Seal Oil | 2,375 | Turbine 5 seal, reservoir, and tanner oil | |
| PBF | Lube and Seal Oil | 2,375 | Turbine 6 seal, reservoir, and tanner oil | |
| PBF | Dielectric Oil | 2 @ 265 | Transfer building 1,000 KVA transformers | |
| PBF | Dielectric Oil | 2 @ 385 | Transfer building 1,500 KVA transformers | |
| | | | | |
| RDF | Diesel Fuel | 5,000 | RDF equipment fuel | |
| RDF | Diesel Fuel | 100 | Mobile re-fueler for shredder | |
| RDF | Kerosene | 275 | Trailer heater fuel | |
| RDF | Dielectric Oil | 2 @ 285 & 1 @ 324 | 3 Operating transformers | |
| RDF | Diesel Fuel | 300 | Heat water for wheel wash facility | |
| RDF | Hydraulic Oil | 2 @ 275 | Hydraulic units for waste processing | |

| Table 2-2 – Summary of Chemical and Petroleum Storage Tanks/Equipment Jet Turbine Facility | | | | |
|---|----------------|-----------|-------------------------------|--|
| LocationContents (gallons)Shell Capacity (gallons)Use | | | | |
| Jet Facility | Jet Fuel | 550,000 | Generator Fuel | |
| Jet Facility | Dielectric Oil | 2 @ 7,560 | 2 Operating Transformers | |
| Jet Facility | Lube Oil | 4 @ 100 | Generator Lube oil Reservoir | |
| Jet Facility | Jet Fuel | 4 @ 100 | Primary and Secondary Filters | |





H. Other Site Improvements

Separate from the Power Block are support buildings, including the switchyard facilities which will remain in operation after the plant is decommissioned

I. Connecticut River and Flood Control System

The South Meadows Generating Facility was built within the floodplain of the Connecticut River in the 1920s. The original and current generating plant construction incorporates а cooling water intake/discharge connection with the Connecticut River. In 1938. Connecticut was hit by a major hurricane that flooded the entire City of Hartford, including the South Meadows Generating Facility. The severity of the 1938 flood initiated major flood control projects, including the immediate construction of the flood control dike system that separates the entire South Meadows site from the Connecticut River. In addition to the earthen dike and concrete floodwalls, there is a continuous sheet pile barrier beneath the dike system that is keyed into the alluvial clay strata to limit groundwater flow beneath the dike system.



Following construction of the flood control dike system, the only interconnections of the South Meadows site with the Connecticut River are the cooling water intake and discharge conduits that run beneath the dike structure. Stormwater runoff is directed to an on-site detention basin on the west side of the Site, Discharge from the detention basin ultimately is captured in the municipal storm-sewer system along Reserve Road to the northwest of the WPF. This system terminates at the South Meadow Detention Pond/Pumping Station which manages water discharge to the Connecticut River.

In the 1940's, Northeast Utilities constructed a fuel farm storage facility in the western portion of the site near Reserve Road. The fuel farm consisted of five welded steel ASTs that were used to store fuel oil for power generation. As part of this facility construction, buried fuel lines were installed from the fuel farm to a barge unloading station on the Connecticut River. The buried fuel lines penetrate beneath the flood control dike and have their terminus at the barge dock on the river. All of the original five ASTs within the fuel farm have been removed. The primary operating AST on the Site is the 550,000 gallon jet fuel tank that was constructed in 2011. This tank services the generators associated with the Jet Facility. The barge fuel line has not been used by CRRA since the time of site acquisition in 2000. CRRA has filled the former and current jet fuel tank using the onsite tanker truck unloading area.

CT DEEP Groundwater/Surface Water Classifications

The groundwater at the property (and in the surrounding area) is classified as "GB" by the CT DEEP. In accordance with Connecticut's Water Quality Standards, the designated uses of groundwater bearing the "GB" designation are industrial process water and cooling waters and base-flow for hydraulically connected surface water bodies. Class GB groundwater is presumed not to be suitable for human consumption without treatment. Additionally, as part of the Connecticut Transfer Act remediation, alternative groundwater standards were obtained for the Facility.





The adjacent Connecticut River is classified as "SB", with designated uses including: marine fish, shellfish and wildlife habitat, shellfish harvesting for transfer to approved areas for purification prior to human consumption, recreation, industrial and other legitimate uses, including navigation. The discharge to an "SB"-classified surface water is restricted to: discharges from public or private drinking water treatment systems; dredging and dewatering; emergency and clean water discharges; cooling waters; discharges from industrial and municipal wastewater treatment facilities (providing Best Available Treatment and Best Management Practices are applied); and other discharges subject to the provisions of Conn. Gen. Stat. §22a-430.





3. FUTURE USE



In developing the cost estimate for abatement, decommissioning, demolition and restoration, TRC assumed that the Site will have been remediated and verified in accordance with the Connecticut Transfer Act. For the purposes of this evaluation, it is assumed that facility structures will be demolished down to the top of concrete slabs and their foundations and final cover will be consistent with ELURs, discussed below. Foundations and building slabs at grade level will remain in place. Above-grade piping will be cut and removed and below-grade piping capped.

Costs have been provided for the demolition of the PBF and WPF. A separate cost has been provided that reflects the total cost should the WPF structure remain in place and be used as a waste handling facility. In both cases, abatement activities are performed within the WPF and all equipment is removed.





4. HEALTH AND SAFETY

A. Task Description

Safety should always be the number one priority. TRC identified potential existing hazards listed below and has made recommendations for safety and accident prevention programs for future work.

B. Issue Identification

TRC maintains a HASP for **RE** POWERTM projects and performed a visual inspection of South Meadows Facility in consultation with facility personnel. Safety training was provided by the plant staff and reviewed with the members of the inspection team prior to performing work at the facility. Potential existing hazards identified at the South Meadows Facility that may impact decommissioning include:

- Physical Hazards
 - Structural safety concerns
 - Falling/flying objects and debris
 - Cold and heat stresses
 - Operating equipment
 - Slips, trips and falls
 - Fire and explosion
 - Manual lifting
 - Splashing
- Environmental Hazards
 - Asbestos
 - Petroleum products and dielectric fluids
 - Polychlorinated biphenyls (PCBs)
 - Ash residue
 - Heavy metals (e.g., lead, arsenic and mercury)
 - Coal combustion residual
- Biological Hazards
 - Animals/vermin
 - Insects

- Underground and overhead utilities
- Energized equipment
- Working near water
- Vehicular and traffic control
- Confined spaces
- Flooding related hazards
- Dust
- Silica
- Other chemicals and gases

 (e.g., lime, hydrazine, carbon dioxide, hydrogen, sodium phosphate, sodium hypochlorite, caustic soda, nitrous oxide, nitrogen, and others).
- Plants





Investigation and demolition activities will introduce additional hazards. The safe execution of work is the single most important project element. The underpinnings of a quality safety program hinge on three key elements:

- An effective Environmental, Health and Safety Management System (EHSMS)
- ✤ A Site Specific HASP coupled with the performance of Job Safety Analysis (JSAs) specific to decommissioning activities
- ✤ Reliance on work plans and engineered demolition plans



The process starts with corporate commitments to safety. It is this platform that underpins safety consciousness, culture, and approach. The HASP combined with the JSAs identifies work tasks, the potential health and safety risks, and the engineering and the administrative controls that will be implemented to mitigate the risks on a project specific basis. The work plans and engineered demolition plans work in harmony with the HASP. These plans outline a sequential approach to safely execute the work under the oversight

and direction of the dedicated Health and Safety Officer. Potential safety risks are identified, mitigated, and managed with a controlled engineered approach to demolition. Because Site soils are subject to the restrictions of the ELURs, the HASP will incorporate appropriate health and safety protocols (as well as CT DEEP notification/interaction).

C. Recommended Actions

It is recommended that JSA's and addenda to the Site-Specific HASP be prepared for all new tasks and phases of work. Health and safety program requirements in accordance with CRRA and Occupational Safety and Health Administration (OSHA) safety rules and practices into plans and specifications should be incorporated.

Required components of the health and safety program include:

- ✤ Daily safety briefings to review JSAs and the HASP.
- Revisions to the JSA and HASP if new hazards are introduced.
- Implementation of a Behavior Based Safety (BBS) program.
- Reporting and conducting Root Cause Analysis of all incidents and "near misses."
- ✤ Audits to verify compliance with the JSAs and HASP.





5. STRUCTURAL SAFETY

The South Meadows Facility has been well maintained and is in good condition with few structural issues identified. NAES, the current operator of the facility, is completely familiar with all of the structures and equipment on the Site. NAES has identified and marked with yellow and red tape restricted areas and possible structural safety issues. Accordingly, TRC was not required to conduct a safety inspection.

A more detailed inspection should be performed after plant shut down to confirm current conditions.







6. ASBESTOS, HAZARDOUS AND REGULATED MATERIALS

A. Task Description

TRC conducted a preliminary evaluation of known or potential asbestos-containing material (ACM), lead-based coatings, and hazardous and regulated material within the building structures at the South Meadows Facility. The evaluation consisted of a review of existing documentation, interviews with facility personnel, and a visual inspection of the plant. Material sampling was not performed as part of the preliminary evaluation.

B. Issues Identification

Asbestos

HRP's 1999 Phase 1 Assessment stated that:

"A previous 1985 asbestos removal report (see reference in Section 1.D (of HRP's report) prepared for northeast utilities has been identified. The report documents asbestos abatement

activities conducted on site between November 10, 1985 and November 12, 1985 and results of associated air sampling for asbestos fibers. Based on this report, it is not possible to specifically identify the location(s) of abatement activities or the material assessed for asbestos content prior to abatement. In the absence of more complete documentation, building materials such as ceiling and floor tiles, cove molding, stair treads,



associated mastics, window caulking, thermal system insulation, flexible ductwork connectors, roofing materials and spray on fire proofing should be presumed to contain asbestos unless testing or prior sampling results prove otherwise."

Also, TRC reviewed HRP's Hazardous Materials Survey report dated March 29, 2012, which included as an attachment, a copy of the survey performed by TRC in 2002. The limited survey was performed in only a small section of the Power Block Facility (PBF) which was once owned by Northeast Utilities (NU). Asbestos containing materials (ACM) were found in the form of floor tiles & mastics.

Since that time a comprehensive asbestos and hazardous material survey has not been performed for the South Meadows Facility. Based on the absence of site-specific information regarding the location and quantity of asbestos containing materials and hazardous materials, TRC has assumed that these materials are present and has included the costs for abatement in our estimate.

This estimate is based on the results of the Site walk. Quantities have been estimated based on TRC benchmarks from other comparable facilities.





The following summarizes the findings from the Site inspection, interviews, and drawing review:



✤ Two of the old boilers still remain in the PBF and are presumed to contain ACM. Also, since the three boilers that were installed in 1985 have not been sampled, they are presumed to contain asbestos as well.

✤ Asbestos-containing transite was noted in numerous locations throughout the facility associated with, but not limited to, the coal conveyor building and transfer systems, laboratory counter tops and laboratory hoods, and electrical systems.

✤ Historically, stacks are often lined with a wire mesh reinforced, "gunite" lining. Documents describing previous asbestos sampling of the original lining material were not

available for review; therefore, additional investigation and asbestos sampling are warranted.

- Suspect United States Environmental Protection Agency (USEPA) Category I non-friable ACM (such as packings, gaskets, resilient floor coverings, and asphalt roofing products) and Category II non-friable ACM, which consists of all other material excluding friable ACM and Category I ACM (such as, but not limited to, glues, mastics, window glazing/caulking, etc), were identified at the site. Asbestos inspections must be performed in buildings prior to any future demolition/renovation work regardless of age of construction. Since the HRP survey report from March 29, 2012 was the only survey report provided to TRC, additional investigation and potential sampling are warranted.
- One ELUR also addressed asbestos in soil, as discussed in Section 10D.

Lead-Based Coatings

Due to the age of the structures, it is likely that the lead-based coatings are present on structural steel and other metal surfaces. Finish coats could also contain elevated concentrations of lead. The only documentation that indicated lead painted surfaces were tested was HRP's March 29, 2012 report of the former NU area in the PBF. No other documents which indicate that painted surfaces at the plant have been sampled for lead were provided for review. Accordingly, an allowance for lead paint remediation has been included in our cost estimate.

Hazardous and Regulated Materials

Hazardous and regulated materials are present throughout the plant. These products include petroleum products (fuel, waste oil), solvents, acids and caustics, ethylene glycol, and compressed gases (hydrogen).

It is assumed based on the walk-down of the facility that mercury switches are present. Facility personnel are unaware of any remaining PCB-containing components at the PBF or WPF facilities, however, confirmatory documents were not provided for review. Universal wastes such as light bulbs, batteries and printed circuit boards are also present throughout the facility.







Also, based on the age of plant, it likely that PCB-containing glazings/caulking and fluorescent light ballasts are present. HRP's March 29, 2012 survey report has indicated that both federally and state regulated PCBs are present in the caulking/glazing of the former NU portion of the PBF. A sample of the adjacent concrete substrate in contact with a >50 mg/kg caulk (PCB Bulk Product Waste) was tested for PCBs and found to contain > 1 mg/kg, therefore the substrate is currently considered a PCB Remediation Waste.

Hazardous wastes are generated at the plant, which is currently categorized as a Resource Conservation and Recovery Act (RCRA) Large Quantity Generator (LQG) under USEPA ID No. CTD043030170. Hazardous wastes are stored in the PBF warehouse, as well as at satellite accumulation locations in the maintenance department. Routine hazardous wastes consist of filter bags which are characterized as a characteristic hazardous waste due to the presence of lead (D008) and cadmium (D006) above regulatory thresholds. Universal wastes such as light bulbs and batteries are also present.

There were no records indicating that the firebricks have been tested for hazardous waste characteristics. In some instances, firebricks contain elevated concentrations of metals, which require management of firebricks as hazardous waste.

An allowance for each of the costs listed above is included in our estimate.

Hazardous materials, as they relate to the Transfer Act are addressed in Section 11.

C. Recommended Actions

The inspection findings indicate the presence of data gaps regarding ACM, lead-based coatings, PCBs, and other hazardous/regulated materials. Uncertainty regarding the presence and location of these materials/substances may result in inflated bid costs and/or contractor change orders during abatement/demolition, if not inventoried. To address the data gaps, recommendations are provided below.

Asbestos

USEPA National Emissions Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 61, Subpart M, Article 61.145(a); Standard for Demolition and Renovation, states that a thorough asbestos inspection must be conducted prior to demolition or renovation to determine the presence of Regulated ACM, Category I ACM and Category II ACM. The Connecticut Department of Public Health enforces the federal Asbestos NESHAPs rule and regulates the licensure and training of persons engaged in asbestos related activities. TRC recommends that a pre-demolition, destructive-level asbestos survey with appropriate bulk sampling be conducted in order to determine the location, type, condition/friability and quantity of ACM at the facility.





Lead-Based Coatings

OSHA Construction Regulation 29 CFR 1926.62, Lead, would be applicable to the South Meadows Facility during salvage and demolition activities. Based on the findings of our preliminary investigation, TRC recommends that a pre-demolition lead-based coating survey be conducted at the facility as well as characterization of the demolition building debris containing lead based paint is required to determine whether the demolition debris might be managed as a hazardous waste under RCRA.

Hazardous and Regulated Materials

Based on the findings of the preliminary evaluation, TRC recommends that a pre-demolition hazardous and regulated materials survey be conducted at the facility. Additionally, TRC recommends determining the RCRA hazardous waste management unit closure requirements.

PCB Building Materials

Based on the findings of the preliminary evaluation, TRC recommends that a pre-demolition PCB building materials survey be conducted at the facility. Bulk building material products such as caulks and glazes have been identified by the EPA and CT DEEP as potentially containing PCBs, particularly those installed from ~1950 to 1979. These bulk products and any impacted porous building material substrates and soils immediately adjacent to the bulk products would require proper handling, abatement and disposal during a renovation or demolition project in accordance with both the EPA (40 CFR 761) and CT DEEP (22a-463 through 469a) PCB regulations.

Comprehensive Asbestos and Hazardous Material Survey

As stated previously, a comprehensive asbestos and hazardous material survey should be performed to confirm the assumptions used in this estimate. As indicated in Table 6-1 below, it is estimated that this survey will cost approximately \$127,000 and require approximately 8 weeks to perform.

| Table 6-1 – Asbestos/Lead and Hazardous Waste Survey | | | |
|--|-----------|--|--|
| Item | Price | | |
| Field Survey Labor | \$40,000 | | |
| PLM Asbestos Sample Analysis | \$15,000 | | |
| TEM Asbestos Samples Analysis | \$8,000 | | |
| Sub Total | \$63,000 | | |
| PCB Survey | | | |
| Field Survey Labor | \$24,600 | | |
| PCB Bulk Samples Analysis | \$12,960 | | |
| PCB Soil/Building Substrate Analysis | \$26,680 | | |
| Sub Total | \$64,240 | | |
| Estimated Total | \$127,240 | | |





7. ASSET VALUATION

A. Task Description

TRC inventoried existing assets that may have salvage value above and beyond scrap value. Estimated scrap values were also calculated based on industry metrics.

B. Issue Identification

Given the age and condition of the equipment, a significant portion of the operational equipment at the plant has limited fair market value except as scrap or potential inventory for other RDF facilities. The following types of equipment were identified during the site inspection:

- Cranes
- ✤ Motors
- Transformers
- ✤ Fans
- Compressors

- Truck Scale
- Turbine Nos. 1 and 2
- RDF Processing Equipment



The inspection identified the presence of an appreciable quantity of materials that have scrap value. These materials include carbon steel, copper, aluminum, brass, arsenical copper, and insulated copper cables. As indicated by the following table, the value of these materials is preliminarily estimated at approximately \$4.24 million based on September 2013 scrap prices.

| Table 7-1 – Summary of Estimated Scrap Values | | | | | |
|---|-------------|--------|--------|-------------|--|
| Material | Total | | | | |
| Carbon Steel | 8,358 | Tons | \$280 | \$2,340,240 | |
| Copper | 197,100 | Pounds | \$2.80 | \$551,800 | |
| Spare Parts (warehouse) | | | | \$900,000 | |
| Transformers | | | | \$100,000 | |
| Misc Electrical Equipment | \$350,000 | | | | |
| | \$4,242,040 | | | | |





8. PERMITTING REQUIREMENTS

A. Task Description

TRC reviewed available permits and related documents in order to develop a matrix of permits required for closure and future use scenarios.

B. Issue Identification

Existing facility permits have closure requirements that must be satisfied when the plant is decommissioned. Table 8-1 presents the permits currently held by the Power Block Facility (PBF) and the Refuse Derived Fuel (RDF) facility. Table 8-2 addresses the Jet Facility.

| Table 8-1 – Summary of Existing Permits Requiring Closure PBF and RDF | | | | |
|---|--|--|---|--|
| Agency | Permit Name, Number, Issuance Date, Expiration Date | Permit Revocation/Termination Requirements | Permitting Time* | |
| Connecticut Department of Energy and the Environment (CT DEEP) | Title V Air Permit 075-0245-TV Issuance:1-17-13 Expiration:1-17-18 RCSA 22a-174-33 and 40 CFR Part 70 | <u>PBF</u> Permit revocation is specified at RCSA 22a- 174-2a(h) and may be requested by the permittee in writing and must contain facts and reasons supporting the request. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation | |
| CT DEEP | Air Registration Certificates: 075-0260, 0261, 0262, 0263, 0264, 0265, 0266 and 0267 Issuance:12/5/73 Transferred to CRRA: 2/14/01 Expiration: None | <u>PBF</u> Revocation of a registration is specified at RCSA 22a-174-2a(j)(4) and may be requested by the permittee in writing and must contain facts and reasons supporting the request along with evidence of the shut-down, removal, dismantlement or inoperability of the stationary source. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation | |
| CT DEEP | Pretreatment Permit (wastewater) Permit ID: SP0000850 Issuance: 4/27/11 Expiration: 4/26/16 | PBF Permit revocation is specified at RCSA 22a- 430-4(p) and shall be in writing and contain facts and reasons supporting the request. A permittee requesting revocation of a permit shall state the requested date of revocation and shall, prior to revocation, provide the commissioner with satisfactory evidence that the discharge has been permanently eliminated. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation | |





| Table 8-1 – Summary of Existing Permits Requiring Closure PBF and RDF | | | | |
|---|---|--|---|--|
| Agency | Permit Name, Number, Issuance Date, Expiration Date | Permit Revocation/Termination Requirements | Permitting Time* | |
| CT DEEP | NPDES Permit (wastewater) Permit ID: CT0003875 Issued: 11/17/04 Expires: 11/17/09* | <u>PBF</u> Permit revocation is specified at RCSA 22a- 430-4(p) and shall be in writing and contain facts and reasons supporting the request. A permittee requesting revocation of a permit shall state the requested date of revocation and shall, prior to revocation, provide the commissioner with satisfactory evidence that the discharge has been permanently eliminated. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation | |
| CT DEEP | Stormwater Industrial General Permit Registration #GSI000118 Issued: 6/1/12 Expiration: | PBF and RDF Permit modified 2012 to cover both RDF and PBF facilities. Permit revocation is specified at RCSA 22a-430-4(p) and shall be in writing and contain facts and reasons supporting the request. A permittee requesting revocation of a permit shall state the requested date of revocation and shall, prior to revocation, provide the commissioner with satisfactory evidence that the discharge has been permanently eliminated. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation | |
| CT DEEP | Registration under the CT DEEP Miscellaneous Sewer Discharges General Permit Issuance: 11/4/03 Expiration: 4/30/11 | <u>PBF</u> General permits are not transferrable. Permit revocation is specified at RCSA 22a-430-4(p) and shall be in writing and contain facts and reasons supporting the request. A permittee requesting revocation of a permit shall state the requested date of revocation and shall, prior to revocation, provide the commissioner with satisfactory evidence that the discharge has been permanently eliminated. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation | |





| Table 8-1 – Summary of Existing Permits Requiring Closure PBF and RDF | | | | |
|---|--|--|--|--|
| Agency | Permit Name, Number, Issuance Date, Expiration Date | Permit Revocation/Termination Requirements | Permitting Time* | |
| CT DEEP | Registration under the Vehicle Maintenance Wastewater General Permit Issuance: 4/7/11 Expiration: 1/23/21 | <u>PBF</u> General permits are not transferrable. Permit revocation is specified at RCSA 22a-430-4(p) and shall be in writing and contain facts and reasons supporting the request. A permittee requesting revocation of a permit shall state the requested date of revocation and shall, prior to revocation, provide the commissioner with satisfactory evidence that the discharge has been permanently eliminated. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation | |
| CT DEEP | Water Diversion Registration Numbers: 4000-091-PWR-RI, 092 and 093 Issuance:1983/4 Expiration: None | <u>PBF</u> Permit revocation is specified RCSA 22a-377 (c)-2.t(i). The permittee shall notify the Commissioner in writing two weeks prior to: (A) commencing construction or modification of structures or facilities authorized herein. Unless the permittee maintains in optimal condition any structures or facilities authorized by this permit, the permittee shall remove such structures and facilities and restore the affected waters to their condition prior to construction of such structures or facilities. | File notice two weeks prior to demolition or construction activities | |
| U.S. Fish and Wildlife Service | Migratory Bird Depredation Permit MB826758-0 Issuance: 10/1/12 Expiration: 9/30/13 | <u>RDF</u> Permit revocation is specified at 50 CFR 13.26. Permit allows taking of no more than 250 specific migratory birds of designated species. When a permittee discontinues activities authorized by a permit, the permittee shall within 30 calendar days of the discontinuance return the permit to the issuing office together with a written statement surrendering the permit for cancellation. The permit shall be deemed void and cancelled upon its receipt by the issuing office. | File notice 30 days prior to termination of migratory bird taking activity. | |
| CT DEEP | Solid Waste Permit to Operate Permit 06401021-PO Issuance: 4/6/11 Expiration: 4/6/16 | <u>RDF</u> Termination or revocation of a solid waste permit to operate is subject to the provisions of section Sec. 22a-208a of the Connecticut general statues. | File notice 30 days prior to termination of business involved with regulated activities. | |





| Table 8-1 – Summary of Existing Permits Requiring Closure PBF and RDF | | | |
|--|--|---|---|
| Agency | Permit Name, Number, Issuance Date, Expiration Date | Permit Revocation/Termination Requirements | Permitting Time* |
| CT DEEP | EPA Identification Number CTD983895673 Expiration: None | <u>PBF and RDF</u> To terminate an EPA ID# a Notification of Hazardous Waste Activity Form must be completed and submitted to CT DEEP. Termination of a LQG EPA ID# requires certification that closure is complete. | Implement closure activities and submit EPA Form 8700 to CT DEEP - 180 days |

| Table 8-2 – Summary of Existing Permits Requiring Closure Jet Turbine Facility | | | |
|---|---|---|--|
| Agency | Permit Name, Number, Issuance Date, Expiration Date | Permit Revocation/Termination Requirements | Permitting Time* |
| Connecticut Department of Energy and Environmenta I Protection (CT DEEP) | Title V Air Permit 075-0252-TV Issuance: 8-14-12 Expiration: 8-14-17 RCSA 22a-174-33 and 40 CFR Part 70 | <u>Jet Facility</u> Permit revocation is specified at RCSA 22a-174-2a(h) and may be requested by the permittee in writing and must contain facts and reasons supporting the request. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation |
| CT DEEP | Air Registration Certificates: 075- 0260, 0261, 0262, 0263, 0264, 0265, 0266 and 0267 Issuance: 12/5/73 Transferred to CRRA: 2/14/01 Expiration: None | <u>Jet Facility</u> Revocation of a registration is specified at RCSA 22a- 174-2a(j)(4) and may be requested by the permittee in writing and must contain facts and reasons supporting the request along with evidence of the shut-down, removal, dismantlement or inoperability of the stationary source. Recommend request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition. | 30 days to request permit revocation |
| CT DEEP | Marine Terminal License License MT076 Issuance: 6/25/01 Expiration: None | Jet Facility License termination is subject to the provisions of CGS Chapter 446k, Section 22a-449(b), and Public Act 99-68. The license holder must file a notice with CT DEEP which shall "include information regarding a person employed by the business who may be contacted for information regarding compliance with this Act." Not later than 90 days after license termination information must be submitted which describes disposal of regulated substances, posting of signage, and submittal of a certification. | File notice 30 days prior to termination of business involved with regulated activities. |





If the facility buildings and ancillary structures are demolished, permits will be required to remove structures, grade the Site, and manage stormwater runoff. Table 8-3 summarizes the permits required for demolition.

| Table 8-3 - Summary of Permitting Requirements for DemolitionPBF and RDF | | | |
|--|---|---|---------------------|
| Agency | Permit Name, Number, Issuance Date, Expiration Date and Regulatory Citation | Applicability | Permitting Time* |
| | | FEDERAL | |
| Federal Aviation Administration (FAA) | 14 CFR Part 77 Objects Affecting Navigable Airspace | Notification required for removal of stack if FAA lighted and or use of construction crane greater than 200 feet high or within certain distances to airports. Notification likely required allowing FAA to update aviation obstruction charts. | 90 to 120 days |
| U.S. Army Corps of Engineers (USACE) | Section 10 and 404 Authorization | The discharge of dredged or fill material into wetlands, streams, and lakes that are subject to regulation under the Clean Water Act (commonly referred to as "jurisdictional waters") must be authorized by either a nationwide permit (NWP) or an individual permit. Demolition work in navigable waters (including construction of a coffer dam) and temporary discharge of pieces of the screen house and concrete pad into the river will trigger jurisdiction of the USACE. | 90 to 180 days |
| U.S. Fish and Wildlife Service (USFWS) | Endangered Species Act (ESA) Section 7 and Migratory Bird Consultation, Biological Opinion | Existing information suggests the current Migratory Bird Depredation Permit MB826758- 0 is applicable to the taking of species incident to operation of the RDF. Historically (2009) a State and Federal species listing was identified in the eastern portion of the property along the Connecticut River. According to the Natural Diversity Database Review, bald eagle nesting can occur along the portion of the Connecticut River adjacent to the property. Demolition activities may require an updated endangered species review be completed. | 60 to 120 days |





| Table 8-3 - Summary of Permitting Requirements for DemolitionPBF and RDF | | | |
|--|--|--|---------------------|
| Agency | Permit Name, Number, Issuance Date, Expiration Date and Regulatory Citation | Applicability | Permitting Time* |
| U.S. Coast Guard (USCG) | USCG Department of Homeland Security Notification | USCG requires notification of all work within 50 feet of navigable waters and may impose security standards. Notification is required 1 month prior to the start of work. | 30 days |
| | | CONNECTICUT | |
| CT DEEP | General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities GP Issuance:10/1/13 GP Termination: 9/30/18 | This general permit authorizes the discharge of stormwater and dewatering wastewaters to surface waters from construction activities on a site, as defined in this general permit, with a total disturbance of one or more acres of land area on a site, regardless of project phasing. A Site Registration Application Form must be filed 45 days prior to commencing the work. A completed registration must be electronically submitted, along with all required elements, at least sixty (90) days prior to the planned commencement of the construction activity. Requires preparation and implementation of stormwater erosion and sediment control plan as a requirement for permit registration. | 90 days |
| Connecticut Department of Public Health (CTDPH) | Notification of Abatement, Demolition or Renovation CTDPH Standards for Asbestos Abatement, Licensure and Training (19a- 332a-1 through 16, 20-440-1 through 9 & 20-441) USEPA National Emissions Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 61, Subpart M | Applicable for all asbestos abatement activities. Requires Connecticut licensed asbestos contractor and licensed asbestos personnel to perform abatement work. | 10 days |
| CT DEEP | General Permit for Contaminated Soil and/or Sediment Management | Registration is not required for the temporary storage of less than 1,000 cubic yards of contaminated soil. However, select soil management practices specified in the general permit are required to be implemented. | |





| Table 8-3 - Summary of Permitting Requirements for DemolitionPBF and RDF | | | | |
|--|--|--|----------------------------|--|
| Agency | Permit Name, Number, Issuance Date, Expiration Date and Regulatory Citation | Applicability | Permitting Time* | |
| DEEP – Bureau of Water Protection, Inland Water Resources Division and Office of Long Island Sound Programs | 401 Water Quality Certificate | With an application for a federal license or permit, certification from DEEP that any discharge into navigable waters (construction and/or operation) is consistent with federal Clean Water Act and Ct Water Quality Standards. | Approximately 180 days. | |
| Connecticut State Historic Preservation Office | Section 106 Cultural and State Historic Resources Review and Consultation- – "Determination of No Effect" | Consultation and review of State Historic Resource Inventory provides a determination of whether cultural and/or historic resources potentially exist on site. Required for issuance of state and federal permits | Approximately 30 days. | |
| | LOCAL | | | |
| Demolition Permit | City of Hartford Department of Development Services Division of Licenses and Inspections | Sec. 9-12 of the City of Hartford Municipal Code requires a permit to demolish buildings and structures. A permit may be granted following applicant submittal of a notice of intent to apply for such permit to the Director of Licenses and Inspections and publication of the intent in a newspaper no more than 120 days prior to registration. Demolition permits may be granted no earlier than 20 days from filing an application. | 140 days | |
| Sec. 31-87. Excavation license | City of Hartford Street Opening/Excavation Permit | Sec. 31-87 of the City of Hartford Municipal Code requires an applicant to obtain an excavation license for any excavation in a public right-of-way in the City such as that which may be required to terminate utility services. | 10 days | |

*This time reflects the typical time between application submittal and receipt of permits/approvals. Application preparation time will range from 1 to 3 months in most instances, as long as demolition plans, procedures, and engineering are relatively complete, and adequate data is available to avoid extensive field work, sampling and laboratory analyses, or studies.





C. Recommended Actions

Plant Closure

CT DEEP - Title V Air Permit Revocation

The PBF operates and manages air emissions under a Title V air permit issued by CT DEEP. Upon termination of active operation the requirements for permit revocation are specified at RCSA 22a-174-2a(h). The request to revoke a Title V permit must contain facts and reasons supporting the request. Specifically, a completed form DEP-AIR-REQ-004 and supporting information is required to terminate the air discharge permit. Coordination with CT DEEP will determine the nature of emission offset credits and emissions trading procedures that are required.

CT DEEP – Air Registration Certificates

Revocation of an equipment-specific registration is managed by CT DEEP consistent with the protocol used to revoke Title V air permits. While registrations do not expire, revocation is recommended using protocol similar to that described above for the Title V permit. TRC recommends this activity be initiated upon termination of active operations and upon determination that the specific equipment will no longer be used at the facility.

<u>CT DEEP – Pretreatment Permit (wastewater)</u>

The PBF manages wastewater discharges from active electrical generation services through a wastewater pretreatment permit that allows the discharges of demineralizer regeneration wastewater, boiler blowdown and boiler drain wastewaters, chemical storage area wash down wastewaters and laboratory wastewater through discharge DSN 002B. In addition, DSN-002C allows discharge of equipment leakage, floor and equipment wash-down, condenser drainage, fire protection. Compressor and steam condensate and in emergency situations PBF roof drains. Upon termination of active discharge operations TRC recommends permit termination via written correspondence with CT DEEP as specified at RCSA 22a-430-4(p). The request for permit termination shall be in writing and contain facts and reasons supporting the request. It is anticipated that termination of the pretreatment permit would entail cleaning of select portions of the wastewater discharge system, including oil-water separators, as applicable. A permittee requesting revocation of a permit shall state the requested date of revocation and shall, prior to revocation, provide the commissioner with satisfactory evidence that the discharge has been permanently eliminated. TRC recommends the written request and associated revocation forms be submitted to CT DEEP at least 30 days prior to commencement of demolition.

CT DEEP – NPDES Permit (wastewater)

The PBF discharges non-contact cooling water from surface water intakes along the Connecticut River under DSN 001 through the authority of an existing NPDES permit. Monitoring is conducted at monitoring locations DSN 001A, 001B, 001C. Discharge is also monitored at DSN's 002 and 003 at the screen-wash discharge basin in Buildings 1 and 3 respectively and lastly at the water intake at monitoring location 01H. Revocation of the NPDES permit is managed by CT DEEP consistent with the protocol




used to revoke the pretreatment wastewater discharge permit described above. TRC recommends this activity be initiated upon termination of active operations at the facility.

CT DEEP - Stormwater Industrial General Permit Registration

As a result of the discharge of stormwater from a defined "industrial activity", the PBF maintains a facility-wide stormwater industrial general permit through CT DEEP. The facility may terminate coverage under the industrial general permit when their facility no longer has any stormwater discharges associated with industrial activity as defined by the permit and at 40 CFR 122.26(b)(14). Revocation of the industrial general permit is managed by CT DEEP consistent with the protocol used to revoke the pretreatment wastewater discharge permit described above. TRC recommends a review of "industrial activity" be conducted upon termination of active operations at the facility and a determination made as to whether the permit is continued, revoked, or re-registered under a new owner/operator.

<u>CT DEEP – Registration under the CT DEEP Miscellaneous Sewer Discharges General Permit and</u> Vehicle Maintenance Wastewater General Permit

The facility may revoke both the miscellaneous and vehicle maintenance wastewater general permits upon termination of the vehicle wash operations and active operation of the facility. Both general permits are administered by CT DEEP and revocation follows protocols described above for pretreatment wastewater permits. Activities associated with permit revocation would involve cleaning and removal of the oil-water separator associated with the vehicle maintenance/wash facility at the PBF as well as the termination of permitted wastewater discharges.

CT DEEP – Water Diversion Registration

The facility maintains a water diversion registration to allow the use of water from the Connecticut River as non-contact cooling water. Permit revocation is specified RCSA 22a-377 (c)-2.t(i). The permittee shall notify the Commissioner in writing two weeks prior to: (A) commencing construction or modification of structures or facilities authorized herein. Unless the permittee maintains in optimal condition any structures or facilities authorized by this permit, the permittee shall remove such structures and facilities and restore the affected waters to their condition prior to construction of such structures or facilities. TRC has assumed that above ground structures would be removed and below ground piping would be sealed in-place to prevent any discharge.

USF&W – Migratory Bird Depredation Permit

The facility maintains a permit to allow for vector control, as required for operation in the vicinity of an active airport. It is anticipated that upon demolition of the facility the permit may be needed to allow for control of birds at the facility. However, bird takings are expected to reduce and eventually abate as patterns change due to the removal of the WPF. At this time, the permittee shall within 30 calendar days of the discontinuance return the permit to the issuing office together with a written statement surrendering the permit for cancellation. The permit shall be deemed void and cancelled upon its receipt by the issuing office.





CT DEEP – Solid Waste Permit to Operate

Termination or revocation of a solid waste permit to operate is subject to the provisions of section Sec. 22a-208a of the Connecticut General Statues (CGS) and would be requested upon termination of facility operations. It is anticipated that termination of the permit would be initiated following consultation with CT DEEP and formally requested upon cessation of operations at the facility.

CT DEEP – EPA Identification Number

Upon termination of an EPA hazardous waste identification number a facility must conduct and document closure activities. CRRA maintains regulatory status as a large quantity generator of hazardous waste as defined by 40 CFR Part 262 and Section 22a-449(c)-100 of the Regulations of Connecticut State Agencies (RCSA). RCRA "generators" are subject to the provisions of Section 22a-449(c)-102 of the RCSA and, by reference 40 CFR Parts 262.34(a), 265.111, and 265.114.3 While the RCRA generator regulations above require closure of hazardous waste storage areas in a manner that is protective of human health and the environment, no federal guidance is provided on the nature or type of closure documentation needed for less than 90-day "generator" storage areas. To address this gap, CT DEEP has developed guidance for sampling and analysis of less than 90-day hazardous waste accumulation sites at a facility. CRRA manages hazardous waste at the facility in an existing concrete floored warehouse building east of the PBF underneath the coal conveyor system. In addition, hazardous waste is managed in a small enclosed room at the RDF facility. Closure of both of these areas will require inspection of the floor surface to assess the presence/absence of cracks or other avenues for releases to penetrate to subsoil. In addition collection and analysis of representative samples for both organic and inorganic constituents of concern (COCs) will be conducted.

Plant Demolition

Federal Aviation Administration - Objects Affecting Navigable Airspace

CRRA will be required to provide notification to the FAA indicating intent to remove the stack in accordance with FAA lighting safety regulations. Notification may also be required for the temporary use of the crane that may be used for demolition work (depending on the crane height). It is anticipated that demolition activities will require close coordination with the adjacent Brainard Airport to address FAA requirements and minimize impacts to airport operations.

USACE Approval for Removal of Concrete Structures in the River

USACE jurisdiction is defined by the ordinary high water mark. The cooling water intake and discharge structures, coal off loading facility, and other in-river structures are subject to USACE permits and must be either maintained or removed. Prior to decommissioning, a determination should be made regarding which in-river structures will remain and be maintained. For the purposed of this study, it is assumed that the inlet and discharge piping will be grouted, capped and abandoned in place. It is also assumed that the screen houses and coal handling facility will be removed. It is assumed that the concrete armoring along the Connecticut River as well as concrete pads and foundations will remain in place to ensure the continued integrity of the river-side dike.





A USACE application and supporting studies for the demolition and removal of the structures in the river

(e.g., screen house, catwalks, etc.) will be required. Necessary filing information will include characterization of the waterway and its resources, and the extent of potential impacts to river resources. The work will require approval from the USACE under Section 10 River and Harbors Act and a Section 401 Water Quality Certification. Studies to support these permits would address issues such as fishery resources and benthic habitat, and the impacts of construction. TRC recommends meeting with the USACE to confirm the approach to permitting and USFWS to confirm the level of study effort required for potential impacts to water-based species. It is reasonable to expect that other



demolition activities will be controlled such that debris or other materials will not fall into, be placed into, or otherwise result in a discharge of fill into the river. The scope and level of effort for biological surveys required by agencies within the river will be determined after agency coordination.

USACE permitting will trigger coordination with the USFWS and State agencies to verify compliance with the Endangered Species Act and Section 106 of the National Historic Preservation Act.

USFWS - Endangered Species Act Coordination

At this time, no endangered species conflicts are known; however, the bald eagle bald eagle nesting can occur along the portion of the Connecticut River adjacent to the property. Demolition activities may require an updated endangered species review or survey for nesting sites conducted prior to initial of demolition activities. To ensure compliance with consultation requirements for federal permitting decisions (i.e., Section 10, CWA Section 404), formal notification of the project will be submitted to the USFWS, along with a request for information concerning known locations of federal threatened and endangered species or designated critical habitats in the vicinity of the project and a request for determination whether the project will impact those species (i.e., clearance letter). The initial consultation letter will also request initiation of consultation regarding potential impacts on migratory birds. Species specific survey requirements will be determined through consultation with the USFWS. Results of rare species surveys (if required) and continued consultation with the USFWS will determine what potential mitigation requirements might apply. TRC anticipates that elements of the demolition project specifications and contractor submittal requirements will address impacts to any endangered species due to facility demolition.

US Coast Guard Department of Homeland Security Notification

USCG requires notification of all work within 50 feet of navigable waters and may impose security standards. Notification is required 1 month prior to the start of work. This notification would be applicable to work on Connecticut River structures.





<u>CT DEEP – General Permit for the Discharge of Stormwater and Dewatering Wastewaters from</u> <u>Construction Activities</u>

As a result of demolition activities it is anticipated that discharges of stormwater and dewatering wastewater from construction activities which result from the disturbance of one or more total acres of land will be applicable to the facility demolition area on a site regardless of project phasing. The project is anticipated to meet requirements as a locally exempt construction project which indicates a construction activity for which the registration is for a project authorized under municipal, state or federal authority. A Locally Exempt construction projects disturbing over one acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to CT DEEP.



A SWPCP will be prepared to address stormwater issues on-site during the construction time frame, including final grading, outfall changes, final land cover, construction schedule, and other details impacting water quality discharged from the site. This typically includes the establishment of measures to minimize the discharge of eroded soil or material suspended in stormwater off-site (e.g., to the Connecticut River) during construction. Potential control measures include the installation of hay bales and silt curtains, the establishment of drainage swales and/or use of existing on-site drainage systems, and the development of construction work procedures to minimize the transport of sediments off-site during rainfall events. Site grading, drainage swales and temporary detention ponds may also be required, although it is anticipated that much of the existing stormwater system will be useable during demolition. This effort will be integrated with the closure of the lined coal pond. It is assumed that the pond liner will be removed and the depression filled with at least 4 feet of clean fill or 2 feet of clean fill and pavement to continue to render the underlying soil inaccessible.

CTDPH - Notification of Demolition

This notification is required for demolition of facilities that may have asbestos. Asbestos abatement projects involving greater than ten (10) linear feet (LF) or twenty-five (25) square feet (SF) of ACM (friable or non-friable) within a facility (i.e. interior abatement) and/or greater than 10 LF or 25 SF of friable ACM outside a facility, require an Asbestos Abatement Notification. At sites scheduled for demolition, asbestos abatement of exterior non-friable ACM or interior abatement involving less than 10 LF or 25 SF of ACM (friable or non-friable), and/or exterior abatement involving less than 10 LF or 25 SF of friable ACM require a Demolition Notification. In most cases, the Demolition Contractor is responsible for filing the Demolition Notification not fewer than ten (10) days prior to the commencement of demolition. However, if a portion of the demolition activities are scheduled to be conducted in conjunction with and/or under the supervision of an Asbestos Abatement Contractor (i.e. in the event of a structure which has been condemned, structurally damaged, and/or deemed unsafe for asbestos abatement activities); then it is the responsibility of the Asbestos Abatement Contractor to submit the Demolition Notification. In the event that an Asbestos Abatement Notification has been submitted and the subject facility is scheduled for demolition, a separate Demolition Notification form does not need to be





submitted. In such cases, the submission of the Asbestos Abatement Notification form shall be deemed as satisfying the requirement for the notification of the demolition of the facility.

Consultation with the State Historic Preservation Office

At a minimum the Connecticut SHPO, under the Department of Economic and Community Development will likely require a literature review and Phase I surveys for archaeology of any new areas of disturbance and a Phase I historic architecture survey of the plant prior to demolition. The plant is considered a historic structure because it is over 50 years old and may be considered eligible for inclusion on the National Register of Historic Places. Eligibility will not prevent demolition, but mitigation may be required in the form of a memorandum of agreement with the local historical society and/or providing funding to support historical society activities.

<u>City of Hartford – Demolition Permit</u>

The City of Hartford Municipal Code requires a permit to demolish buildings and structures. A permit may be granted following applicant submittal of a notice of intent to apply for such permit to the Director of Licenses and Inspections and publication of the intent in a newspaper no more than 120 days prior to registration. Demolition permits may be granted no earlier than 20 days from filing an application. It is anticipated that project plans and specifications will be prepared to require the demolition contractor to obtain a demolition permit and closely coordinate work with the City of Hartford.

City of Hartford - Street Opening/Excavation Permit

TRC anticipates that utility (water, sewer, select electrical service) will be terminated at public roadways where applicable utilities enter the property. An excavation license will be required for any excavation in a public right-of-way in the City to terminate utility services.





9. ABATEMENT AND DEMOLITION MEANS AND METHODS

A. Task Description

If CRRA elects to demolish all or portions of the South Meadows Facility, there may be constraints on the contractor, beyond the limits of law and existing regulations. TRC recommends allowing abatement and demolition contractors to develop their own means and methods within the constraints of law, regulations and certain minimum requirements; however, where site conditions exist that limit available means and methods, such conditions should be identified for cost estimating and scheduling purposes and in order to ensure bidders are made aware of important constraints. TRC examined the Site configuration, consulted with our demolition consultants regarding the applicability of standard demolition techniques, and developed a summary of potential issues which should be considered as demolition plans and specifications are developed.

B. Issue Identification

The South Meadows Facility is situated along the northern shore of the Connecticut River, which is classified as a navigable waterway subject to USACE jurisdiction. During demolition, protections must be established to prevent the introduction of demolition debris to the river. Additionally, any temporary



structures that are required to be placed in the river for executing the demolition work (e.g., for removal of in-river structures) will be subject to USACE approval. Furthermore, any temporary structures placed in the river must be removed entirely after the work is complete.

As discussed in Section 6, ACM, and hazardous and regulated materials are present at the South Meadows Facility. Prior to structural demolition, removal of these materials is required in

accordance with applicable regulations. The abatement work should be performed in a systematic and comprehensive manner that is coordinated with the demolition schedule in order to minimize the setting up and tearing down of containment structures. It is anticipated that the existing concrete armored Connecticut River embankment will be preserved as part of the protection and maintenance of existing features which will remain after facility demolition.

A preliminary analysis of the demolition approach indicates that a crane may be required to remove elevated equipment and demolish structures. Prior to siting a crane, structural analysis of the bearing capacity of the site soils will be required.

Additionally, a barge crane will most likely be the most cost effective approach for demolition of the coal off-load facility.

Crushed brick and concrete that meets structural and environmental re-use requirements may be placed in the below ground portions of the Power Block; however, even if all of the existing on-site masonry were







suitable for re-use, a significant quantity of fill will be required (approximately 61,000 tons) to bring the footprint of the Power Block to existing surrounding grade. Similarly, fill will be required to backfill the coal pond.

Due to the presence of businesses on adjoining properties, it is likely that restrictions on the generation of noise, vibration, dust and traffic will be required. In addition, special notice may be required to the adjacent airfield due to demolition activities that may have an impact on air travel conditions.

C. Recommended Actions

Potential USACE restrictions on work performed in the Connecticut River should be determined during the demolition design phase in order to identify demolition methods that are unlikely to receive USACE approval or will require significant permitting/monitoring/reporting efforts. These restrictions should be incorporated into the contractor bid package.

ACM and hazardous and regulated materials surveys should be completed, as described in Section 6, and the locations of these materials should be identified in the contractor bid package. Removal of ACM and hazardous and regulated materials prior to and as part of demolition should be specified.

The structural characteristics of soil at locations where a crane would be placed to remove elevated equipment or demolish structures should be evaluated. In addition, potential future use alternatives for the property should be established prior to finalizing the demolition bid package, in order to include appropriate site restoration requirements.

D. Environmental Land Use Restrictions

For purposes of this evaluation, it is assumed that the South Meadows facility has been remediated in accordance with the Connecticut Transfer Act and as such, a number of Environmental Land Use Restrictions (ELURs) will be in place at the time of facility decommissioning. These ELURs place a number of restrictions or limitations on the use of the Properties or portions of the Properties to protect human health and the environment, and are consistent with the Remediation Standard Regulations, Regulations of Connecticut State Agencies (R.C.S.A.) Sections 22a-133k-1 through 22a-133k-3. In general, these restrictions impact the demolition activities and this estimate in the following ways:

- It continues to be assumed that only industrial activity will be permitted at the Properties.
- For purposes of pricing, in general, it is assumed that soil shall not be exposed as a result of excavation, demolition or other activities. Similarly, the soil, bituminous concrete, concrete, and building slabs will not be disturbed in any manner by demolition activities. No excavation or





other intrusive activities are included in the decommissioning activities. All pavement shall be maintained in good condition. In the event that any of these activities become necessary during demolition or redevelopment, the user must comply with the CT DEEP notification and interaction requirements of the ELURs.

- It is also assumed, for Playbook pricing, that demolition of transformer and electrical equipment foundations in switchyards will not be required.
- Similarly, demolition of the southwestern-most portion of the main PBF building, the former Administrative wing, shall be subject to specific controls and approval by CT DEEP prior to demolition due to the known presence of PCB contamination.





10. ENVIRONMENTAL CONSIDERATIONS

A. Task Description

Phase I environmental assessments were prepared by HRP and Metcalf & Eddy in 1989/1999 prior to the transfer of the Site from Northeast Utilities to CRRA. (It is noted that potential buyers of the Site are likely to require performance of a new Environmental Site Assessment, consistent with current ASTM standards, prior to their property purchase.) Upon the transfer of the Site from NU to CRRA in 2001, a Connecticut Transfer Act Form III filing was made by TRC, on behalf of CRRA, thereby obligating cleanup of the Site to satisfy the commercial/industrial remedial standards, within the responsibilities of the underlying private contract among TRC and CRRA (the TRC Contract) thereunder, such as existed at the time of transfer. Upon the subsequent transfer of an additional parcel of the Site (the Retained Parcel) in April 2009, a second Form III was filed by TRC on behalf of CRRA adding that parcel to the Connecticut Transfer Act obligations. Since that time, TRC has conducted extensive environmental investigations and remedial actions in accordance with Connecticut's Transfer Act and the RSRs. A list of remedial action is included in Appendix A. As of the writing of this RE Power Playbook both CRRA and TRC concur that remediation required under the Transfer Act has been substantially completed. A draft Verification Report has been prepared and reviewed by a Licensed Environmental Professional (LEP) and CRRA. In addition, the Department of Energy and Environmental Protection (DEEP) has engaged in initiating review of the final documentation of the completion of the Transfer Act cleanup obligations.

It is noted that the Verification Report includes the filing of a number of ELURs in support of the Site's commercial/industrial use. These ELURs anticipate future Site use that is consistent with commercial/industrial development, and where disturbances to these uses are to be made, they assure that proper precaution are taken (e.g., when/if excavation in certain capped areas or foundation removal is undertaken as part of future Site development). In addition, with the filing of ELURs, certain ongoing operation and maintenance activities (e.g., groundwater monitoring) are imposed by regulation. TRC currently is required to fulfill some of these operation and maintenance activities, but that requirement is tied to the current, planned commercial/industrial Site use. Therefore, when future Site development is considered, it will be important to note that a change in Site ownership and/or a change in planned Site use will require assessment of and planning for: the ELUR precautions that may be triggered; the long-term maintenance obligations that may be associated with such ELURs; and the effect that such changes in ownership and/or use may have on the relative responsibilities of TRC and any new entity (e.g., successors and assigns to CRRA under the TRC Contract) with respect to the ongoing ELUR operation and maintenance activities or otherwise.

Also, as future Site development is considered, there may be environmental/remedial obligations associated with the Site that fall outside of the Connecticut Transfer Act and/or the contractual remedial obligations undertaken pursuant to the TRC Contract. These obligations may include, but are not limited to: asbestos and lead paint in buildings; clean-up and/or management of impacted oil in operating or staged equipment, transformers and tanks retained by NU; remediation related to the Connecticut River/river sediments; clean-up of soils determined under regulation to be Environmentally Isolated Soil





or Inaccessible Soil; and/or natural resource damage issues. Therefore, when future Site development is considered, it will be important to note that a change in Site ownership and/or a change in planned Site use may require review of these issues, and an Action Plan to address the issues may have to be developed. TRC's Playbook review of Site uses indicated that the property is being utilized today generally as it was at the time of the 1989/1999 Phase I inspections, with the exception of the following:

- The 38,000 square foot "Maneuver Hall" was added onto the southwestern portion of the WPF in 2000 and is the location at which municipal waste is dropped off at the facility.
- Additional air handling/odor control equipment was added to the northern portion of the WPF at that time as well.
- The former bulk petroleum storage Tanks 5 and 6 were decommissioned and demolished in 2004 and 2011, respectively.
- The former 38,000 gallon PCB-oil AST was also decommissioned and demolished in 2007, and a new 550,000 gallon jet fuel aboveground storage tank was constructed in the area in 2011.
- ✤ A truck wash facility was added to the eastern/central portion of the property.
- The facility acts as a large quantity generator of hazardous waste due to the disposal of bag-house filters as characteristic hazardous waste due to leachable lead (D008) and cadmium (D006) at concentrations above regulatory limits.



The basis of this Playbook estimate is that contamination that existed at the property, at the time of property transfer, has been remediated in accordance with the Transfer Act; that CRRA has had no releases since initiation of the Transfer Act (per CRRA), and that investigation/remediation of the Connecticut River/river sediments is not a CRRA responsibility. Further, it is assumed that a property-wide ELUR is in place which will restrict property use to commercial/industrial activities. Further, Site structures such as foundations (slabs at grade level), parking lots,

roads, and concrete pads which effectively act as qualifying structures that render the underlying soils Inaccessible or Isolated will remain in place.

Future actions at the property that may require disturbance of the soil will generally require obtaining a waiver from the CT DEEP and having an appropriate soil management plan in place that will be protective of human health and the environment.

Based on the project assumptions, no data gaps have been identified that would affect decommissioning other than those previously discussed with respect to asbestos, building PCB (e.g. caulking) and lead paint contamination within the buildings.





PCB Impacted Soil

One example of an ELUR that has potential for associated demolition cost is a small area of PCBimpacted soil present west of the PBF. In accordance with regulation, the impacted soil is managed with an Engineering Control, offering protection in the event of excavation of soil from underneath the building, near active transformers and structural foundations. Should the PBF facility be demolished, the PCB-impacted soil likely would be required to be removed and disposed off-site. It is estimated that approximately 500 cubic yards of PCB-impacted soil at concentrations above 50 mg/kg may require excavation and off-site disposal from three contiguous areas at and near the Engineered Control.

In addition to the PCB impacted soil noted above, an area of PCB impacted concrete is present in the lube oil storage room in the lower level of the PBF. Existing data indicate PCBs in excess of 1 mg/kg from the concrete floor surface and from one of the four walls approximately 1 foot above the floor surface. Should the PBF facility be demolished, the removal of approximately 15 CY PCB-impacted concrete may be required.

The costs for both of these activities are included in this Playbook estimate.





11. UTILITIES

It is assumed that the PBF will be isolated from the switchyard as part of the demolition activities and that the switchyard will remain in operation.

TRC anticipates that service utilities (water, sewer, select electrical service) will be terminated at public roadways where applicable utilities enter the property. An excavation license will be required for any excavation in a public right-of-way in the City to terminate utility services. The plant will be taken to a "cold and dark" condition prior to the start of demolition activities.





12. COST ESTIMATE

TRC has included costs for pre-demolition surveys, plans and specifications, engineering and construction management services as well as abatement, decommissioning, demolition, and restoration to meet future industrial use scenarios. The budgetary estimate utilizes data from prior bid projects for unit pricing when not supplied by team members. Estimated costs are partially offset by recovery of scrap and salvage. TRC has not included sale of the real estate or future use. Power plant decommissioning costs vary widely, and TRC recommends development of pre-demolition surveys to define the scope of work, preparation of plans and specifications for competitive bid, prequalification (safety, financial, prior experience, insurance, etc.) of contractors for abatement, decommissioning, demolition, and restoration, and full documentation of the entire process. Table 12-1 presents a summary of the estimated costs to decommission the South Meadows Facility. Table 12-2 which presents more detailed information, is presented at the end of this section.

| Table 12-1 – Summary of Estimated Decommissioning Costs Range | | | | | |
|--|--------------|--------------|--|--|--|
| Item | Low Range | High Range | | | |
| TRC Pre-Demolition Surveys, Permitting, Design, Plans and Specifications | \$625,000 | \$938,000 | | | |
| Abatement, Demolition and Site Restoration | \$14,317,000 | \$21,475,000 | | | |
| TRC Construction Management | \$1,092,000 | \$1,638,000 | | | |
| Asset Recovery (Scrap Value)* | \$3,380,000 | \$5,070,000 | | | |
| Sub-Total | \$12,654,000 | \$18,981,000 | | | |
| Bond (1.8%) | \$228,000 | \$342,000 | | | |
| Net Estimate after Salvage and Recovery | \$12,882,000 | \$19,323,000 | | | |

* Scrap values are based on September 2013 market rates. Prices can vary greatly depending on scrap and salvage markets.

The following assumptions were used in developing the cost estimate:

- All existing RDF will be combusted in the PBF and residual RDF in storage will be minimal.
- * No remaining non-processible waste will remain on-site.
- Bulk chemical and petroleum storage tanks will be completely used with minimal product remaining at decommissioning.
- * The potential value of air emission off-set credits has not been included in the cost estimate.
- Utilities (e.g., water and electric) will be turned off and disconnected by CRRA. (Demolition contractor will verify site is locked out and tagged out with CRRA walk down.)
- Pre-demolition surveys will be conducted.





- Plans and specifications will be prepared for demolition of existing structures and site restoration.
 Bid documents for contractor procurement will be prepared.
- Permit applications and filings will be prepared and submitted.
- Asbestos, lead paint and regulated waste will be removed, as necessary, by demolition contractor.
- Independent third party will perform air monitoring during asbestos abatement.
- There will be no coal remaining in bunkers or coal pile.
- Fluid filled equipment will be drained by CRRA prior to mobilization of the demolition contractor.
- Demolition will be to existing grade. At-grade pavement and foundations will remain..
 Subsurface voids will be filled with broken concrete, bricks and fill to match surrounding grades.
- Cooling water intake and discharge piping will be capped.
- Brick and concrete debris will be broken and crushed for use as backfill material in basements and other below grade voids.
- Construction and demolition waste not suitable for on-site reuse will be transported off-site for disposal and recycling.
- Above grade piping and appurtenances will be removed to ground surface. Below grade piping will be capped and abandoned in place.
- Remediation of subsurface soil, with the exception of PCB contaminated soil specifically noted in this Playbook and groundwater remediation is not required.
- Demolition contractor will provide a dedicated Health and Safety Supervisor.





| Table 12-2 – Decommissioning Cost | | | | | | | | |
|---|------------------|------------------|-------------|-------------|---------------|---------------|---------------|--|
| | Labor | Labor Field | Subcontract | Other | Expected | Low | High | |
| | Office | | | Direct | Cost | Probable | Probable | |
| Due Demelition Summers Demuit | Diana and Sua | aifi a a ti a ma | | Costs | | Cost | Cost | |
| Pre-Demonuon Surveys, Permit | s, Plans and Spe | cilications | ¢(2,020 | | ¢107.400 | | | |
| Aspestos and Regulated Materials Survey | \$64,600 | | \$62,820 | | \$127,420 | | | |
| Pre-Demolition Surveys, | \$212,401 | | | \$22,818 | \$235,219 | | | |
| Plans and Procurement | | | | | | | | |
| Work Plans and Permits | \$258,829 | \$2,520 | \$86,879 | \$70,669 | \$418,897 | | | |
| | | | | Subtotal | \$781,536 | \$625,000 | \$938,000 | |
| Abatement, Demolition and Restoration | | | | | | | | |
| Mobilization and Set Up | \$39,385 | \$41,315 | \$179,182 | \$23,415 | \$283,297 | | | |
| Asbestos and Lead Paint Abat | tement | | \$2,467,875 | | \$2,467,875 | | | |
| Abate Building PCB Power B | lock Facility | | \$1,415,000 | | \$1,415,000 | | | |
| Universal, Regulated and Haz | ardous Material | | \$1,040,010 | \$2,086 | \$1,042,096 | | | |
| Decommissioning and Pond C | losure | | | | | | | |
| Dismantling and | \$225,577 | \$5,221,505 | \$2,851,159 | \$4,389,424 | \$12,687,665 | | | |
| Demolition | | | | | | | | |
| Construction Management | \$462,081 | \$761,310 | | \$141,882 | \$1,365,273 | | | |
| Project Oversight | | | | | | | | |
| | | | | Subtotal | \$19,261,206 | \$15,409,000 | \$23,113,000 | |
| Total Decommissioning Cost | | | | | \$20,042,742 | \$16,034,000 | \$24,051,000 | |
| Scrap Value, Warehouse Parts a | and Asset Recove | ery- | - | | \$(4,225,368) | \$(3,380,000) | \$(5,070,000) | |
| Subtotal of Costs | | | | | \$15,817,374 | \$12,654,000 | \$18,981,000 | |
| Bond (1.8%) | | \$284,714 | \$228,000 | \$342,000 | | | | |
| Total | | | | | \$16,102,087 | \$12,882,000 | \$19,323,000 | |
| | | | | | | | | |
| Potential Deduct for leaving the WPF Structure in place (\$952,920) | | | | | | | | |



13. SCHEDULE

TRC developed a decommissioning schedule and sequence for the South Meadows Facility. The schedule presents the key milestones and estimated task durations.

The pre-demolition surveys (e.g., asbestos survey, hazardous and regulated materials surveys, etc.), preparation of plans and specifications, and plant closure permitting are expected to be completed in approximately 16 months, including the receipt of regulatory agency approvals and permits. It is assumed that the plant will be taken off line at that point. Contractor procurement is estimated at 4 months. Plant decommissioning would begin with the removal of assets. Abatement, demolition, and site restoration will require approximately 18-24 months.

| T | TRC Results you can rely do | | | CRRA South D | Re Powe f Meadows R Decommissio | r Playboo for Resource I oning Sch | ok Recovery F edule | acility | | | (| RRA |
|----------------|---|--|---------|--|---|---|--|-------------|-----------------------------|------------------|--------|---|
| ID | Task Name | | | | Year 1 | | Yea | ar 2 | 1 | Year 3 | | |
| 1 | Decision to Decommision | Facilty | | Qtr3 Qtr4 | <u> Qtr1 Qtr</u> •}ך | 2 Qtr 3 | Qtr 4 0 | Qtr1 Qtr2 | Qtr3 Qtr | 4 Qtr1 | Qtr 2 | Qtr3 Qtr4 |
| 2 | Pre-Demolition Planning | and Procurement | | | | | | | | | | |
| 3 | Pre-Demolition Plan an | id Surveys | | | | | | | | | | , e șe se |
| 4 | Asbestos and Regulate | d Materials Survey | | | - | | | | | | | 1 |
| 5 | Demolition Contractor | Procurement | 1. | ***** | | | | | ********* | ******** | | |
| 6 | Work Plans, Permits an | id Submittals | | ****** | | * | | | | ******* | | ******** |
| 7 | Site Demolition and Deco | ommissioning | | 1 | | | - | _ | | | | |
| 8 | Mobilization and Set U | p | 17 | ••••• | | ******** | ····· | | | | | |
| 9 | Asbestos and Lead Pair | nt Abatement | | here a serie a serie de la | | | | | <u> </u> | | | an fan en en en en en en H |
| 10 | Abate Building PCB- Po | wer Block Facility | | 1 | | | | × | | | | а т |
| 11 | Universal, Regulated ar Decommissioning | nd Hazardous Materia | al | | | | | ····· | | | ****** | |
| 12 | Dismant ling and Demo | lition | | in a start of the second | a kana ka | فيعرفون ومراجع | | | | | | - <u>*</u> ********* |
| 13 | Construction Managem | nent and Project Over | sight | | | | | | | _ | 6 | |
| 14 | Site Restoration | | | | | | | | | ******** | - | |
| 15 | Restoration | | | | | | | | | | HC S | |
| 16 | Scrap and Salavage | | | 4 | _ | | | | | | - | - |
| 17 | Identify and Sell Equipr Warehouse Spare Parts | nent with Salvage Val s | lue and | | + | - | | | | | | |
| 18 | Process Scrap material | | | a a se a a fa a se a | | | | | | i forsterie E | | ₩. ¹ |
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14. SUMMARY OF RECOMMENDED ACTIONS

Decommissioning of the South Meadows Facility will entail demolishing existing structures, implementing regulatory required closures, and performing Site restoration. Portions of the property may be retained or sold/leased for redevelopment. While consideration of future site redevelopment is critical to defining the plant closure requirements, there are several actions which are required, regardless of the planned future use. The actions include:

- Structurally unsafe locations will be identified and access barricaded.
- Operational equipment that may be placed in service or inventory at another facility (e.g., transformers, cranes, etc.) will be removed.
- Asbestos, regulated materials and petroleum products will be identified and removed. Oil-filled equipment will be drained for removal.
- Facility permits for air and water discharges will be modified or closed with applicable regulatory agencies.
- On-site utilities will be decommissioned (e.g., electric service to the plant, water, etc.).
- Plans and specifications for demolition and Site restoration will be developed. At a minimum, the demolition will include the removal of



all on-site structures to grade as detailed in this report. The structures located in the Connecticut River (e.g., barge dock, intake and discharge structures) are subject to USACE jurisdiction and will be maintained, decommissioned in place or removed in accordance with permit requirements. Terrestrial below grade structures which are not removed will be properly closed and abandoned in-place. Structures that will remain after plant decommissioning include the jet turbine facility, substations and switchyard facilities and the surfaces required by the ELURs.

To advance the South Meadows Facility decommissioning, TRC recommends performing additional investigation to eliminate the data gaps identified. Specifically, TRC recommends the following:

- Evaluate future use options and determine final property disposition.
- Design and implement a health and safety program for the investigations.
- Perform a pre-demolition, destructive-level asbestos survey with appropriate bulk sampling in order to determine the location, type, condition/friability and quantity of ACM at the facility.
- Perform a lead-based coating survey of the facility.
- Conduct a hazardous and regulated materials survey at the facility.
- Perform geotechnical investigation to assess restrictions on equipment used to remove elevated equipment or demolish structures.
- Investigate existing electrical service to truck scale. Determine measures required to maintain service during demolition.





 Continued implementation and support of ELURs (required by law) and allow proper O&M of ELUR caps/covers.

These actions will generate the information necessary to safely decommission the South Meadows Facility in accordance with applicable laws and regulations. The results of the investigations will permit development of plans and specifications for demolition and restoration specifying the final site conditions.





Appendix A. Remedial Action Completed by TRC

Refer to Figure 3 which delineates remedial areas.

| | Table A-1. List of Remediation Activities |
|--------------------------|--|
| Areas | Brief Description of Remediation Activities |
| 1-2 | ETPH, arsenic and PCB-impacted soils remediated through a combination of excavation, backfilling and paving in 2003/2004. ELUR will be implemented to render soils inaccessible. |
| 1-3 | Remediation entailed excavation and proper disposal of ETPH-impacted soils from this small area in 2003. |
| 1-4 | Soils impacted with arsenic in excess of the I/C DEC and leachable nickel in excess of the GB PMC were remediated in 2003. Leachable nickel-impacted soils were excavated and backfilling and re-grading were completed to render the arsenic-impacted soils inaccessible (will be formalized with implementation of an ELUR). |
| 1-5 | The soils in Area 1-5 were determined through the investigation process to be impacted with ETPH and PCBs. In June 2004, soils were excavated and the area back-filled to achieve compliance with the RSRs for PCBs. Upon further review of the investigation data, it was determined that the ETPH impact was well below the seasonal high water table and below the extent to which the DEC apply. |
| 1-6 | Remediation of this area of leachable vanadium and arsenic-impacted soils took place in 2006/2007 via a combination of excavation, removal of the mound of soil, re-grading and placement of clean soil cover to render impacted soils inaccessible. ELURs will be implemented. |
| Coal Pond / Coal Pile | The coal pond/coal pile liner renders underlying soils inaccessible. An ELUR will be implemented. |
| 2-1 | Soils impacted by petroleum (ETPH and PAHs) identified within Area 2-1 were remediated between 2004 and 2007 with the use of a bio-venting system. Follow-up, post-bioventing soil sampling has indicated that the ETPH and PAHs are compliant with RSR/APS criteria. Arsenic was not an issue in this area. |
| 2-2 | A large petroleum release from the former Tank 5 located in the low-lying area of the site known as Area 2-2 in 1995 resulted in ETPH and PAH impacts to the soil and free-phase product floating on the water table. A ground water extraction and product recovery system was operated in this area of the site from 1997 to 2006. In the meantime, remediation of the soils was initiated with excavations in the eastern and western portions of Area 2-2 and with a bio-venting system that was operated between 2004 and 2006. The remediation of this area of the site is on-going, with additional soil excavation and the placement of a soil cap to address ETPH and PAH impacts. Tank 5 was removed in 2004 per the contract. |





| | Table A-1. List of Remediation Activities | | | | | |
|--------------------|--|--|--|--|--|--|
| Areas | Brief Description of Remediation Activities | | | | | |
| 2-2 (continued) | The PCB tank was removed per the contract in 2007. This area was remediated in 2007 in accordance with an approved SICP. The tank and its associated piping and appurtenances were properly decommissioned and removed. Based on analytical results from soil samples collected during the investigative phase in the area of the former PCB storage tank, associated appurtenances and piping pad, no areas of soil impacts were identified which required remedial efforts beyond the application of an industrial/commercial ELUR. The appropriate ELUR will be implemented. Investigation of the migration of impacts onto Parcel No. 3 from the former fuel farm area was performed in 2005. A remedial action plan detailing the investigation and corrective actions to be performed was prepared in 2006. Remedial actions were delayed until 2008 because access issues needed to be resolved prior to performing the work, but were completed in 2009. | | | | | |
| 3 | Area 3-1: Soils were remediated in the 3-1 sub-areas in 2009. A combination of excavation and back-filling were utilized to remove hotspots of arsenic and lead-impacted soils (in excess of the I/C DEC and/or GB PMC). Subsequent investigation activities indicated the presence of ETPH and PAH-impactsed soil which will be addressed by an Engineered Control to render underlying soils inaccessible (note that a PMC exemption was sought for all of Area 3 and was approved by the CT DEEP in 2013). <u>Area 3-2:</u> Metals, ETPH and PAH impacts (in excess of the I/C DEC and/or GB PMC) in Area 3-2 were remediated in 2009 through a combination of soil excavation and back-filling / placement of a soil cap to render soils inaccessible. | | | | | |
| | <u>Area 3-3:</u> In 2009, a strip of soil along the Gate 20 access road that was determined through investigation to be impacted by arsenic in excess of the I/C DEC was excavated to allow for the placement of soil and pavement to render soils inaccessible. The appropriate ELURs will be implemented. There is a sub-area within Area 3-3 (specifically in the immediate vicinity of well HRP-SMD71) where a limited amount of free-phase petroleum product has been identified. Recovery wells were placed around this well, however there has been no free-phase product observed in these recovery wells throughout the duration of monitoring (since 2006). In an attempt to remediate the isolated area of free-phase product to the extent practical, an absorbent sock has been placed in the well. | | | | | |
| | Ior all of Area 3. | | | | | |
| PCB AST | This area was remediated in 2007 in accordance with an approved SICP. The tank and its associated piping and appurtenances were properly decommissioned and removed. Based on analytical results from soil samples collected during the investigative phase in the area of the former PCB storage tank, associated appurtenances and piping pad, no areas of soil impacts were identified which required remedial efforts beyond the application of an industrial/commercial ELUR. The appropriate ELUR will be implemented. | | | | | |





| | Table A-1. List of Remediation Activities |
|------------------------|---|
| Areas | Brief Description of Remediation Activities |
| PBF-1 | Remediation of arsenic and ETPH-impacted soils (in excess of the I/C DEC) was completed in 2004 through a combination of excavation, backfilling and paving to render soils inaccessible. The appropriate ELURs will be implemented. Area South of Gate 20: Soils impacted by arsenic in excess of the I/C DEC were remediated in 2005 through a combination of soil excavation, back-filling and paving to render the soil inaccessible. The appropriate ELURs will be implemented. |
| PBF-3 | PBF-3 – Former Switchyard and FD Fan Area: The former switchyard / FD Fan area was remediated in 2004 through 2006. PCB, arsenic and ETPH-impacted soils were remediated by excavation in accordance with an EPA-approved SICP. In the course of remediating the FD Fan area which is contiguous with the PBF-3 former switchyard, it was determined that an engineered control would be required to render elevated PCB levels isolated and inaccessible. The proposed engineered control (an 8-inch thick reinforced concrete slab constructed over the impacted area with appropriate markings) was ultimately approved by the CT DEEP and EPA and ground water monitoring associated with the presence of the engineered control is on-going. |
| PBF-4 | Former PCB Oil Tanks (Basement): Remediation of the PCB oil-containing tanks was completed in 2007 in accordance with an EPA-approved Self Implementing Cleanup Plan (SICP). The remediation efforts included the collection of all free-flowing oil from piping and tanks, demolition of the piping, appurtenances and equipment, decontamination of the tanks, excavation of PCB-impacted soil and decontamination and testing of the concrete. |
| 115 kV Switchyard | Initial investigation of the 115 kV switchyard was performed in 2000. At that time no impacts requiring remediation were identified. However, during construction activities performed by CL&P, soil with PCB concentrations requiring remediation were identified. Additional investigation was performed in April 2009 and remediation was completed in 2010. |
| Mercury Boiler Room | Completion of the mercury boiler room demolition was in 2004. Following the removal of hazardous materials and demolition, additional soil sampling was conducted which revealed the presence of arsenic and mercury in excess of the I/C DEC and GB PMC beneath the building slab. Per a July 2007 submittal to the CT DEEP, an appeal was made to utilize an engineered control (the remaining permanent reinforced concrete structure of the former Mercury Boiler Room) to render the soil remaining beneath the slab environmentally isolated and inaccessible. This appeal was approved and the engineered control is in place and ground water monitoring associated with the control is on-going. |
| Track Hopper Room | The Track Hopper Room was remediated in 2008/2009. The remediation focused on a combination of removal of lead paint and sediment and water that had accumulated in the track hopper room (the lowest floor of which is beneath the seasonal high water table) over the course of time. An investigation of the soils exterior to the Track Hopper Room did not reveal the need for the remediation of the soils, as the impacts were detected below the seasonal high water table and below the extent to which the DEC apply. |
| PBF Wetlands | An approach to remediation of the wetland sediments has been developed and is being proposed to the CT DEEP. |





| | Table A-1. List of Remediation Activities | | | | | |
|----------------------------|--|--|--|--|--|--|
| Areas | Brief Description of Remediation Activities | | | | | |
| Fuel Lines | Soils in the immediate vicinity of the fuel line network that runs through the property was investigated in 2011. ETPH-impacted soils (at concentrations above the GB PMC) were identified in a small area near the jet turbine yard. Remediation of this area took place in 2013 and consisted of placement of an impermeable geomembrane to render the underlying soil isolated. This remediation was conducted in accordance with a CT DEEP-approved Engineered Control application. The appropriate ELURs will be rendered in this area. | | | | | |
| WPF-1, WPF-2 & WPF-3 | Soils impacted with arsenic above the I/C DEC were delineated in areas WPF Areas 1 through 3. In order to render the soils inaccessible in these landscaped areas, TRC applied for use of an engineered control through the CT DEEP. This engineered control, specifically, high density polyethylene (HDPE) grids ("pavers"), was approved for use in conjunction with the removal of two-feet of soil from each of the impacted areas. In 2007, the excavation and HDPE paver installation was completed. The appropriate ELURs will be implemented to finalize this remediation. | | | | | |
| WPF-4 | Consistent with the findings in other parts of the WPF, the soils within WPF Area 4 were identified as exhibiting arsenic at concentrations in excess of the I/C DEC. In 2006, this area of the WPF was remediated. To render arsenic–impacted soil inaccessible the entire grass-covered area was excavated, re-graded, and backfilled in a manner that placed four feet of suitable soil above arsenic polluted soil. Consistent with other AOCs across the site, ELURs will be implemented. | | | | | |
| WPF-5 | Arsenic-impacted soils were identified in the small strip of land located between the entrance- ways to the WPF. To render arsenic polluted soil inaccessible the entire area was excavated to 4 feet below grade and backfilled in a manner that allowed placement of four feet of suitable soil above the arsenic-impacted soil. | | | | | |
| Area WPF 4 | There were two small areas in the northern portion of the WPF where roll-offs were stored and where ETPH impacts were identified (along with arsenic impacts in excess of the I/C DEC) that required remediation. In 2004, these two small areas of ETPH impacts in excess of the I/C DEC and GB PMC were excavated and the excavations were backfilled and re-paved to render the arsenic impacts inaccessible (formalized once the ELUR is implemented). | | | | | |
| WPF Basin | Remediation of the WPF storm water detention basin took place in early 2013 in conjunction with a sediment removal maintenance activity. Sediments that had accumulated in the basin over its 20+-year operational history were removed, along with six inches of the underlying arsenic and beryllium-impacted soils. In accordance with a CTDEEP-approved Engineered Control application, a geotextile barrier layer and six inches of stone were placed across the basin as a means to render underlying soils inaccessible. A combination of rip-rap, heavy vegetation, and fencing were included with the other elements of the Engineered Control to prevent contact with the arsenic-impacted soils within the area immediately surrounding the basin. An ELUR will be implemented for this area. | | | | | |





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Exhibit J

Valuation Analysis of CRRA's Jet Turbine Facility

Market Value Evaluation

Jet Turbine Systems at the South Meadows Facility

Prepared for

Connecticut Resources Recovery Authority Hartford, Connecticut

Prepared by

TRC

Windsor, Connecticut



October 14, 2013

TRC Environmental Corporation

21 Griffin Road North Windsor, Connecticut 06095 Telephone 860-298-9692 Facsimile 860-298-6399

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Appendix A An Evaluation of Air Pollution Control Options



1.0 EXECUTIVE SUMMARY

CRRA owns a peaking power plant which is adjacent to the Mid-Connecticut Project trash-to-energy facility in Hartford's South Meadows. The purpose of this report is to provide a market evaluation of the potential sale or relocation of the Jet Turbine Systems as a unit either nationally or internationally or the disposition for scrap and spare parts.

The peaking plant consists of four electric generator sets, each capable of producing 40 megawatts (MW) of electricity. Each generator set consists of two Pratt & Whitney FT4A-9 jet engines typically used for aircraft applications on Boeing 707 and B-52 aircraft. The FT4A-9s run on jet fuel.

In the evaluation of the marketability of these units, TRC considered the following:

- The jet turbine equipment specifications and details;
- The feasibility of dismantling and divesting the jet turbine system for reuse at another facility;
- The feasibility of and permitting requirements for using the facility in the United States and internationally;
- The availability and market pricing for comparable equipment in both the domestic and international markets;

TRC is a national engineering, consulting, and construction management firm providing integrated services to the energy, environmental and infrastructure markets. With over 2,600 technical professionals and support personnel at more than 80 offices throughout the U.S., we serve a broad range of clients in government and industry, implementing complex projects from initial concept to delivery and operation. TRC has a deep portfolio of successful power plant decommissioning, retrofit, and repower projects throughout the U.S, many of which included asset evaluation activities.

To evaluate the value of the CRRA peaking units, TRC specifically:

- Contacted a number of the industry leaders and vendors for turbine system supply, maintenance and spare parts.
- Reviewed the current offerings for leading spare parts and genset providers
- Applied our experience on other power plant decommissioning projects





It should be noted that no supplier contacted was willing to provide a formal estimate for the value of these units as detailed herein, principally because of the competition between potential suppliers and the fact that there is no firm commitment to shutdown these units. Accordingly, the estimates provided herein are based on TRC's professional judgment, based on our extensive experience in the industry and confidential discussions with these sources.

It is our conclusion that a market is not likely for these systems as a complete operating unit either nationally or internationally at this time. This conclusion is based on:

- The age of the units and absence of emission control equipment
- The cost of installing emissions control equipment
- The use of jet fuel as a single fuel and its current costs
- The inability to add a heat recovery unit
- The cost to disassemble, package, ship and reassemble the units
- The cost to modify to 50 Hz for international applications

Should the facility be shutdown, the most effective disposition would be for scrap value and limited spare parts sales. In developing a range of values for this option, we have considered a number of factors:

- The cost to disassemble units for scrap or spare parts
- The current high value for scrap steel and specialty metals
- The market for spare parts
- The cost of abatement and demolition of the facility after disposition of the turbine units
- The cost of removal and potential scrap value of the storage tank after disposition of the units

As we noted earlier, industry suppliers are unwilling to provide a price quote for spare parts as well, unless the units are actually available for sale. Accordingly, we estimate a net value of \$150,000 to \$400,000 per twinpac system with an expected value of \$250,000. This range is based on TRC's professional judgment and experience with other demolition projects and includes the costs factors noted above. The low end assumes that the equipment is scrapped with limited spare parts while the upper range includes a high allowance for spare parts sales.



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2.0 BACKGROUND

2.1 <u>TRC Qualifications</u>

A pioneer in groundbreaking scientific and engineering developments since the 1960s, TRC is a national engineering, consulting, and construction management firm providing integrated services to the energy, environmental and infrastructure markets. We serve a broad range of clients in government and industry, implementing complex projects from initial concept to delivery and operation.

A publicly-held corporation listed on the New York Stock Exchange (NYSE:TRR) – NYSE's oldest environmental firm – TRC includes 2,600 technical professionals and support personnel at more than 80 offices throughout the U.S. TRC has been a partner to the energy industry for forty years. We have a long history of siting and licensing new generating and transmission facilities, power engineering, emissions measurements, due diligence and other environmental services. Our RE Power scope of services typically includes permitting, asset recovery, abatement, decommissioning, demolition, remediation and site restoration. TRC's RE Power team combines professional, technical and construction services to achieve our client goals.

In addition to siting and licensing over 30,000 MW of new generation, TRC is currently executing its fourteenth power plant retirement project. TRC has served as Owners' Engineer for eight of these projects, and as the Prime Contractor for four of the projects. TRC's deep portfolio of successful power plant decommissioning, retrofit, and repower projects includes the following:

| NO | PROJECT NAME | ORIGINAL CONSTRUCTION | SIZE OF PROJECT | DATES | TRC'S ROLE |
|----|-----------------------------|--------------------------|--------------------|---------|------------|
| 1 | PG&E | 1920s | 200 | 2006 - | Prime |
| | Hunters Point, California | | MW | 2012 | Contractor |
| 2 | Austin Energy | 1959 | 570 | 2011 - | Prime |
| | Holly Street, Texas | | MW | Present | Contractor |
| 3 | Taunton Municipal Lighting | 1902 | 100 | 2008 - | Prime |
| | Massachusetts | | MW | 2012 | Contractor |
| 4 | Consolidated Edison | 1901 | Steam | 2000 - | Prime |
| | Waterside Station, New York | | Electric | 2008 | Contractor |
| | | | MGP | | |



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| NO | | ORIGINAL | SIZE OF | | |
|----|----------------------------------|--------------|---------|---------|------------|
| | PROJECT NAME | CONSTRUCTION | PROJECT | DATES | TRC'S ROLE |
| 5 | Associated Electric Cooperative, | 1953 - 1960 | 59 MW | 2013 - | Owner's |
| | Inc (AECI) | | | Present | Engineer |
| | Chamois Power Plant, Missouri | | | | |
| 6 | Associated Electric Power | 1940s | 100 | 2012 | Owner's |
| | Pickway Plant | | MW | | Engineer |
| | Lockburne, Ohio | | | | |
| 7 | Associated Electric Power | 1940s | 400 | 2012 | Owner's |
| | Kanawha River Plant | | MW | | Engineer |
| | Glasgow, West Virginia | | | | |
| 8 | DTE Energy | 1930s | 250 | 2012 | Owner's |
| | Marysville Plant, Michigan | | MW | | Engineer |
| 9 | National Grid | 1930s - | 400 | 2011 - | Owner's |
| | Glenwood Landing, New York | 1960s | MW | Present | Engineer |
| 10 | National Grid | 1930s – | 100 | 2011 - | Owner's |
| | Far Rockaway, New York | 1960s | MW | Present | Engineer |
| 11 | New York Power Authority | 1970s | 825 | 2010 - | Owner's |
| | Poletti Power Plant | | MW | Present | Engineer |
| 12 | National Grid | 1956 - 1963 | 370 | 2013 - | Owner's |
| | E.F. Barrett, New York | | MW | Present | Engineer |
| 13 | National Grid | 1958 - 1960 | 370 | 2013 - | Owner's |
| | Port Jefferson, New York | | MW | Present | Engineer |
| 14 | PG&E | 1963 | 63 MW | 2009- | Owner's |
| | Humboldt Bay, California | | | Present | Engineer |

TRC has extensive experience in the valuation and disposition of plant assets. For example, TRC managed asset recovery as the prime Contractor for the Con Edison Waterside Station, PG&E Hunter's Point, and Austin Energy Holly Street demolition projects, and provided procurement and construction support for the NYPA Poletti project.

2.2 <u>General</u>

The peaking plant consists of four electric generator sets, each capable of producing 40 megawatts (MW) of electricity. Each generator set consists of two Pratt & Whitney FT4A-9 jet engines typically used for aircraft applications on Boeing 707 and B-52 aircraft. The FT4A-9s run on jet fuel.





The peaking plant went into commercial operation on June 1, 1970. CRRA acquired the plant in 2001 from Connecticut Light & Power (CL&P) after legislation restructuring Connecticut's electric utility industry required CL&P to sell its generation assets. The power turbines and the generators operate at 3,600 rpm and produce electricity at 60 hertz (cycles per second). Each generator has an enclosed control area that houses the main control cabinet, breakers, motor control centers, vibration monitoring equipment, programmable logic control cabinet and monitor, and a battery back-up power supply with direct current to alternating current power inverters.

Two 3-winding, main power transformers, each rated at 87 Mega Var-Ampheres (MVA), serve to raise the generator voltage from 13.8 kilovolts (kV) to a transmission system voltage of 115 kV. Each main power transformer is commonly connected to two of the four generators.

The units do not contain emissions control equipment.

2.3 <u>Facility Dismantling and Relocation</u>

There is recent evidence that these units can be disassembled, prepared for shipment and reassembled. The estimated cost for disassembly and packaging is \$ 400,000 to \$ 500,000 per twin pac. Shipping and reassembly is estimated at ~\$200,000, which could vary dependent on the location chosen. This estimate is based on similar work done within the past 3 years.

2.4 <u>Permitting</u>

The peaking plant currently operates in full compliance with all applicable permits, orders and regulations, including a Title V Air Operating Permit issued by the Connecticut Department of Energy and Environmental Protection (DEEP). DEEP has issued CRRA a Trading Agreement and Order, allowing it to buy credits to offset any exceedances of emissions limits.

In 2012, CRRA and DEEP agreed on a number of steps to reduce emissions from the facility. The specific changes to which CRRA agreed include the following:

The jets will burn only ultra-low sulfur fuel (i.e., fuel with no more than 15 parts per million of sulfur, in contrast to the previous maximum sulfur content of 500 ppm – a reduction of 97 percent).



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- CRRA will have site personnel trained and certified to conduct testing for opacity, which is the density of visible emissions (i.e., smoke) and opacity tests will be conducted each time that a jet is operated.
- Additional "stack tests" for particulate pollution, which had been required only once every five years, will be conducted for each jet turbine whenever it exceeds 168 hours of operation.

While these measures are effective for continued operation of the facility, they do not contribute to the ability to relocate the facility either nationally or internationally.

Accordingly, TRC has evaluated the emissions controls and potential costs for modifying these units for relocation in the United States or internationally to countries with comparable environmental laws. This evaluation is provided in Appendix A. The conclusion of this evaluation is that it is not cost effective to add emission controls to these units.

2.5 Market Availability of Comparable Units

With the announced shutdown of over 100 fossil facilities over the past 2 years, there are a large number of Genset units currently available in the market place with the expectation that as new regulations become effective, a large number will continue to be decommissioned over the next 4 years. Many of these units are newer, with multiple fuel sources and installed air emissions equipment.

The number of units available is confirmed by a check of the inventory of Generating units >10MW on the web. Examples of the numerous suppliers which offer systems based on a simple internet search include:

| Critical Power | http://criticalpoy | http://criticalpower.com/ | | | | |
|---|-------------------------------------|---------------------------|--|--|--|--|
| Penn Energy | http://www.pennenergyequipment.com/ | | | | | |
| SIRGIN | http://www.sirgen.com/ | | | | | |
| Perry Videx | http://www.perryvidex.com/ | | | | | |
| Diesel Service and Supply <u>http://www.dieselserviceandsupply.com/Used-Generators/</u> | | | | | | |
| International Process Equipment <u>http://www.ippe.com/</u> | | | | | | |

The listing above does not indicate a recommendation for or reliance on these companies for the conclusions provided in this report but rather, to provide an indication of the number of units available through a simple internet search.



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2.6 <u>Market Conditions</u>

The U.S. Energy Information Administration (EIA) collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA provides a wide range of information and data products covering energy production, stocks, demand, imports, exports, and prices; and prepares analyses and special reports on topics of current interest. Three recent graphs issued by EIA summarize how the market for electricity has drastically changed over the past 10 years:

- 1. The slowing rate of demand growth (EIA Figure 75)
- 2. The growth spurt of natural gas plants (EIA Figure 78)
- 3. The planned retirement of coal plants





The net result has been the increased availability of fossil fuel powered peaking units.





2.7 <u>System Marketability</u>

Based upon conversations with industry professionals and confidential sources, all indications are that there is not a current market for the South Meadows units as a system either domestically or internationally. The major factors leading to this conclusion are:

- The units will need to be upgraded to meet current emission standards and as noted previously and detailed in Appendix A, upgrade is not cost effective for applications within the United States and developed countries.
- 2. A newer generation of gas turbine has been developed over the past 10 years.
- 3. Conversion to 50Hz would be required for international sales and could be cost prohibitive.
- 4. Single fuel source is a major disadvantage.
- 5. Jet fuel is currently an expensive fuel and not the preferred fuel type.
- 6. Gas turbines are being developed for combined cycle applications with heat recovery steam generators converting waste heat into steam and steam turbine generators. The South Meadows units, as dual units, cannot be efficiently modified to add a heat recovery unit.

There has been tremendous emphasis on gas turbines over the past 10 years due to the prevalence of natural gas. According to the U.S. DOE, gas turbines are expected to account for 40 percent of U.S. generation by 2020, up from 15 percent of the power generation industry in 1998. Recent market analysis, such as the annual Diesel & Gas Turbine Power Generation engine order survey, confirms the trend toward natural gas and dual fuel units for small generating units as well.

The combined effect of these factors is that, in our professional judgment, it is unlikely that the units can be sold as a unit either nationally or internationally.

We have evaluated the market for spare parts. Since there are a large number of comparable units in operation, a market for spare parts will exist. However, the value of spare parts could adversely affected by a number of factors:

1. The age of the South Meadows machines.



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- 2. The need to disassemble and remove the parts from the units. Competing suppliers of spare parts may have the components sitting in a warehouse ready for shipment.
- 3. The retirement of other units and availability of spare parts

Accordingly, we have included a range for the anticipated value in our conclusions below.





3.0 <u>CONCLUSIONS</u>

It is our conclusion that sale of these systems as a complete operating unit is possible but a low probability both nationally and internationally at this time. This conclusion is based on:

- The age of the units and absence of emission control equipment
- The cost of installing emissions control equipment
- The use of jet fuel as a single fuel and its current costs
- The inability to add a heat recovery unit
- The cost to disassemble, package, ship and reassemble the units
- The cost to modify to 50 Hz for international applications

Should the facility be shutdown, the most effective disposition would be for scrap value and spare parts sales. In developing a range of values for this option, we have considered a number of factors:

- The cost to disassemble units for scrap or spare parts
- The current high value for scrap steel and specialty metals
- The market for spare parts
- The cost of abatement and demolition of the facility after disposition of the turbine units
- The cost of removal and potential scrap value of the storage tank after disposition of the units

As we noted earlier, industry suppliers are unwilling to provide a price quote for spare parts as well, unless the units are actually available for sale. Accordingly, we estimate a net value of \$150,000 to \$400,000 per twinpack with an expected value of \$250,000. This range is based on TRC's professional judgment, general discussions with industry suppliers and experience with other demolition projects and includes the costs factors noted above. The low end assumes that the equipment is scrapped with limited spare parts while the upper range includes a higher allowance for spare parts sales.

Should CRRA choose to pursue selling the systems as a unit while simultaneously offering them for spare parts, it is recommended that CRRA contract with a third party to:

- 1. Prepare a technical specification and bid package for the JTF systems.
- 2. Identify potential buyers and actively promote the sale of the equipment.





3. Provide technical support during the sales process, including the development of firm disassembly and shipping costs as well as system conversion estimates.

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The use of a third party supplier will allow maximum exposure for both spare parts and equipment sales. Discussions with suppliers indicate that sales of complete units are principally a matter of timing and availability and could take a significant amount of time. It is not uncommon for it to take 18 months or more to find a buyer.





Appendix A An Evaluation of Air Pollution Control Options

1. Background and Purpose

The Connecticut Resources Recovery Authority owns and operates a peaking power facility adjacent to its Mid-Connecticut Project in Hartford's South Meadows. The facility consists of four Pratt & Whitney (P&W) "TwinPac" generator sets, each with an output of approximately 40 megawatts. Each TwinPac consists of an enclosure housing two P&W FT4A-9 simple-cycle combustion turbines (CTs) that fire jet fuel, a generator, and ancillary equipment. This report is a high-level assessment which:

- 1. Identifies the key air pollution programs which would apply if, hypothetically, these generator sets were to be used at another location in the United States.
- 2. Specifies the minimum air pollution control equipment needed if, hypothetically, these generator sets were to be used at another location in the United States.
- 3. Provides high-level cost for the air pollution control equipment specified in item 2.

It should be noted that the cost estimates provided in this section are based on informational quotes provided by vendors or owners for comparable units within the past 3 years.

2. Key Air Pollution Programs

The key air pollution programs which would apply if, hypothetically, the South Meadow FT4A-9 CTs were to be use at another location in the United States are summarized below. Depending on the circumstances, additional regulations may apply.

New Source Performance Standard (NSPS)

40 CFR 60 Subpart KKKK establishes emission standards and monitoring, testing, and record keeping requirements for stationary CTs with a heat input at peak load equal to or greater than 10 million British thermal units per hour (MMBtu/hr), based on the higher heating value (HHV) of the fuel, which commence construction, modification, or reconstruction after February 18, 2005. Modified or reconstructed CTs with heat input greater than 50 and less than 850 MMBtu/hr which fire fuels other than natural gas must qualify as a nitrogen oxides (NO_x) emission limit of 96 parts per million by volume, corrected to 15% oxygen (ppmvd @ 15% O₂) or 4.7 pound per megawatt hour of useful output.



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NOx Reasonably Achievable Control Technology (RACT)

 NO_x RACT standards apply to various new and existing source categories, including CTs, and vary from state to state. For oil-fired CTs, the typical current limit is approximately equal to the NSPS (i.e., 96 ppmvd @ 15% O₂). Some states have considered reducing the NO_x RACT limit for oil-fired CTs to approximately 50 ppmvd @ 15% O₂.

National Emission Standard for Hazardous Air Pollutants (NESHAP)

40 CFR 63 Subpart YYYY establishes emission standards and monitoring, testing, and record keeping requirements for certain existing, new, or reconstructed stationary CTs located at a major source of hazardous air pollutant (HAP) emissions. Affected CTs are subject to limits on formaldehyde emissions. Since South Meadows FT4A-9 CTs' formaldehyde emissions have not been measured and the status of the hypothetical new location facility is unspecified, Subpart YYYY is not considered in detail. If the NESHAP were to apply, the most likely course of action would be to install an oxidation catalyst, the cost of which is addressed in Section 5.

New Source Review (NSR)

Relocated FT4A-9 CTs <u>may</u> be subject to NSR depending on many factors, including the state and Air Quality Control Region in which they were moved, the number of hours for which they were permitted, and other emission sources at the site. If they were subject to NSR, they would have to meet Best Available Control Technology (BACT) limits and be subject to air dispersion modeling. For a simple-cycle oil-fired CT, BACT for NO_x is typically on the order of 9 ppmvd @ 15% O₂.

The requirements for air dispersion modeling vary from state to state. Air dispersion modeling would have to demonstrate, among other things, that operation of the FT4A-9 CTs would not cause or significantly contribute to a prohibited exceedance of a National Ambient Air Quality Standard (NAAQS). The nitrogen dioxide (NO₂) 1-hour and fine particulate matter (PM_{2.5}) 24-hour NAAQS are stringent, and the FT4A-9 CTs' exhaust stacks are short. Depending on the surrounding terrain and nearby structures, it might be necessary to install taller stacks to demonstrate compliance with the applicable NAAQS. Installing taller stacks could be costly.





South Meadows FT4A-9 CT Emissions

 NO_x and particulate matter (PM) emission testing of the South Meadows FT4A-9 CTs was conducted in November 2009 and April 2012. Based on the average of three test runs, NO_x measurements varied from 114.8 to 136.1 ppmvd @ 15% O_2 , and PM measurements varied from non-detect to 0.2 lb/MMBtu. Assuming ultra-low sulfur fuel was burned, NO_x would be the principal pollutant of concern, with PM and CO emissions of somewhat lesser concern.

3. Air Pollution Controls

NO_x is formed during combustion by the following mechanisms:

- Thermal NO_x results from the dissociation of nitrogen (N₂) and oxygen (O₂) molecules in the combustion air at high temperature. The N and O atoms recombine to form NO_x. Thermal NO_x formation increases exponentially as combustion zone temperature increases.
- Prompt NO_x is formed within the flame by reactions of N₂ molecules in the combustion air and hydrocarbon radicals from the fuel. The amount of prompt NO_x formation in combustion turbines is negligible compared to the amount of thermal NO_x formed.
- Fuel NO_x results from the reaction of nitrogen-bound compounds in the fuel with O₂ in the combustion air. Fuel NO_x formation is largely independent of combustion temperature.

Control technologies may be characterized as combustion control or post-combustion control. The following NO_x emissions control technologies are potentially feasible for FT4A-9 CTs:

- Water Injection (WI)
- Selective catalytic reduction (SCR)
- Staged combustion

These technologies may be implemented alone, or in combinations.

WI

WI is a combustion control technology. Injecting water into the combustor of a combustion turbine provides a heat sink that reduces the peak temperature in the combustion zone and hence decreases the formation of thermal NO_x . The mass ratio of the injected water to the fuel is typically 1.0 or less.





As more water is injected into the combustor to lower the combustion temperature, the flame becomes less stable. It reaches a point where, if the rate of water injection were to increase, the water would literally put out the flame.

If WI alone were installed on the South Meadows FT4A-9 CTs, it is estimated that a NO_x emission rate of 75 ppm could be achieved. This would satisfy the NSPS and current typical NO_x RACT, but would not qualify as BACT or meet a significantly more stringent future NO_x RACT.

Use of WI will typically increase emissions of carbon monoxide (CO) and volatile organic compounds (VOC). It might be necessary to install an oxidation catalyst to compensate for these increased emissions.

SCR

SCR is a post-combustion NO_x control. Aqueous or anhydrous ammonia (NH₃) is injected into the exhaust gas stream upstream of a catalyst bed. On the catalyst surface, NH₃ reacts with NO_x contained within the exhaust gas to form N₂ and water (H₂O).

If SCR alone were installed on the Unit, it is estimated that a NO_x emission rate of approximately 25 ppm could be achieved. This would satisfy the NSPS, current typical NO_x RACT, and reasonably foreseeable future NO_x RACT, but may not qualify as BACT.

If WI and SCR were both installed, it is estimated that a NO_x emission rate of 10 ppm could be achieved. This would satisfy the NSPS and NOx RACT, and likely qualify as BACT.

Staged Combustion Using "Cookie Cutter" Air Deflectors

Staged combustion is a combustion control technology. NO_x emissions can be reduced by injecting the combustion air and/or fuel at several "stages" (i.e., locations), which spreads the flame over a larger area. This reduces the flame temperature and decreases the formation of thermal NO_x . Staging is limited by the need to maintain a stable flame. "Cookie cutters" are air deflectors which stage the





combustion air. They were developed for FT4 turbines by Energy Services, Inc., a division of P&W Power Systems, and are used only in conjunction with WI.

If WI and "cookie cutters" were both installed on the Unit, it is estimated that a NO_x emission rate of 50 ppm could be achieved. This would satisfy the NSPS, current typical NOx RACT, and reasonably foreseeable future NOx RACT, but would not qualify as BACT.

4. High-Level Costs for Air Pollution Controls

WI

High-level cost estimates per each CT to install WI on FT4A-9 are as follows:

- WI (complete scope of supply) \$600,000
- CO catalyst plus housing (optional; complete scope of supply) \$250,000

SCR

High-level cost estimates per each CT to install SCR on FT4A-9 are as follows:

- Installation of an SCR system (including an NH₃ tank and space for a CO oxidation catalyst) -\$2,550,000;
- CO catalyst (optional; includes catalyst blocks only) \$200,000

Cookie Cutters

High-level cost estimates per each CT to install cookie cutters on FT4A-9 are as follows:

- Cookie cutters (hardware plus installation) \$125,000
- WI (required) see estimate above.
- CO catalyst plus housing (optional) see estimate above.

These costs assume that the CT were in good working order, and do not include permitting or taller stacks.



Exhibit K

Statutory Analysis of Dissolution and Sale of CRRA

MEMORANDUM FROM THE LAW OFFICES OF HALLORAN & SAGE LLP 225 Asylum Street Hartford Connecticut 06103

| TO: | Laurie Hunt |
|----------|--|
| FROM: | Peter G. Boucher Ann M. Catino |
| DATE: | November 7, 2013 |
| SUBJECT: | Statutory Analysis of CRRA Transition – Dissolution and Sale |

CRRA has requested that we identify statutory issues related to three hypothetical scenarios: (a) dissolution of CRRA; (b) sale of CRRA's assets; and (c) sale of CRRA/Mid-CT facilities as a business. For this review, we have reviewed CRRA's enabling statutes, the legislative history of the enabling legislation and relevant case law. This memo first briefly reviews the legislative history when CRRA was created. The legislative history and statutes provide the necessary context and framework for evaluation of each scenario. Next, each scenario is reviewed in the context of the statutory framework.

We conclude that CRRA does not have independent authority under its statutes to dissolve itself as would a purely private corporation. CRRA does have statutory authority to sell assets in the normal course of its performance of its statutory obligations; however, the sale of all assets that would leave nothing more than a shell would be inconsistent with the statutory scheme. Finally, the sale of the Mid-CT facilities as a "business" would be restricted absent enabling legislative action.

I. <u>Statutory Authority - Background</u>

CRRA was created in 1973 (P.A. 73-459) to solve a very real solid waste problem existing in the state at that time. In brief, according to the legislative history, in July 1972, after a competitive bidding process, DEP (now DEEP) contracted with the General Electric Company to develop a state-wide system for solid waste management (Rep. Farlow, 5/16/73, pp. 4-5). The solid waste system existing at the time was characterized as being in a "crisis" situation (Sen. DeNardis; 5/16/73, p. 96) and ineffective and inefficient from a local perspective and landfill space was running out. (Sen. Costello, 5/16/73, p. 99). Legislators' remarks included references that Connecticut's policy of "bury or burn" had to end because such conduct polluted the environment and created too many economic distortions. That prior system resulted in municipalities paying varying amounts depending upon whether compliance with the environmental regulatory framework for their particular landfill was achieved. Those municipalities that complied with law tended to pay more; those not in compliance had less costs. (Sen. Costello, 5/16/73, pp. 99, 107-108). CRRA was developed to improve the solid waste system, to keep costs down for municipalities and to provide positive economic benefits

(Rep. Harlow, 5/16/73, p. 17). Under the new legislation, an emphasis was also placed on resources recovery. Noncombustibles (*e.g.*, metals, glass) were to be segregated and resold; combustibles would go to an energy recovery plant and the resulting energy would be used affirmatively and productively in the industrial sector. (Rep. Harlow, 5/16/73, pp. 14, 17).

The State DEP (working with GE) evaluated options prior to proposing the CRRA model. Senator Costello identified two other approaches evaluated by DEP: the public works approach and the public utilities approach. He commented that the "public utilities approach is very expensive because the private utility cannot float bonds at the interest rates that the State can, so it would be much more expensive to take that approach." (Sen. Costello, 5/6/73, p. 100). As to the public works approach, he stated that this model "has proven out of the years to be an inefficient approach where great technology and expertise is required. In this area, the developing technology is complex, it is ingenious and we believe that we must work in partnership with private enterprise, with private industry to have an effective solid waste plan for the State of Connecticut."

It was against this backdrop that CRRA, its purpose and role was created. But, its creation as an independent authority was made with caution as to its independent status. Rep. Ratchford, in supporting its development, remarked: "[Y]ou're an independent authority, yes, we've set you up because the advantages in the bond market and financially of having such an authority yes, we want you to have the power, but remember you were a creature of the General Assembly, you will report back to it. And if your development is not a positive one, the General Assembly can always change its authority." (Rep. Ratchford, 5/16/73, p. 21).

The courts have similarly recognized CRRA's purpose and status. In Shelton v. Comm'r, 193 Conn. 506 (1984), the court found that the legislature created CRRA as part of a comprehensive program to address the growing statewide problem of solid waste disposal. Its creation was based on express legislative findings "that prevailing solid waste disposal practices generally, throughout the state, result in unnecessary environmental damage, waste valuable land and other resources, and constitute a continuing hazard to the health and welfare of the people of the state; that local governments responsible for waste disposal services are becoming hard pressed to provide adequate services at reasonable costs ... [and] that the development of systems and facilities and the use of the technology necessary to initiate large-scale processing of solid wastes have become logical and necessary functions to be assumed by state government" Shelton, 193 Conn. at 517-518 (citing to Conn. Gen. Stat. § 22a-258). The court further referenced the policy "that solid waste disposal and resources recovery facilities and projects are to be implemented either by the state of Connecticut or under state auspices" Id. at 518 (citing to Conn. Gen. Stat. § 22a-259(2) (emphasis added). "The CRRA was created to make and implement statewide solid waste management plans subject to the authority of the DEEP to issue permits for any solid waste disposal facility." Id. (citing to Conn. Gen. Stat. § 22a-208).

In Connecticut Res. Recovery Auth. v. Comm'r of Dep't of Envtl. Prot., 1994 WL 60061 (Conn. Super. Ct. Feb. 16, 1994), the court echoed the fact that CRRA (and SCRRRA) are statutory creations made for the purpose of performing public functions whose finances are enhanced by special tax exemptions; and a pledge by the state not to alter the rights of bond holders. Connecticut Res. Recovery Auth., 1994 WL 60061 at *4 (citing to Conn. Gen. Stat. § 22a-270, and 22a-275(f)). "One of the purposes the legislators probably had in mind in directing

the commissioner to consider the capacity of existing [facilities] when making a determination of need was the financial impact on those facilities of a new competitor for municipal waste, because the state has a significant interest in maintaining the financial viability of these facilities operated by CRRA or by municipal or regional authorities." *Id.*

Simply put, CRRA was created to solve the solid waste management problem that existed in the state in a cost-effective and efficient manner. Its creation as an independent authority was the result of a study and was intentional. If it failed to achieve its goals and/or its impacts were not positive, the General Assembly could change its authority.

At no point in the legislative history did the drafters of CRRA's enabling statutes forecast either scenario whereby CRRA would not be needed or its activities transition to either a purely private or public system. (The latter two scenarios being specifically rejected as being too costly at the time.) Nor was there any discussion that CRRA should independently control its own destiny. In fact, the opposite was the case – CRRA was a creature of the legislature with only those powers permitted by statute.

II. <u>Statutory Authority - Dissolution</u>

The analysis of whether CRRA can dissolve itself must begin by reviewing the specific powers granted to CRRA by the legislature. The statutes creating and authorizing CRRA do not provide for or contemplate self-dissolution as a permitted power. Nor can such power be implied from the statutes or legislative history.

The legislature declared various policies that are in the interest of the state and identified activities in furtherance of these goals which should be carried out by CRRA. Conn. Gen. Stat. § 22a-259(c)(11). CRRA's mission is dynamic, ongoing and must be in conformity with the state solid waste management plan as well as other applicable policies. Conn. Gen. Stat. § 22a-259. "[T]hese policies and purposes are hereby declared to be in the public interest and the provisions of this chapter to be necessary and for the public benefit as a matter of legislative determination." Conn. Gen. Stat. § 22a-259(11). Specifically, CRRA was created as "a body politic and corporate, constituting a public instrumentality and political subdivision of the State of Connecticut established and created for the performance of an essential public and governmental function." Consequently, for CRRA to decide on its own that its mission is accomplished (and whether it may dissolve), would be contrary to law and the express policies of the state (i.e., the decree of the legislature that CRRA's activities are in the public interest and that it is a "political subdivision", performing "an essential public and governmental function").

The legislature set forth in detail, in Conn. Gen. Stat. § 22a-262, the purposes of CRRA stating specifically that "[i]t is the intention of this chapter that [CRRA] shall be granted all powers necessary to fulfill these purposes and to carry out its assigned responsibilities and that the provisions of this chapter, itself, are to be construed liberally in furtherance of its intention." Conn. Gen. Stat. § 22a-262(b). Ceasing activities and dissolving, again, are contrary to the existing legislatively-directed mission of the authority (i.e., which requires CRRA to carry out its statutorily assigned responsibilities).

CRRA's powers, both general and specific, are enumerated in sections 22a-265 through 22a-268. None of these sections provides CRRA with the authority to dissolve itself.

Finally, section 22a-261(m) specifically provides that "[t]he authority shall continue as long as it has bonds or other obligations outstanding and until its existence is terminated by law." This section makes it clear that CRRA cannot dissolve itself; it has to continue until a twofold circumstance exists: First, all "bonds and other obligations"¹ are satisfied. Second, the legislature has to act to terminate CRRA.

CRRA continues to have bonds outstanding and, therefore, under the statute, it must continue in existence. The bonds still outstanding are for the SCRRRA southeast project that currently serves 12 municipalities in the southeastern area of the State. The SCRRRA project consists of a mass burn resources recovery facility in Preston and a (now closed) landfill in Montville. The Authority issued the bonds for these facilities. It is our understanding, based upon a conversation with CRRA's bond counsel, that the bonds mature in or about November 2015. Although these bonds are paid out of the SCRRRA project, backed by the State of Connecticut, and a debt service reserve fund has been set up, these bonds are within the scope of section 22a-261(m) as CRRA was the issuer of the bonds. While a full analysis of CRRA's relationship with SCRRRA is beyond the scope of this memo, the fact that bonds remain outstanding for the SCRRRA project presents a statutory bar to the dissolution or termination of CRRA's existence.

Section 22a-274 underscores these two conditions set forth in section 22a-261(m) and also broadens the State's obligations to include parties with whom CRRA enters into contracts. The pledge of the State of Connecticut is provided under section 22a-274 to "the holders of any bonds and notes issued under this chapter *and with those parties who may enter into contracts with [CRRA]* or its successor agency. . .that the state will not limit or alter the rights hereby vested in [CRRA] until such obligations, together with the interest thereon, are fully met and discharged *and such contracts are fully performed*. . . provided nothing herein contained shall preclude such limitation or alteration if and when *adequate provision shall be made by law for the protection* of the holders of such bonds and notes. . . or *those entering into such contracts*. . . ." Conn. Gen. Stat. § 22a-274 (*emphasis added*).

This section amplifies what must occur if CRRA's existence is terminated. It is only by an act of the legislature when CRRA has no other bonds or other debt outstanding unless adequate provisions are made *by law* for the protection of bond and note holders. But, significantly, it also adds that CRRA's vested rights not be limited absent provisions protective of the contracting party. Therefore, in order to dissolve CRRA, the legislature must make adequate provision for the protection of CRRA's contract counterparties.

In our opinion, the phrase "or other obligations" used in § 22a-261(m) relates to other types of financial instruments. The phrase "or other obligations" is standard language that the General Assembly uses in the context of bond issuance and indebtedness. By way of example, the following sections use this phrase at least once: C.G.S. § 7-479i, "Issuance of bond indebtedness" (in Chapter 113A, Municipal Risk Management Pools); C.G.S. §8-252, "Issuance of bonds by authority" (in Chapter 134, Connecticut Housing Finance Authority - another quasi-public agency); C.G.S. §42b-15, "Bonds or other obligations issued by public entity may be consolidated in single issue if all have the same security" (in Chapter 748, Registered Public Obligations); C.G.S. §7-259, "Bonds, notes or other obligations" (in Chapter 103, Municipal Sewerage Systems). Based on the frequent usage of this phrase in other financial and bonding statutes, we believe that "or other obligations" refers to other financial instruments; not to a broader class of legal "obligations".

Enacting a law permitting dissolution or termination by an entity's board of directors is not without precedent. In fact, the legislature has provided clear authority to private sector and non-stock businesses to dissolve and has articulated the procedures for dissolution. The power to dissolve is specifically available to such entities. For a private company to dissolve, the mechanics of dissolution by a private company's board of directors and shareholders is set forth in statute, together with procedures for liquidation, notice, dealing with known and unknown claims, and the duties of the directors. *See* Conn. Gen. Stat. § 33-880 *et seq.*

For example, and for some guidance², the statutes set forth the procedures for the voluntary dissolution of a business (*i.e.*, stock corporation). Many issues must be addressed – including, but not limited to, the identification of known and unknown claims and potential liabilities. Known claims must still be managed and notice published of the dissolution such that contingent claims may be solicited and addressed. In other words, if any potential legal liabilities or unasserted claims exist, those claimants must be notified and provided an opportunity to make a claim that would be considered during dissolution (or reserved for later adjudication, with appropriate financial reserves established). A procedure to similarly address known and unknown claims must be set forth by statute for CRRA to dissolve.

In addition, the authorizing statutes for a private company to dissolve require an affirmative act of the board of directors. Its business activities then cease except those that are appropriate to wind up and liquidate its business and affairs. Such activities include: (1) collecting its assets; (2) disposing of its properties that will not be distributed in kind to its shareholders; (3) discharging or making provision for discharging its liabilities; (4) distributing its remaining property among its shareholders according to their interests; and (5) doing every other act necessary to wind up and liquidate its business and affairs. But, dissolution of a corporation does not: (1) transfer title to the corporation's property; (2) prevent transfer of its shares or securities, although the authorization to dissolve may provide for closing the corporation's share transfer records; (3) subject its directors or officers to standards of conduct different from those prescribed in the statutes; (4) change quorum or voting requirements for its board of directors or shareholders; change provisions for selection, resignation or removal of its directors or officers or both; or change provisions for amending its bylaws; (5) prevent commencement of a proceeding by or against the corporation in its corporate name; (6) abate or suspend a proceeding pending by or against the corporation on the effective date of dissolution; (7) terminate the authority of the registered agent of the corporation; or (8) of itself render the shareholders liable for any liability or other obligations of the corporation nor vest title to the property of the corporation in the shareholders. Issues similar, if not identical to these, would need to be addressed prior to any dissolution of CRRA.

The legislature has also provided for administrative dissolution by the Secretary of State's office (Conn. Gen. Stat. § 33-890 *et seq.*) and judicial dissolution (Conn. Gen. Stat. § 33-896 *et seq.*) of a business. None of these sections are applicable to CRRA.

The statutes also clearly set forth the authority and procedures for a non-stock corporation to dissolve. See Conn. Gen. Stat. §§ 33-1170 et seq. Such procedures are similar to

² Public Act No. 13-285(9) requires CRRA to develop a transition plan that considers dissolution. The statutes referenced here provide some insight as to the issues that must be considered.

those set forth for a stock corporation. However, certain provisions unique to the status of a nonstock corporation exist. For example non-stock corporate assets must be used or transferred for "charitable, eleemosynary, benevolent, educational or similar purposes." Conn. Gen. Stat. § 33-1170(a). These provisions also are not applicable to CRRA although they provide further guidance as to the various factors and issues that warrant consideration for legislation in the event the legislature does believe that dissolution is an appropriate course of action.

As a "quasi-public" agency, CRRA also derives certain powers (and limitations on these powers) by virtue of such status. Chapter 12 of the General Statutes pertains specifically to quasi-public agencies like CRRA. However, Chapter 12 does not authorize a quasi-public agency to dissolve, nor does it contain provisions similar to those found elsewhere in the General Statutes pertaining to business dissolutions.

In conclusion, the dissolution of CRRA was not contemplated at the time CRRA was created and no statute enacted then or thereafter establishes authority for it to dissolve. Any such dissolution (and the mechanics thereof) must be specifically authorized by the General Assembly and the issues not unlike those set forth above need to be addressed. Provisions must be clearly set forth in statute for the transfer of CRRA real properties, solid waste facilities and transfer stations, other assets, employment and pension obligations, debts, municipal agreements, operating contracts and liabilities (including any transfer of environmental permits and closure obligations existing under the solid waste laws implemented by DEEP). In addition, the overall questions of oversight of the facilities, whether disruption to the Hartford region's solid waste disposal system will result, and the effect on competition would need to be addressed. Whether dissolution is consistent with DEEP's Statewide Solid Waste Management Plan, which serves as the basis for solid waste management planning and decision-making through 2024, would also require serious consideration.

III. <u>Statutory Authority – Sale of CRRA Assets</u>

The starting point for whether CRRA can sell its assets is also determined by reference to CRRA's statutory authority. Section 22a-266(a)(4) authorizes CRRA to "sell or lease to any person all or any portion of a waste management project, for such consideration and upon such terms as the authority may determine to be reasonable." A waste management project is defined as:

Any solid waste disposal and resources recovery area, plant, works, system, facility or component of a facility, equipment, machinery or other element of a facility which the authority is authorized to plan, design, finance, construct, manage, operate or maintain under the provisions of this chapter, including real estate and improvements thereto and the extension or provision of utilities and other appurtenant facilities deemed necessary by the authority for the operation of a project, including all property rights, easements and interests required.

Conn. Gen. Stat. § 22a-260(22). Consequently, under 22a-266(a)(4) CRRA's authority to sell or transfer ownership of its "assets" is limited to those types of assets defined in § 22a-260(22), which are largely hard, "bricks and mortar" type assets. Basically, CRRA does have the authority to sell a solid waste disposal area or resources recovery facility (or component or element thereof), and its real estate and improvements, to a "person". A "person" is "any

individual, firm, partnership, association, limited liability company or corporation, public or private, organized or existing under the laws of the state or any other state, including federal corporations, but excluding municipalities, special districts having taxing powers or other political subdivisions of the state." Conn. Gen. Stat. § 22a-260(5).

Any such sale must be in the ordinary course and consistent with CRRA's ongoing mission. In other words, the sale of assets must be in the context of the activities that CRRA is statutorily authorized to perform. If any sale of its assets as defined in § 22a-260(22) does not permit CRRA to carry out its statutory mission to provide solid waste management services³, then such a sale would be a defacto dissolution and not authorized under the statutes.

Furthermore, and consistent with the statutory limitations regarding CRRA's continued existence under Conn. Gen. Stat. § 22a-261(m), if *any* bonds or obligations still exist, CRRA cannot effectively sell *all its assets* which essentially terminates its statutory activities. Such an action may also run afoul of any independent bond obligations. An asset sale that effectively ceases CRRA's activities and that operates to eviscerate CRRA's existence (leaving a shell public authority) would essentially nullify its statutorily imposed obligations and activities. If such asset sale essentially leaves the role contemplated by the legislature and statute unfulfilled, any such termination must be by law. Indeed, provisions must be legislatively enacted if the rights vested in CRRA are altered when bonds remain outstanding or contracts are not fully performed. Conn. Gen. Stat. § 22a-274. Any legislation must provide for the protection of bond holders or those parties who have contracted with the authority. An act of the legislature, therefore, is needed prior to a wholesale sale of assets, i.e., *all of CRRA's assets*.

IV. Sale of CRRA/Mid-CT Facilities as a Business⁴

The sale of Mid-CT facilities as a business also has the statutes as a starting point. In brief, Mid-Connecticut is comprised of a waste processing facility and a power block facility and is part of the Mid-Connecticut Project, which also consists of four transfer stations; a regional single-stream recycling center; the Hartford Landfill (currently undergoing closure construction activities) and the Ellington Landfill (now closed). While each of the hard assets may be sold (that is, the facility, the real estate, or its component parts), the sale of all the Mid-CT Facilities as an ongoing business operation (including, for example, its contracts, good will and other such

³ CRRA is required by statute to provide "waste management services." Conn. Gen. Stat. §§ 22a-262, 22a-264 to 22a-266; and, *see infra*, Section IV.

⁴ For purposes of this analysis, we are distinguishing between what could be considered a tangible asset versus the sale of a "business" based upon general legal distinctions in order to assess the statutory authority. A tangible asset is defined by Black's Law Dictionary as "an asset that has a physical existence and is capable of being assigned a value." One specific type of tangible asset is a capital asset, which is defined by Black's to mean "a long-term asset used in the operation of a business or used to produce goods or services, such as equipment, land or an industrial plant." The Mid-Connecticut plant (and its associated parts) is a tangible, capital asset that CRRA uses in the operation of its business in order to provide waste management services. As a tangible asset, it is capable of being valued and sold. The sale of tangible assets is authorized, as set forth in Section III of this memo, pursuant to Conn. Gen. Stat. § 22a-266(a)(4). Comparatively, the sale of a "business" would include not only the capital assets, but also the business as a going concern that includes intangibles such as goodwill as well as the liabilities, past and present. Selling tangible assets, such as the bricks and mortar that make up the Mid-Connecticut facility and the equipment therein, would be permitted by the statutes.

intangibles) is not statutorily authorized under section 22a-266(a)(4). Nowhere in CRRA's enabling legislation is CRRA authorized to sell its "business activities." The sale of business activities would be broader than the sale of assets; it would necessarily mean that a continuity of operations would exist. Decisions as to what liabilities would be transferred (*e.g.*, for post-transfer operations) and what liabilities would be retained (e.g., existing tort liabilities, existing lawsuits, closure obligations, environmental and other risks, and liabilities not associated with the ongoing operation of a business) would be required. None of these considerations that would permit CRRA to sell its "business" are set forth in statute.

The statutes also do not authorize the sale of activities defined as "waste management services." "Waste management services" are "actions taken to effectuate the receipt, storage, transportation and processing for resources recovery, recycling, reuse of recovered materials, or disposal of solid wastes, including the sale of products, materials or energy on behalf of the state, a region, a municipality or a person by the authority or by any person or persons acting under contract with the authority, pursuant to the provisions of this chapter." Conn. Gen. Stat. § 22a-360(6). The statutes expressly require CRRA to engage in "waste management services." *See e.g.*, Conn. Gen. Stat. §§ 22a-262, 22a-264, 22a-265 and 22a-266. Indeed, to sell its business activities constituting "waste management services" is inconsistent with CRRA's statutory mission to provide such services and would be contrary to statutory authority. Therefore, to affect such a sale of CRRA's waste management services to a private entity, an act of the legislature would be required.

In addition, in a memo by the Director of the Legislative Program Review and Investigations Committee, dated May 5, 2011, (the "Director's Memo") as to what the process, mechanics and issues would be to transfer ownership of Mid-CT to the State of Connecticut, the Director stated that legislation is likely needed to transfer the ownership of CRRA's Mid-CT plant to the State.⁵ The Director's opinion relied upon Conn. Gen. Stat. § 22a-261(m) which also states that "[u]pon the termination of the existence of the authority [by the legislature], all its rights and properties shall pass to and be vested in the state of Connecticut." The Director stated:

Simply put, if the legislature has the authority to terminate CRRA's existence, with the accompanying passing of all assets to the state of Connecticut, it follows that the legislature also has the authority to transfer ownership of one of CRRA's assets, the Mid-CT plant, to the state, with all necessary appropriate bondholder protections. PRI staff is not aware of any research to the contrary. Such a transfer would provide direct state control over a portion of in-state RRF capacity, something that does not exist now. (It may be noted that CRRA has always had the statutory authority to sell or lease part of a waste management project to "any person," but the definition of "any person" in the CRRA statutes does not include the state of Connecticut. Thus, those statutes do not appear to apply to this transfer.)

The Director's Memo provides further insight into not only whether a transfer of Mid-CT assets to the State may occur, but also whether it is currently authorized (which it is not, absent legislative action). The Director's Memo, however, is silent on whether the entire business may

⁵ In the Director's Memo, the Mid-CT plant is defined as the waste processing facility and power block facility. It is referred to as "part of CRRA's Mid-Connecticut Project," which is also identified as including four transfer stations, a single-stream recycling center, and the Hartford and Ellington landfills.

be transferred, as that question was beyond its scope. However, the analysis would be the same; that is, whether the existing statutes permit such a transfer, and the statutes currently do not authorize a transfer of CRRA's business operations.

V. <u>Conclusion</u>

CRRA can only exercise those powers granted under statute. No statutory authority exists that allows CRRA to dissolve itself. CRRA has statutory authority to sell certain of its assets – those defined in Conn. Gen. Stat. § 22a-266(a)(4). That is, any portion of a waste management project, which is basically the hard, bricks and mortar-type asset and real property. However, if the asset sale is for substantially all of the assets (to one or more private entities) and all assets are sold leaving only a shell that cannot fulfill the statutory mission of the Authority, such a complete liquidation is equivalent to a dissolution (or termination) and is not authorized by statute. A sale of the "business" which would include not only assets but also an ongoing business operation, with decisions required as to what liabilities would be sold and what (if any) ones retained, similarly is not authorized. Any sale whereby the enterprise continues, but by a party other than CRRA, would require statutory authority.

Two statutes contemplate that CRRA continues its mission and exists until the legislature provides otherwise. Sections 22a-261(m) and 22a-274 clearly provide notice that CRRA continues until the legislature terminates the Authority's existence and, § 22a-274 also compels the legislature to provide for the protection of bond holders, note holders and parties contracting with the Authority.

In short, of the three hypotheticals, only one is statutorily permitted and that hypothetical – sale of assets – is limited only to certain types of assets.

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Exhibit L

CRRA Landfill Property, Infrastructure, and Operational Information

CRRA LANDFILL PROPERTY, INFRASTRUCTURE AND OPERATIONAL INFORMATION

1. PROPERTY, INFRASTRUCTURE & OPERATIONAL REQUIREMENTS

- Ellington Landfill
- Hartford Landfill
- Shelton Landfill
- Wallingford Landfill
- Waterbury Landfill
- 2. LEASE & ACCESS AGREEMENTS
- 3. O&M ACTIVITIES, TASKS, & CONTRACTS
- 4. LIST OF PERMITS, LICENSES, AUTHORIZATIONS
- 5. CONSENT ORDERS, NOT YET CLOSED OUT
- 6. POST-CLOSURE COST ESTIMATES
- 7. COMPLIANCE CALENDAR FY2014

PROPERTY, INFRASTRUCTURE, AND OPERATIONAL REQUIREMENTS

CRRA Ellington Landfill (217 Sadds Mill Road)

Property & Infrastructure Summary

Waste types: MSW DEEP Closure Certification: October 28, 1998

Property

- 1. CRRA owns Landfill proper (27 acres)
- 2. CRRA owns adjacent parcel upon which Transfer Station is located (14 acres) Note: Transfer Station parcel does not have frontage on Sadds Mill Rd; accordingly, an easement allowing CRRA to have access to TS must be put in place.
- 3. CRRA owns former Thompson Family Land Trust property: 58 acres (plume control)
- 4. CRRA owns former Art Barber property: 20 acres (plume control)
- 5. CRRA owns former Charette property: 1.3 acres (plume control)
- 6. CRRA owns former B&L Dev Corp property: 5.3 acres (plume control)

<u>Cap</u>

• MSW Area: 2 feet soil; slopes up to 3H:1V

Infrastructure

- A. Active Landfill Gas Collection & Control System
 - a. Central (10 wells) & Perimeter (46 wells) Gas Collection System
 - b. Thermal Oxidizer
 - **c.** Three LFG Condensate Tanks
 - d. LFG Monitoring: 7 on-site structures; 18 perimeter probes





CRRA Hartford Landfill (Leibert Road)

Property & Infrastructure Summary

Waste Types: MSW, Ash Residue; Contaminated Soil; Bulky; C&D DEEP Closure Certification: Pending Final Closure

Property

- 1. Landfill is owned by City of Hartford (SMUs = 96 acres; entire parcel = 124 acres)
- 2. CRRA leases the landfill from the City of Hartford. Upon Certification of Closure by DEEP, Lease Agreement will terminate and an Easement Agreement will commence to provide for CRRA access to conduct post-closure care & maintenance activities.

<u>Cap</u>

- Ash Area: geomembrane/soil; slopes 3H:1V
- MSW Area: geomembrane/soil; exposed membrane; slopes 3H:1V

Infrastructure

- 1. Active Landfill Gas Collection & Control System
 - a. Gas Collection System 110 wells
 - **b.** Gas Monitoring
 - c. Thermal Oxidizer
 - d. One LFG Condensate Tanks
 - e. LFG Monitors/probes: 9 on-site structures; 15 perimeter probes Note: Two LFG Engines combust LFG, Generate 1.5 MW of Power. Owned/operated by private company pursuant to contract w/CRRA
- 2. Groundwater Flow Control System
 - a. Bentonite Slurry Wall
 - b. Piezometers
 - c. Pumping Wells
 - d. Pump Building (no treatment conducted)
- 3. Ash Residue Leachate Collection/Treatment System
 - a. Lift Station
 - b. 60K gal storage tank
 - c. Treatment Building (pH adjustment only)
- 4. Vehicle Maintenance Building
- 5. Truck Wash Building
- 6. Scale House
- 7. 150 kW Emergency Generator

CRRA Landfills Property Summary March 2013





CRRA Shelton Landfill (866 River Road)

Property & Infrastructure Summary

Waste Types: MSW; Ash Residue; HW Metal Hydroxide Cell DEEP Closure Certification: April 27, 2001

Property

- 1. CRRA owns Landfill proper (SMUs = 49 acres; entire property = 110 acres)
 - a. Includes 1.2 acres leased to City of Shelton for Muni Transfer Station Operation
- 2. CRRA owns Former Crump Parcel: 6.3 Acres (Plume control)

<u>Cap</u>

- NE & SE Ash Areas: geomembrane/soil; slopes 2H:1V
- Historic MSW/Ash Area: 2 feet soil; slopes 2.5H:1V
- Metal Hydroxide Area: geomembrane/soil; slopes minimal

Infrastructure

- 1. Active Landfill Gas Collection & Control System
 - a. Central (67 wells) & Perimeter (52 wells) Gas Collection System
 - **b.** Thermal Oxidizer
 - c. Two LFG Condensate Tanks
 - d. Autodialer/System Monitoring Building
 - e. LFG monitors/probes: 19 on-site structures; 5 off-site structures; 19 onsite and 16 off-site perimeter probes
- 2. Ash Residue Leachate Collection/Treatment System
 - a. Two Lift Stations
 - **b.** 30K gal storage tank
 - c. Treatment Building (pH adjustment only)
- 3. Transfer Station (Leased to City of Shelton)
- 4. Truck Wash Building
- 5. Maintenance Garage
- 6. 100 kW Emergency Generator



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CRRA Wallingford Landfill (Pent Road)

Property & Infrastructure Summary

Waste Types: MSW; Ash Residue; Bulky; Haz Waste Metal Hydroxide Cell DEEP Closure Certification: February 28, 2006

Property

- 1. Landfill is owned by Town of Wallingford (SMUs = 37 acres; entire property = 110 acres). CRRA has authority to access landfill to conduct post-closure activities pursuant to a provision in former Lease Agreement with Town of Wallingford.
- 2. Former Barbarino Property: 45 Acres (Plume control) (Algonquin Gas Line Easement)

<u>Cap</u>

- Ash/MSW/Bulky Waste Areas: 2 feet soil; slopes up to 2H:1V
- Metal Hydroxide Area: 50% area soil, 50% area geomembrane/soil; slopes minimal

Infrastructure

- 1. Passive Gas Collection/Venting System
- 2. LFG monitors/probes: 4 in structures; 17 probes







CRRA Waterbury Landfill (Highland Avenue)

Property & Infrastructure Summary

Waterbury Landfill (Highland Avenue)

Waste Types: Bulky

DEEP Closure Certification: November 19, 2009

Property

1. Landfill is owned by CRRA (5.2 acres)

<u>Cap</u>

• Bulky Waste Area: 2 feet of soil; slopes up to 3H:1V

Infrastructure

None

CRRA Landfills Property Summary March 2013



MAP REFERENCE: US GEOLOGICAL SURVEY, WATERBURY 7.5-MINUTE QUADRANGLE, SCALE: 1:24,000

| $\widehat{\boldsymbol{\mathcal{S}}}$ | Drawing Name: SITE LOCATION MAP | Sheet No.: FIGURE 1 |
|--|--|------------------------|
| BLUE RIVER | Project Name: WATERBURY BULKY WASTE LANDFILL HIGHLAND AVE, WATERBURY, CT | Project No.: 10035 |
| 547 MAIN STREET, STE 5 MIDDLETOWN, CT 06457 | CONFIDENTIALITY: THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN SHALLNOT BE USED IN WHOLE OR PART WITHOUT THE FULL KNOWLEDGE AND | Date: 08-31-10 |
| (860) 467-4469 OFFICE | WRITTEN CONSENT OF BLUE RIVER ENGINEERING, LLC. | Scale: NTS |


LEASE & ACCESS AGREEMENTS

CRRA Landfills - Lease & Access Agreements with Municipalities

Hartford Landfill

CRRA leases the landfill from the City of Hartford pursuant to a <u>Lease Agreement</u> executed in 1982.

As of February 2013 the CRRA sublets a portion of the landfill to the City of Hartford on which they operate a municipal transfer station.

CRRA and the City executed a <u>Settlement Agreement</u> in February 2007 in which the two parties clarified closure and post-closure care responsibilities, with CRRA agreeing to be responsible for closure activities, and for post-closure monitoring & maintenance activities. This obligation was also codified in the solid waste permit amendment issued to CRRA in April 2007.

The <u>Settlement Agreement</u> provides that, upon DEEP certification of closure, CRRA and the City will execute a <u>Mutual Release and Indemnity Agreement</u>, along with an <u>Easement</u> <u>Agreement</u>. Simultaneously, the <u>Lease Agreement</u> will expire and the <u>Easement Agreement</u> will then provide the legal authority for CRRA and its contractors to continue to enter onto the landfill and conduct post-closure maintenance & monitoring activities.

Shelton Landfill

CRRA leases to the City of Shelton an area of the landfill on which is situated CRRA's Solid Waste Transfer Station, pursuant to a <u>Lease Agreement</u>. The City operates the transfer station as a registrant under the General Permit for Municipal Transfer Stations. CRRA receives an annual lease payment of \$6,000.

Wallingford Landfill

CRRA conducts post-closure care and maintenance activities at the Wallingford Landfill pursuant to a <u>Lease Agreement</u>, which, although expired (February 28, 2006), contains a provision that states that CRRA's obligation to conduct post-closure care and maintenance for 30 years after closure survives the term of the Lease Agreement.

CRRA Landfills – Lease & Access Agreements with Private Parties

Thompson Family Land Trust (TFLT)

This is associated with property that CRRA owns, adjacent to the Ellington landfill. CRRA and TFLT executed a Settlement Agreement in 2007; the settlement agreement is recorded on the land records and has several covenants that run with the land (e.g., easement for stormwater runoff; no landfill can ever be developed).

Ultimate Family Golf Centers LLC (UFGC)

This is associated with property that CRRA owns, adjacent to the Shelton landfill. CRRA and UFGC executed a Lease Agreement in May 1998. Current agreement terminates in May 2023. Under this agreement UFGC leases the 6.3 acres "Crump Parcel" for \$16,500 per year. UFGC in-turns sublets the parcel to Bishop Golf LLC. (This land is part of the Sports Center of Connecticut on River Road in Shelton.)

Minnesota Methane / Fortistar (MM)

This regards the Hartford landfill. CRRA and Minnesota Methane/Fortistar entered into an agreement in 1996 whereby MM controls the rights to all landfill gas generated at the landfill. MM collects the LFG, conveys it to an electric generating station (two 850 kW reciprocating engines) and converts the LFG to electric power.

The agreement does not have a termination date. It continues until MM elects to cease collecting the gas and operating the EGF (i.e., when no longer economical). CRRA entitled to a royalty payment of 10% of gross electric sales. Royalty payment from MM is approximately \$100,000 per year. CRRA obligated to pay City of Hartford 50% of this royalty payment pursuant to Lease Agreement.

O&M ACTIVITIES, TASKS, & CONTRACTS

CRRA LANDFILLS – O&M ACTIVITIES, TASKS & CONTRACTS

| LANDFILL | TASK | FREQUENCY | CONTRACTOR/IN HOUSE |
|-----------|--|--|--|
| | | | Deales Landonasium |
| Ellington | Mowing/snowplowing Gas Collection & Control System Q&M/reporting | bi-weekly/annual/as needed bi-weekly/monthly/as needed/ emergency response | SCS Field Services (may move in-house after new flare installed) |
| | Environmental Monitoring/reporting | Quarterly Groundwater Well and Domestic Well Monitoring and Reporting Semi-Annual Surface Water Monitoring and Reporting Quarterly Stormwater Monitoring and Reporting | O'Reilly Talbot & Okun |
| | Stormwater inspections | quarterly/semi-annual | CRRA In-House |
| | Engineering inspections | quarterly | CRRA In-House |
| 11 | Mawing | hi-weekly/annual | Primary Landscaping |
| Hartford | IVIOWINg | | Botticello |
| | Gas Collection & Control System O&M/reporting | weekly/monthly | Fortistar (will terminate contract when electricity profit not adequate – then CRRA must manage or contract management of system) |
| | Leachate System I&M | quarterly/semi-annual/annual | Knapp Engineering |
| | Leachate System Inspections, O&M | daily/weekly/monthly | CRRA In-House |
| | GFCS | monthly/quarterly/as needed | LBG (may move in-house in future) |
| | Environmental Monitoring/reporting | Quarterly Groundwater Monitoring and Reporting Quarterly Surface Water Monitoring and Reporting Quarterly Dike Stability Monitoring and Annual Reporting Quarterly Stormwater Monitoring and Reporting Monthly Sanitary Sewer Discharge Sampling and Reporting | DTC |
| | Stormwater Inspections | quarterly/semi-annual | CRRA In-House |
| | Engineering inspections (includes gas monitoring) | quarterly | Arcadis (then in-house post closure) |
| | General site maintenance | as needed | Botticello |
| Shelton | Mowing/snowplowing | bi-weekly/monthly/annual/as needed | Niro Landscaping |
| | Gas Collection & Control System O&M/reporting | bi-weekly/monthly/as needed/ emergency response | SCS Field Services |
| | Leachate System I&M | guarterly/semi-annual/annual | Knapp Engineering |

| | Leachate System I, O&M | Weekly/monthly/as needed | CRRA In-House |
|-------------|---|--|--|
| | Environmental Monitoring/reporting | Semi-Annual Groundwater Monitoring and Reporting Semi-Annual Surface Water Monitoring and Reporting Quarterly Stormwater Monitoring and Reporting Monthly Sanitary Sewer Discharge Sampling and Reporting | GZA |
| - | Stormwater Inspections | quarterly/semi-annual | CRRA In-House |
| | Engineering inspections | quarterly | CRRA In-House |
| Wallingford | Mowing | bi-weekly/monthly/annual | T&T complete |
| | Environmental Monitoring/reporting | Semi-Annual Groundwater Monitoring and Reporting Semi-Annual Surface Water Monitoring and Reporting Quarterly Stormwater Monitoring and Reporting | LBG |
| | RCRA Corrective Action/Ecological Risk Assessment | • Baseline Ecological Risk Assessment (BERA) has been completed and submitted to DEEP. Current RFS with URS (through 6/30/2013) for additional support in addressing CT DEEP questions and comments on BERA. | |
| | Stormwater Inspections | quarterly/semi-annual | CRRA In-House |
| | Engineering inspections (includes gas monitoring) | quarterly | CRRA In-House (gas monitoring by Arcadis – may move in-house shortly) |
| Waterbury | Mowing | annual | Butler |
| | Environmental Monitoring/reporting | Quarterly Groundwater Well Monitoring and Reporting | Blue River |
| | Engineering inspections | quarterly | CRRA In-House |

Notes: Other costs, contracts affecting each site:

Ellington – Electricity (CL&P), Telephone, Bottled Water for Kolesinski property, Security (Sonitrol), misc. maintenance.

Hartford – Electricity (CL&P), Water and Sewer (MDC), Telephone, DOT Bond (Gallagher), Fuel for equipment and heat (Dime Oil), Security (Sonitrol), Lease and other agreement with City of Hartford, Fortistar agreement for rights to LFG and revenue share, Standard ZREC Contract with CL&P, Interconnection Agreement with CL&P (to be signed shortly), I&M Agreement for Solar EGF (after installation in 2013), misc. maintenance.

Shelton – Electricity (UI), Water (Aquarion), Wastewater (Town of Stratford), Telephone, Security (Sonitrol), Lease with Shelton for Transfer Station, Lease of CRRA property to the north of the landfill, misc. maintenance.

Wallingford – Lease of property from Town of Wallingford, misc. maintenance.

CRRA Landfills O&M Activities, Tasks & Contracts Page 2 of 2

LIST OF PERMITS, LICENSES, AUTHORIZATIONS

HARTFORD LANDFILL

AIR

Air Permit No. 0120, Permit to Construct and Operate Enclosed Flare

1. Permit (09/26/97)

Air Permit Nos. 0165, 0166 and 0167. Permits to Construct Fuel Burning Equipment

2. Permits (03/10/00)

Air Permit No. 0165, Permit to Operate Fuel Burning Equipment

3. Permit (04/11/00)

Air Permit No. 0271, Permit to Construct and Operate Stomass Mauler Waste Reducer

- 4. Permit to Operate (03/12/99)
- 5. Permit to Construct (12/29/98)

Air Permit No. 0291, Permit to Construct and Operate Leachate Storage Tank

- 6. Permit to Operate (11/7/01); Revoked (11/14/02)
- 7. Permit to Construct (10/03/01)

Air Permit No. 075-0377-TV Title V Operating Permit

8. Permit Renewal Issued (11/09/09)

HARTFORD LANDFILL

WASTE, SOLID

Solid Waste Permit No. SW 064-4(L), Permit to Construct

- 1. Permit (02/07/79)
- 2. Permit Transfer to CRRA (06/30/82)
- 3. Minor Permit Amendment for Relocation of Landfill Access Road (08/18/97)

Solid Waste Permit No. SW-0640351, Permit to Construct and Operate Ash Disposal Area

- 4. Modification to Permit No. 064-4(L) to Construct a Double Lined Landfill for Disposal of Residue (11/08/96)
- 5. Approval to Operate Ash Residue Expansion Area (01/29/98)
- 6. Minor Permit Amendment to Use "Local Government Financial Test" (08/25/98)
- 7. Consent Order (WSWDS02011) Concerning Cell 2 (05/06/02)
- 8. Modification (SW-060546) to Increase the Final Elevation of the Ash Disposal Area (05/28/02)
- 9. Approval of Revised Operations and Management Plan (07/19/02)
- 10. Minor Permit Amendment to Modification SW-060546 to Alter the Filling Sequence (09/23/02)
- 11. Cell 2 Action Leakage Rate Exceedance Status Report (09/23/04)
- 12. Approval of Alternate Cover Operations of Lined Ash Residue Disposal Area (11/15/04)
- 13. Approval of Revised Surface Grading Plan for Phase 1 Ash Area (03/19/2007)

Solid Waste Permit No. SW-064-5-L, Permit to Construct Mixed/Interim Ash Area

- 14. Permit (12/18/85)
- 15. Approval of Alternate Daily Cover Material (12/28/94)
- 16. Minor Permit Amendment for Renewal of Approval of Disposal of Energy Recovery Facility Residue (01/26/96)
- 17. Minor Permit Amendment for Use of a Low Speed Shear Shredder (12/05/98)
- 18. Approval of Interim Ash Area Closure (8/04/99)
- 19. Approval of Use of "Posi-Shell" Interim Cover (04/27/01)
- 20. Approval to Use Reclaimed Mixed Glass Cutlet as Cover (05/06/02)
- 21. Modification to Permit to Construct No. SW 064-5-L and Permit to Operate No. 064-4-L-O for the Hartford landfill (3-29-07)
- 22. Approval of Soil generated during construction activities at the University of Hartford
- 23. Authorization for Modification of The Approved Closure Plan for The Hartford Landfill (12-28-11)

Solid Waste Permit No. SW-064-4-L-0, Permit to Operate

24. Permit (10/31/86)

HARTFORD LANDFILL

WATER, GROUND

Groundwater Discharge Permit No. LF0000014

- 1. Permit (02/06/98)
- 2. Modification to Increase the Final Elevation of the Ash Disposal Area (05/28/02)

WATER, SEWER

POTW Permit No. SP0001412

3. Permit (10/17/07)

POTW Permit No. GVW000224, Car Wash Wastewater

4. Approval Letter and General Permit (08/04/94)

MDC Approval to Discharge Landfill Gas Condensate to the Sanitary Sewers

5. Approval Letter (05/10/00)

WATER, STORM

Stormwater Discharge Certificate No. GS1000500

- 6. Registration Status (Effective 10/01/11)
- Stormwater Discharge Certificate Construction Activities 80 acre area Permit #GSN001627 (4/16/07)
- Stormwater Discharge Certificate Construction Activities Permit #GSN001663 (6/26/07)

<u>OTHER</u>

Federal Fish and Wildlife Permit No. MB826758-0, Authorization to Take Migratory Birds.

9. Permit (07/01/08)

U.S. Army Corps of Engineers Permit No. 1990-01322

- 10. Permit (10/01/93)
- 11. Extension of Time Limit for Completion of Work (10/01/98)

Water Quality Certificate No. WQC-91-1013

12. Certificate (10/20/92)

Greater Hartford Flood Commission Certificate of Approval

13. Certificate (05/11/94)

ELLINGTON LANDFILL

Solid Waste Permit No. SW-048-2, Permit for Expanding Landfill

- 1. Permit (Botticello) (06/27/84)
- 2. Permit Transfer to CRRA (07/01/86)
- 3. Minor Permit Amendment to Construct and Operate Landfill Gas Recovery System and Flare (05/06/91)
- 4. Authorization for Closure (10/20/94)

Solid Waste Permit No. SW-048-2E-O, Permit To Operate

5. Permit (11/14/86)

Air Permit No. 58-027-002, Permit to Operate Landfill Gas Incinerator

6. Permit (01/20/00)

Stormwater Discharge Certificate No. GS1000815

7. Registration Status (Effective 10/01/11)

Sewage Disposal Permit No. ELL-1808, Permit for Private Sewage Disposal System

8. Permit (06/01/90)

Zoning Permit No. ZP-2006-0168, Permit for Thermal Oxidizer Station Set 9. Permit (11/17/05)

Building Permit No. BP-2006-0237, Permit for Thermal Oxidizer Station Set TR # 29654

10. Permit (11/28/05)

Building Permit No. BD-2006-0237, Permit for Thermal Oxidizer Station Certificate No: OP-2007-0033

Permit (9/27/06)

WATERBURY BULKY WASTE LANDFILL

Solid Waste Permit No. SW-151-B, Permit to Establish and Operate

- 1. Permit to Establish (03/10/83)
- 2. Permit to Operate (11/14/86)
- 3. Transfer of Permit to Establish to CRRA (12/18/86)
- 4. Transfer of Permit to Operate to CRRA (12/19/86)
- 5. Minor Permit Amendment for Operation of a Wood Waste Shredder (07/21/89)
- 6. Final cover Material, Bulky Waste Disposal Area, Highland Avenue, Waterbury, CT
- 7. Approval of DOT Cover Soil
- 8. Solid Waste Authorization for Closure
- 9. Revised Deadline for Completion of Closure
- 10. Approval of As-Built Drawing and Final Closure Certification Report

SHELTON LANDFILL

SITE WIDE

Stormwater Discharge Certificate of Registration No. GSI000512

1. Registration Status (Effective 10/01/11)

Stewardship Permit DEP/HWM/CS-126-005

Permit (Contained in Separate Notebook)

MSW/INTERIM ASH AREA

Solid Waste Permit No. SW-126-1E, Permit for Expansion and Operation

- 2. Permit (08/12/83)
- 3. Permit Modification to Approve Disposal of Residue (02/22/88)
- 4. Minor Permit Amendment to Construct a Temporary Gas Venting System (09/01/88)
- 5. Minor Permit Amendment to Construct and Operate a Landfill Gas Recovery System (05/11/89)
- 6. Minor Permit Amendment to Construct and Operate an Electric Generating Facility (02/25/93)

Solid Waste Permit No. SW-126-1VA, Permit to Construct a Vertical Expansion

7. Permit (09/01/89)

Solid Waste Landfill Closure Authorization

8. Authorization (10/10/96)

Solid Waste Authorization for the Disruption of Shelton Landfill

- 9. Authorization (09/17/01)
- Groundwater Discharge Permit No. LF0000023
 - 10. Permit (01/11/85)

Air Permit Nos. 163-119-037 and 038, Permits to Operate

11. Permits (12/13/91)

Air, Temporary Authorization to Operate a Stationary Air Contaminant Source

- 12. Temporary Authorization (08/31/99)
- Air Permit No. 163-119-091, Permit to Construct Gas Collection and Control System
 - 13. Permit (10/18/01)

Air Permit No. 163-119-091, Permit to Construct and Operate Gas Collection and Control System

14. Permit (04/26/02); Minor Modification (12/21/10); Minor Modification (8/19/11)

Letter Confirming No Permit Change Required for Addition of Natural Gas Pipeline

15. Permit Letter (11/28/06)

City of Shelton Inland Wetlands Permit No. 90-35

- 16. Permit (01/17/91)
- City of Shelton Inland Wetlands Permit No. 92-3
 - 17. Permit (3/31/92)

SHELTON LANDFILL

City of Shelton Certificate of Wetlands Compliance

18. Certificate (11/01/94)

U.S. Corps of Engineers Wetlands Nationwide Permit

19. Permit (09/28/93)

NORTHEAST AND SOUTHEAST LINED ASH AREAS

Solid Waste Permit No. 1260181, Permit to Construct

- 20. Permit (08/05/92)
- 21. Minor Permit Amendment for Use of "Local Government Financial Test" (11/01/98)

Solid Waste Permit No. 1260227, Permit to Operate

22. Permit (04/19/94)

Solid Waste Approval to Dispose of Residue in Northeast Lined Ash Area

23. Approvals (12/19/96; 08/16/96; 07/18/96; and 06/27/96)

Solid Waste Permit Nos. 1260181 (Construct) and 1260227 Operate

24. Modification to Revise Final Closure Configuration of SE and NE Lined Ash Areas (08/25/98)

Solid Waste Landfill Closure Authorization

25. Authorization (4/27/2001)

Groundwater Discharge Permit No. LF0000052

- 26. Permit (08/27/96)
- 27. Minor Permit Modification for Changes in Benthic Monitoring Program (09/05/97)

POTW Permit No. SP0001459

28. Permit (12/05/12)

Town of Stratford Special Permit to Discharge to the Sanitary Sewer

29. Special Permit (06/16/09)

Water Management Approvals

- 30. Approval to Install and Operate an Ash Residue Leachate Collection and Pretreatment Facility (07/07/94)
- 31. Approval to Install a Wastewater Transfer and Neutralization System (04/22/93)

HAZARDOUS WASTE AREA

U.S. EPA Closure Letter

- 32. Letter (10/17/89)
- 33. Letter (11/29/95)

WALLINGFORD LANDFILL CONTENTS

Solid Waste Permit No. 148-3E

1. Permit to the Town of Wallingford for Expansion and Operating a Solid Waste Disposal Area (11/30/84)

Solid Waste Permit No. 148-4-L

- 2. Permit to the Town of Wallingford to Operate a Municipal Solid Waste Facility (11/14/86)
- 3. Permit to the Town of Wallingford for the Closure of the Existing Municipal Solid Waste Disposal Area (01/24/86)

Solid Waste Permit Nos. 148-3E and 148-4-L

- 4. Permit Modification to Dispose of Residue (11/15/88)
- 5. Disruption Authorization to Northeast Utilities for the Installation of New Overhead Transmission Structure. May 08, 2007

Approval of As-Built Drawing and Final Closure Certification Report

6. Approval Letter (2/28/05)

Landfill Gas Monitoring Plan

7. Approval of Wallingford Landfill Gas Monitoring Plan (October 2004)

Groundwater Discharge Permit No. LF0000028

8. Permit (07/18/89)

Stormwater Discharge Certificate No. GS1000499

9. Registration Status (Effective 10/01/11)

Stewardship Permit No. DEP/HWM/CS-148-004

Permit (Contained in Separate Notebook)

CONSENT ORDERS, NOT YET CLOSED OUT

Consent Orders Associated with CRRA Landfills that have not been Closed Out

Consent Order SW-400 - Shelton Landfill

CRRA and DEP entered into Consent Order SW-400 on February 19, 1998 to address CRRA's pre-authorized use of the 2:1 slope option at the Southeast area, to investigate and determine the plume limits of the MSW portion of the landfill and to provide data on an unauthorized condensate discharge event. As part of this Consent Order, CRRA paid a civil fine in the form of a Supplemental Environmental Project (SEP) in the amount of three hundred fifty thousand dollars (\$350,000). The SEP was identified as a "mercury public awareness account", and has been used by CRRA to improve public awareness of mercury recycling and to eliminate sources of mercury from the municipal waste stream. CRRA has expended the full \$350,000 (the final payment consisted of \$21,809.21 to the Product Stewardship Institute in CY2009, associated with the Bridgeport Mercury Thermostat Collection Program).

CRRA completed the data submittal requirements associated with the condensate discharge event in 2001.

CRRA completed and submitted to DEEP the "Zone of Influence" investigation report in CY 2003.

This consent order has not been officially closed. CRRA is currently in compliance with all of the requirements of the Consent Order.

Consent Order Number WC-4862 - Ellington Landfill

CT-DEP issued consent order number WC-4862 on August 10, 1989. This consent order required CRRA to "investigate the existing and potential extent and degree of groundwater and surface water contamination resulting from the operation of the Ellington Landfill in Ellington, Connecticut." In a letter dated January 16, 1990, the CT-DEP approved CRRA's proposed Phase II Hydrogeologic Study required by Paragraph 6A of the Consent Order.

CRRA submitted the Phase II Hydrogeologic Investigation report dated July 1990 to CT-DEP in order to satisfy Paragraphs 6B and 6C of Consent Order WC-4862. Following review of this report, the CT-DEP determined that additional work was required in order to meet the requirements of Paragraph 6C of the Consent Order. As a result of the CT-DEP comment letter dated May 3, 1993, CRRA submitted a "Scope of Study – Completion of Plume Delineation Investigation" on February 11, 1994, and the follow-up "Plume Delineation Investigation Report" dated February 1995. To the best of its knowledge, CRRA has received no written correspondence from CT-DEP approving or disapproving CRRA's February 1995 submittal, and Consent Order WC-4862 has therefore not been officially closed.

POST-CLOSURE COST ESTIMATES

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| ACCOUNT | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | TOTAL |
|---|---------|----------|----------|---------|---------|---------|---------|---------|---------|---------|----------|----------|---------|---------|---------|--------|----------|
| 52302 Miscellaneous Services | 00 | O.C | 00 | 00 | 0.0 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0.0 | 00 | 00 | |
| 52407 Droitect Equipment Maint | 133 000 | 13 000 | 13 000 | 13 000 | 13 000 | 13 000 | 13.000 | 13 000 | 13 000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 13.000 | 3.250 | 318.25(|
| | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 750 | 45,750 |
| Upgrade Flare | 120,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120,000 |
| Monitoring Well Repairs | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 1,250 | 76,25(|
| Monitoring Well Redevelopment | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5.000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 1,250 | 76,25(|
| 52415 Grounds Maintenance | 43,000 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 42,900 | 10,725 | 654,325 |
| Mowing and Snowplowing | 23,000 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 22,900 | 5,725 | 349,325 |
| Snow Plowing | 0 | 0 | 0 000 0, | 0 | 00001 | 00007 | 0 | 00001 | 00007 | 0 000 | 0 000 01 | 0 000 01 | 00001 | 00001 | 0 000 | 0 000 | |
| Stormwater Erosion Controls | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 2,500 | 152,500 |
| 52602 Ecos/1 iconsos/Dormits | | U nonini | 200 | 0000 | 0000 | 00000 | 00000 | 200 | 0 | 0 | 0 | 0 | 500 | 0 | 0 | 00014 | 1 50(|
| | 00 | 0 | 500 | 0.0 | 0 | 0 | 0 | 500 | 0 | 00 | 0 | 0 | 500 | 0 | 0 | 0 | 1 500 |
| 52504 Accessment/Taxes | | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Art Barbour Property | 0 | 0 | 0'0 | :0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 52645 Landfill Closure/Postclosure | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| General | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 52640 Insurance | 43,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 10,000 | 613,000 |
| Pollution Legal Liability | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 16,000 | 10,000 | 4,000 | 260,000 |
| Other Insurance | 24,000 | 24,000 | 72 000 | 72 000 | 73 800 | 49.200 | 40 300 | 40.300 | 40,300 | 10 300 | 37.050 | 37 050 | 37.050 | 37 050 | 37 050 | 9 263 | 810.21 |
| 52/US Uther Operating Charges | 22,400 | 000/07 | 000 000 | 000 00 | 000 67 | 22 200 | 22 200 | 000'64 | 22 200 | 22,200 | 22 200 | 000 22 | 000000 | 22,200 | 22,200 | 5,550 | 338.75 |
| Non-Poultine Services - SCS | 49,000 | 49 000 | 49,000 | 49 000 | 49 000 | 24 500 | 24,500 | 24,500 | 24,500 | 24.500 | 12.250 | 12.250 | 12.250 | 12.250 | 12.250 | 3.063 | 431.81 |
| Bottled Water | 1,400 | 1,400 | 1,400 | 1 400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 350 | 21,35 |
| Propane for Landfill Flare | 1,200 | 1,200 | 1.200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1.200 | 1.200 | 1,200 | 1.200 | 1,200 | 1,200 | 1,200 | 300 | 18,30 |
| 52856 Legal | 0 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 250 | 14,25 |
| General | 0 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1.000 | 1.000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 250 | 14,25 |
| 52858 Engineering | 30,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 2,500 | 172,50 |
| Specific One-Time Expenses | 20,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | D | 0 | 0 | D | 0 | 0 | 20,00 |
| Evaluate pH of Condensate General | 10.000 | 10.000 | 10,000 | 10,000 | 10 000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10,000 | 2,500 | 152,50 |
| 52901 Environmental Testing | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 27,000 | 6,750 | 411,75 |
| General | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 21,000 | 5,250 | 320,25 |
| Contingency | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6.000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 1.500 | 91,50 |
| 53304 Electricity | 16,000 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 4,3/5 | 265,37 |
| General | 16,000 | 17,500 | 17,500 | 17,500 | 17,500 | 17,500 | 1/,500 | 1/,500 | 1/,500 | 11,500 | 000 0 | 000 F | 000 V | 000 F | 000 1 | 010.4 | 10,002 |
| 55585 Bank/Trustee Fees | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 0001 | 1,000 | 000 1 | 000 | 1,000 | 1 000 | 1 000 | 1 000 | 022 | 15,25 |
| General | 000 07 | 000 00 | 000-000 | 000.100 | | 0001 | 50 500 | SO FOO | 80 500 | 60 500 | R0 500 | 60 500 | ED EDD | 60 500 | 60 500 | 15 125 | 911 12 |
| (XXX Administration | 24,000 | 002'00 | 002 20 | 22 700 | 22 700 | 22 700 | 22,700 | 22.700 | 22.700 | 22.700 | 22.700 | 22.700 | 22.700 | 22.700 | 22,700 | 5,675 | 347,47 |
| Professional Services-Indirect and Overhead | 3.500 | 33.100 | 33,100 | 33,100 | 33.100 | 33,100 | 33,100 | 33,100 | 33,100 | 33,100 | 33,100 | 33,100 | 33,100 | 33,100 | 33,100 | 8,275 | 475,17 |
| Field Services-Direct | 18,000 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 475 | 45,07 |
| Field Services-Indirect and Overhead | 3,500 | 2,800 | 2,800 | 2,800 | 2.800 | 2,800 | 2.800 | 2.800 | 2,800 | 2,800 | 2,800 | 2,800 | 2.800 | 2,800 | 2,800 | 00/ | 43,40 |
| TOTAL GASB 18 | 382,000 | 226,800 | 227,300 | 226,800 | 226,800 | 202,300 | 202.300 | 202.800 | 202,300 | 202,300 | 190,050 | 190,050 | 190,550 | 190,050 | 190.050 | 47,513 | 3,299,96 |
| TOTAL NON-GASB 18 | 34,000 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 59,900 | 14,975 | 887,57 |
| TOTAL | 416,000 | 286.700 | 287.200 | 286,700 | 286,700 | 262.200 | 262.200 | 262.700 | 262,200 | 262.200 | 249,950 | 249,950 | 250,450 | 249.950 | 249.950 | 62.488 | 4,187,53 |

| 1 | 521 | 521 | 523 | 524 | 524 | Ŕ | 525 | 526 | | 527 | ä | 1 | R. | SIR | 52 | 233 | 201 | 395 | 280 | - | | TOTAL | TOTAL |
|---------|-------------------------|---------------|--------------------------------------|--|--|--|--|--|---------------------------|--|--|--|---------------------|---------------------------|--------------------------|--------------------------------|---------------------------------------|---------------------------------|---------------|--|---|-----------|-------------|
| ACCOUNT | 04 Telephone and Pagers | 15 Advarusing | 02 Miscellaneous Services General | 01 Building Operations Emorgency Generator PM | Or Project Equipment Maintenance Experiment Lawier - Lines April Experiment Series And - Lines April Based Series Weit Recomposition of Montaneous Weit Recomposition of Recomposition of the Series April 2018 (2018) (| 15 (Compatible Managements) Norming Swedening Swedening Swedening Swedening Swedening Swedening | 02 feeduleanskerparnins Seale Reparation DEP Stammedia | 04 Kentai/Lease Conorni Minsurance | Pollution Legal Liability | Contrast Operating Charges Scale Decade Buckets Leven 14, new contrast Buckets Expenses 14, new contrast of charge Buckets Expenses 14, new contrast of charge | 09 Other Operating Charges Gravidwite Spotem Concorties Spotem | Plane Upgradie Wortsweiter Discharter | 56 Legal Grmezii | 00 Engineering General | ot Environmental Testing | 04 (Electricity Envolvement | 09 Other Utilities Other Utilities | 05 Communition (Communities) | 0 Contingency | Administration Professional Services-Den-C Professional Bearces-entries and Overhand | Fred Services Orego Fred Services his not and Overhead | GASB 10 | Mon-0A38-10 |
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| -Y 36 | 2,000 | 0.0 | 00 | 5 100 1 500 3 600 | 22,000 15,000 12,000 | 000000000000000000000000000000000000000 | 28,175 | 02-000 | 40,800 | 500.0 | 5,000 5,000 5,000 80,000 | 005 10 | 0001 | 15,000 | 000 00 | 20,000 | 0.0 | 0.0 | 10,000 | 000005 | 21,500 | 2 515 62 | 10213 |
| 1 20 | 2,900 | 100 | 00 | 5 100 1 500 3 600 | 5 000 5 000 5 000 5 000 | 10000 00000 00000 00000 | 2 50510 | 01 000'20 | 10,800 a | 0000 | 20,000 5,000 5,000 000,000 | 005.00 | 1,000 | 000 51 | 000 8 | 00000 | 00 | 0.0 | 10,000 | 52,000 39,800 59,000 | 21,600 | N0.775 54 | 51,800, J3 |
| 7 38 1 | 2 000 | 0.9 | 0,0 | 5 100 1 500 3 600 | 5,000 1 5,000 1 5,000 1 2,000 1 | 1 0000 0 0000 0 0000 0 0000 0 0 0000 0 0 | 7 500 2 | 0,000 10 | 0.800 4 | 0000 | 0000 | 0050 | 1 1200 | 00035 | 0 000 10 | 0000 | 00 | 0 0 | 0 000 | 000 200 10 10 10 10 10 10 10 10 10 10 10 10 1 | 21 600 2 | 16-315 St | 1000 |
| L . | 2,000 | 0.0 | 0.0 | 5 100 1 500 3 600 | 5 000 5 000 5 000 1 1 | 000000 00000 00000 00000 00000 00000 0000 | 175 175 000 0 | 2,000 10 | 1 200 | 0000 | 0000 | 005.00 | 1,000 | 5 000 | 0.000 10 10.000 10 | 00000 | 0,0 | p'a | 0.000 | 0000 89 | 21 600 | 13.475 30 | N NOT |
| 1 | 2000 | 202 | 00 | 5,100 1,500 2,500 | 5,000 5,000 5,000 2,000 | 0000 0000 0000 0000 0000 0000 0000 0000 0000 | 2 1111 | 2.000 10 | 0.800 4 | 0:0 0 0 | 00000 | 00100 | 1,000 | 0000 | 00.000 10 | 0000 | 0.04 | 0 0 | 0.000 | 0000 | 000170 | 0110 01 | T SHE |
| 1 41 | 2,000 | 90 | 0.0 | 5100 | 5,000 5,000 5,000 | 00000 | 27 500 2 | 00070 | 1, 700 | 6000 | 005,85 | 03.500 | 1000 | 15,000 | 20,000 15 | 100000 | 0.00 | 0.0 | 0000'0 | 000 000 | 005.00 | 1975 5 | T BOOK |
| 7 a 4 | 2000 | 0.0 | p , p | 5 100 1 500 3 con | 5 000 5 000 5 000 12 000 | 00000 | 27 575 175 27 500 0 | 000 20 | 01,200 | 0,0,0,0 | 5,000 5,000 | 93,500 | 1000 | 12,000 | 00,000,00 | 00000 | 0 91 | 0.0 | 10,000 | 39,600 58,000 | 21,600 32,600 | TATE S | 1 200 |
| 2 | 2000 | 001 | 100 | 5,100 1,500 3 £00 | 32,000 15,000 12,000 | 00000 00000 00000 00000 00000 | 27.675 175 27.500 | 00020 | 00219 | 0.000 | 20 000 9 0000 | 005,60 | 1,000 | 000 | 00000 | 0000 | ə.'ci (| 0:0 | 0000 | 00000 | 1 600 | 101100 | 1000 |
| _ | 2.2 | 11 | 1 | 5.T0 1.50 | 5,00 | 0000 | 27.67 | 80.55 | 02.13 | | 0000 | 12 | 2.0 | 15.00 | 8.8 | 22 | | | 0.00 | 52.000 34.800 | 89.5 | | 4 |

Hartford Landfill Projections

| Control Control <t< th=""><th></th><th>ACCOUNT</th><th>FY 14</th><th>FY 15</th><th>FY 16</th><th>FY 17</th><th>FY 18</th><th>FY 19</th><th>FY 20</th><th>FY 21</th><th>FY 22</th><th>FY 23</th><th>FY 24</th><th>=Y 25 F</th><th>Y 26 F</th><th>Y 27 F</th><th>Y 28 F</th><th>Y 29 F</th><th>Y 30</th><th>Y 31</th><th>TOTAL</th></t<> | | ACCOUNT | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 | FY 24 | =Y 25 F | Y 26 F | Y 27 F | Y 28 F | Y 29 F | Y 30 | Y 31 | TOTAL |
|--|--------------|--|-----------------------|-------------------------|-------------------------|-------------------|------------------|----------------------------|----------------------------|-------------------------|----------------------------|------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|-------------------------|
| Multicle intervalues Image: intervalues Image | 52104 T | felephone & Pagers | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 3,000 | 3,000 | 3,000 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 3,000 | 3,000 3,000 | 3,000 3,000 | 3,000 | 2,250 2,250 | 53,25 53,25 |
| 3.3.3. Simple sectorem 100 | 52302 N | Miscellaneous Services | D'C | DC | 00 | 0 0 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0 0 | 00 | 0 | 0 0 | |
| Open difference Sign 1 Sign 1 </td <td>52355 N</td> <td>Mileage Reimbursement</td> <td>1,000</td> <td>750</td> <td>17.75</td> | 52355 N | Mileage Reimbursement | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 750 | 17.75 |
| 94.00 94.00 95.00 <th< td=""><td>52404 8</td><td>Sulding Operations</td><td>2,000</td><td>1,700</td><td>1 700</td><td>1,700</td><td>1,700</td><td>1,700</td><td>1,700</td><td>1,700</td><td>1,700</td><td>1,700</td><td>1,700</td><td>1,700</td><td>1,700 1.700</td><td>1,700</td><td>1,700</td><td>1,700 1,700</td><td>1,700</td><td>1 275 1 275</td><td>30,47 30,47</td></th<> | 52404 8 | Sulding Operations | 2,000 | 1,700 | 1 700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 1.700 | 1,700 | 1,700 | 1,700 1,700 | 1,700 | 1 275 1 275 | 30,47 30,47 |
| Note the state of the | 52407 P | Project Equipment Maintenance | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 5,000 | 5 000 | 35.000 5.000 | 5 000 | 35,000 5.000 | 3.750 | 621,25 |
| Off to the state st | 22 | Vionitoring Well Repairs Vionitoring Well Redevelopmen/Replacement | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 3,750 | 88,75 443,75 |
| Septence | 52415 G | Grounds Maintenance Wowing and snow plowing | 84,500 65,000 | 119,500 65,000 | 94,500 65,000 | 94,500 65,000 | 94,500 65,000 | 94,500 | 84,500 | 99,500 65,000 | 84,500 65,000 | 84,500 65,000 | 84,500 | 84,500 8 | 34,500 55,000 | 34,500 8 | 34,500 | 84,500 55,000 | 34,500 85,000 | 53,375 48,750 | 1,589,87 |
| Mark Mark Mark Mark Mark Mark Mark Mark | US U | Seep repair Sediment pond dredaing | 15,000 | 40,000 | 15,000 | 15,000 | 15,000 | 15,000 | 5,000 | 5,000 | 5,000 | 5,000 | 2,000 | 5,000 | 5,000 | 2,000 | 5,000 | 5,000 | 0 0 | 00079 | 15.00 |
| Matrix Matrix< | 0.0 | Swale Maintenance Catch Basin Maintenance | 2,500 1,000 | 2,500 1,000 | 2,500 | 2,500 | 2,500 1,000 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2 500 1 000 | 2,500 | 1,000 | 1,000 | 750 | 17.71 |
| 9500 Final contrast with the conttas with the contrast with the conttas with the contrast with the | <u>. w u</u> | Erosion Control tuture use plan | 1,000 | 10,000 | 10,000 | 10.000 | 10,000 | 1,000 | 10,000 | 10,000 | 1,000 | 1,000 | 10,000 | 10,000 | 1,000 | 1.000 | 1,000 | 1,000 | 1,000 | 7,500 | 17.75 |
| C F Contractive (NF), (NF) T(N) T(N) <th< td=""><td>52502 F</td><td>-ees/Licenses/Permits</td><td>41,000</td><td>35,800</td><td>35,300</td><td>8,100</td><td>8 100</td><td>8,100</td><td>8,600</td><td>8,100</td><td>8,100</td><td>8 100</td><td>8,100</td><td>8,600</td><td>8,100 0</td><td>8,100 0</td><td>8,100 0</td><td>8,100</td><td>8,600</td><td>6,075</td><td>233,07</td></th<> | 52502 F | -ees/Licenses/Permits | 41,000 | 35,800 | 35,300 | 8,100 | 8 100 | 8,100 | 8,600 | 8,100 | 8,100 | 8 100 | 8,100 | 8,600 | 8,100 0 | 8,100 0 | 8,100 0 | 8,100 | 8,600 | 6,075 | 233,07 |
| DE PENNIMA STP1 | | DEP Groundwater - MSW DEP Groundwater and POTW - Ash | 13,300 | 17,950 | 17,950 | 4,350 | 4,350 | 4,350 | 4,350 | 4,350 | 4,350 | 4.350 | 4.350 | 4,350 | 4,350 | 4,350 | 4,350 | 4,350 | 4,350 | 3.263 | 118.01 |
| 3500 13100 | | DEP Stormwater DEP Hazardous Waste | 3.750 | 3.750 | 3,750 | 3,750 | 3,750 | 3,750 | 3.750 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 | 3.750 | 3,750 | 3,750 | 2,813 | 66,54 |
| Matrix Matrix< | 52640 lr | Insurance Pollution Legal Liability | 150,000 | 131,000 | 131,000 | 131,000 | 131,000 | 131,000 | 131,000 | 131,000 | 131,000 52,400 | 131,000 | 131,000 52,400 | 31,000 1. | 52,400 | 31,000 1 52,400 | 31 000 52 400 | 31,000 1 52,400 | 31,000 52,400 | 39,300 | 930,10 |
| Image: constraint in the | 53704 C | Other Insurance | 97,600 | 78,600 | 78,600 | 78,600 137,150 | 137.150 | 78,600 | 137.150 | 137,150 | 78,600 137,150 | 137,150 | 137,150 | 37,150 1 | 78,600 | 37,150 1 | 78 600 1:37,150 1: | 78,600 1 | 78,600 | 58,950 02,863 | 2,434.26 |
| Case System for Moutine CAM, Section Se | | contract Operating criatges | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.10 | 0 | 0 | |
| Asset Contraster moval scandinger fram. Top asset Top asset <td>00</td> <td>Gas System Routine O&M Sas System Non-Routine O&M</td> <td>54,000</td> <td>62,150 54,000</td> <td>62,150 54,000</td> <td>62,150 54,000</td> <td>54,000 54,000</td> <td>62 150 54 000 21 000</td> <td>62,150 54,000 21,000</td> <td>62,150 54,000</td> <td>62,150 54,000 21,000</td> <td>54,000</td> <td>62,150 54,000 21,000</td> <td>62,150 54,000 21,000</td> <td>62 150 54,000 21,000</td> <td>52,150 54,000 21,000</td> <td>52 150 54 000 21 000</td> <td>52,150 54,000 21,000</td> <td>54,000 21,000</td> <td>46,613 40,500 15,750</td> <td>958,50 372,75</td> | 00 | Gas System Routine O&M Sas System Non-Routine O&M | 54,000 | 62,150 54,000 | 62,150 54,000 | 62,150 54,000 | 54,000 54,000 | 62 150 54 000 21 000 | 62,150 54,000 21,000 | 62,150 54,000 | 62,150 54,000 21,000 | 54,000 | 62,150 54,000 21,000 | 62,150 54,000 21,000 | 62 150 54,000 21,000 | 52,150 54,000 21,000 | 52 150 54 000 21 000 | 52,150 54,000 21,000 | 54,000 21,000 | 46,613 40,500 15,750 | 958,50 372,75 |
| STRD Officient in the manual sectors 2.900 2.001 2.900 < | | Assist Gas Gas condensate removal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 000 | 000,12 | 0 | 0 0 | 0 0 | 00 | 00 | 00 | 00 | 00 | 00 | |
| 3733 Chart rate of control Contro Contro Control | 52709 | Deter Operating Charges | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 1,875 | 6,44 |
| 3788 Remeansa 1000 1500 | 52856 L | Logal | 1,000 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 375 | 6 6 8 |
| The interval in the control | 5285815 | General | 10.000 | 1.500 | 1.500 | 1,500 | 1 500 | 1,500 | 1,500 | 1 500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1 500 | 20,000 | 54,0 |
| S200 Environmental Testing 48,000 75,000 48,000 | 00 | General Downchute Renair Design and Oversight | 10,000 | 1,500 | 1,500 | 1,500 | 1.500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 0 | 1,500 0 | 1,500 | 1,500 | 1,500 | 1.500 D | 20.000 | 540 |
| 3333 Electricity 25,000 25,0 | 52901 | Environmental Testing Ground, Surface, Storm | 48,000 48,000 | 173,000 48,000 | 48,000 48,000 | 48,000 48,000 | 48,000 48,000 | 48,000 48,000 | 48,000 48,000 | 48,000 48,000 | 48,000 | 48,000 48,000 | 48,000 | 48,000 48,000 0 | 48,000 48,000 0 | 48.000 48.000 0 | 48,000 48,000 0 | 48.000 48.000 0 | 48,000 48,000 0 | 36,000 36,000 0 | 977,0 852,0 125,0 |
| 33309 Orter Utilities 3,000 | 53304 E | Electricity | 11,000 | 25,000 | 25,000 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 25,000 | 25,000 | 25,000 | 25,000 25,000 | 25,000 | 25,000 25,000 | 25,000 25,000 | 25,000 25,000 | 18,750 18,750 | 429.7 |
| 55522 Financial Assurance Mechanism Fees 2.000 | 53309I C | Other Utilities Weter and Sawer | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 3,000 | 3,000 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 3,000 | 2,250 | 53,2 53,2 |
| 56618 Construction 82,000 530,000 0< | 555821 F | Financial Assurance Mechanism Fees | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 2,000 | 2,000 | 2,000 | 2,000 | 2.000 2.000 | 2,000 2,000 | 2,000 | 2,000 | 36,0 36,0 |
| SB011 Contingency 40,000 174,300 72,233 68,153 66,633 66,53 66,633 67,200 27,00 27,00 27,00 27,00 27,00 27,00 <td>56605</td> <td>Construction Future Use Plan Leachade Storage Tank</td> <td>82,000 0 82,000</td> <td>530,000 530,000 0</td> <td>0000</td> <td>0000</td> <td>0000</td> <td>0000</td> <td>0000</td> <td>0000</td> <td>0000</td> <td>0:0 0 0</td> <td>0:00:0</td> <td>0000</td> <td>0000</td> <td>0000</td> <td>0000</td> <td></td> <td>0000</td> <td>0000</td> <td>612.0 530.0 82.0</td> | 56605 | Construction Future Use Plan Leachade Storage Tank | 82,000 0 82,000 | 530,000 530,000 0 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0:0 0 0 | 0:00:0 | 0000 | 0000 | 0000 | 0000 | | 0000 | 0000 | 612.0 530.0 82.0 |
| XXXX Administration 7.4 000 97.500 27.500 97.500 97.500 27.500 97.500 27.500 97.500 27.500 97.500 27.500 27.500 37.500 27.500 37.500 27.500 37.500 27.500 37.500 27.500 37.500 27.500 27.500 37.500 27.500 37.500 27.500 37.500 27.500 37.500 27.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 37.500 <th3< td=""><td>58001 0</td><td>Contingency 3CBA Corrective Action Continuency</td><td>40,000</td><td>174,308</td><td>72,233</td><td>68,153 68,153</td><td>68,153 68,153</td><td>68,153 68,153</td><td>66,728 66,728</td><td>68,903 68,903</td><td>66,653 66,653</td><td>66,653 66,653</td><td>66,653 66,653</td><td>66,728 66,728</td><td>66,653 66,653</td><td>66,653 66,653</td><td>66,653 66,653</td><td>66,653 66,653</td><td>66,728 66,728</td><td>52,896 52,896</td><td>1,279,5</td></th3<> | 58001 0 | Contingency 3CBA Corrective Action Continuency | 40,000 | 174,308 | 72,233 | 68,153 68,153 | 68,153 68,153 | 68,153 68,153 | 66,728 66,728 | 68,903 68,903 | 66,653 66,653 | 66,653 66,653 | 66,653 66,653 | 66,728 66,728 | 66,653 66,653 | 66,653 66,653 | 66,653 66,653 | 66,653 66,653 | 66,728 66,728 | 52,896 52,896 | 1,279,5 |
| Professional Services - Indirect and Overhead 2.000 45,000 | A XXXX | Administration | 74,000 15,000 | 97,500 30,000 | 97.500 30,000 | 97.500 30.000 | 97,500 30,000 | 97,500 30,000 | 97,500 30,000 | 97,500 30,000 | 97,500 30,000 | 97,500 30,000 | 97,500 30,000 | 30,000 | 30,000 | 97,500 30,000 | 97,500 30,000 | 97,500 30,000 | 97,500 30,000 | 73,125 22,500 | 517,5 |
| Field Services - Indirect and Overhead 2,000 13,500 13,700 13,700 13,700 13,700 13,7100 13 | at the st | Professional Services - Indirect and Overhead Field Services - Direct | 2,000 | 8,000 | 45,000 9,000 | 45,000 9,000 | 45.000 9.000 | 9,000 | 45,000 9,000 | 45 000 9 000 | 45,000 9,000 | 9,000 | 45,000 9,000 | 9,000 | 45,000 9,000 | 45,000 9,000 | 9,000 9,000 | 45 000 9 000 13 500 | 45,000 9,000 13,500 | 6.750 6.750 10.125 | 205.7 205.7 228.1 |
| Control Contro | ntal GASB | Field Services - Indired and Overneau 1.18 M&M | 2,000 | 1.336,358 | 13, JUU 553, 783 | 522,503 | 522,503 | 522,503 | 511,578 | 528,253 | 511,003 | 511,003 | 511,003 | 511,578 5 | 11,003 | 11,003 5 | 511.003 5 | 11 003 | 11.578 | 05,533 | 10.128.5 |
| | otal Non-G | GASB 18 M&M | 101,600 | 137,100 | 137,100 | 137 100 | 137,100 | 137,100 | 137_100 | 137.100 | 137,100 | 137-100 | 137.100 | 137,100 1 | 37,100 | 37,100 1 | 37,100 1 | 37_100 | 37,100 | 02.825 | 2,398.0 |

Shelton Landfill Projections

WALLINGFORD LANDFILL PROJECTIONS

| | 22 | 12 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 13 | ii a | 10 | 6 | 8 | F | 6. | - | + | 5 | 2 | | ſ |
|---|---------|---------------|---------|---------|------------|------------|-------------|-------------|------------|-------------|------------|-----------|-----------|---------|---------|---------|---------|---------|--------------|-----------|-----------|--------|
| ACCOUNT | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | FY 20 | εY 21 Ι | Y 22 F | Y 23 FY | 24 FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | FY 31 | FY 32 | FY 33 F | 734 FY | 35 TO. | AL |
| 52302 Miscellaneous Services | 00 | 0,0 | D.C | 00 | 00 | 00 | 010 | 00 | 0 0 | 00 | 010 | 00 | 0 0 | 00 | 0 0 | 00 | 0.0 | DIQ | 0 0 | 00 | 00 | 00 |
| 52355 Mileage Reimbursement | 200 | 200 | 500 | 500 | 200 | 200 | 200 | 500 | 500 | 500 | 500 50 | 500 | 500 | 500 | 500 | 500 | 2002 | 500 | 500 | 500 | 500 | 1.000 |
| Mileage Keimbursement | DOC UC | 2000 | 200 | 1000 02 | 000000 | 00000 | 20 000 | 20 000 | | 000 000 | 20.00 | 20.000 | 20 000 | 20 000 | 20.000 | 20.000 | 20.000 | 20.000 | 20.000 2 | 0.000 11 | 667 4 | 1.667 |
| 5240/ Project Equipment Maintu | 2000 | 2000 | 20000 | 2000 | 20000 | 5 000 | 5.000 | 2000 5 | 2 000 | 5.000 | 000 5.00 | 5.000 | 5.000 | 5 000 | 5 000 | 5 000 | 5,000 | 5,000 | 5,000 | 5,000 | 917 10 | 7,917 |
| Monitoring Weil Redevelopment | 10.000 | 10,000 | 10 000 | 10,000 | 10 000 | 10,000 | 10,000 | 10,000 | 000 01 | 0,000 10 | 000 10,00 | 10,000 | 10,000 | 10 000 | 10,000 | 10 000 | 10,000 | 10,000 | 10,000 | 0,000 | ,833 2. | 5,833 |
| Gas Monitoring Uporades | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5.000 | 2,000 | 5,000 | 5.000 5 | 000 5.00 | 00 5,000 | 5.000 | 5 000 | 5,000 | 5,000 | 5,000 | 5 000 | 5.000 | 5 000 2 | 917 10 | 7,917 |
| 52415 Grounds Maintenance | 33,000 | 33,000 | 33,000 | 33 000 | 33 000 | 33,000 | 33,000 | 33,000 | 33,000 | 3,000 33 | 000 33'00 | 33,000 | 33,000 | 33 000 | 33,000 | 33,000 | 33,000 | 33,000 | 33,000 3 | 3,000 19 | 220 7 | 2,250 |
| Mowning/Snow Removal, Elc | 22,000 | 22,000 | 22,000 | 22,000 | 22 000 | 22,000 | 22,000 | 22,000 | 22,000 | 2,000 22 | 000 22,00 | 22,000 | 22 000 | 22 000 | 22,000 | 22 000 | 22.000 | 22,000 | 22,000 | 21 000 2 | 833 44 | 4,633 |
| Seeps Control | 5,000 | 5,000 | 5,000 | 5,000 | 5 000 | 5,000 | 2,000 | 5,000 | 5,000 | 5,000 | | | | | 2,000 | ound a | 0000 | 000 9 | 000 9 | | 500 | 005.0 |
| Erosian Control | 48.000 | 0000 4 4 0000 | 6 000 | 2 75D | 2 750 | 0,000 | 0,000 | 3 750 | 2.760 | 3 750 3 | 750 4.25 | 3 755 | 197 E | 3 750 | 3 750 | 4 250 | 05/ E | 3.750 | 3750 | 3,750 2 | 187 | 4.387 |
| DED Groundwater | 14 000 | 13,600 | 13,600 | 000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,200 |
| DEP Stormwater | 0 | 200 | 0 | 0 | 0 | 0 | 500 | 0 | 0 | 0 | 0 50 | 8 | 0 | 0 | 0 | 500 | 0 | 0 | 0 | 0 | 0 | 2,000 |
| DEP Hazardous Waste | 4,000 | 3,750 | 3,750 | 3.750 | 3,750 | 3,750 | 3.750 | 3,750 | 3,750 | 3.750 3 | 750 3,75 | 30 3.750 | 3 750 | 3.750 | 3 750 | 3.750 | 3,750 | 3,750 | 3,750 | 3,750 2 | 187 | 181 1 |
| 52645 Landfill Closure/Postclosure | 0,0 | 0 0 | 00 | 00 | 0.0 | 00 | 0 0 | 0.0 | 0.0 | 0.0 | 0 0 | 0 0 | 00 | | 0.0 | 0'0 | 0.0 | 0 0 | 0 0 | 0 0 | 0 0 | 00 |
| Coneral Anton America Channel | | | | 0 | 2 | 0 | c | c | 0 | c | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ALIOS Ottos Operating Charges | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 52640 Insurance | 100,000 | 87,000 | 87,000 | 87,000 | 87,000 | 87,000 | 87,000 | 87,000 | 000 28 | 12,000 57 | 000 87.00 | 00 87,000 | 87,000 | 87,000 | 87,000 | 87,000 | 87,000 | 87,000 | 87,000 8 | 2,000 50 | ,750 1.8 | 00.750 |
| Pollution Legal Liability | 30,100 | 30,100 | 30,100 | 30,100 | 30,100 | 30,100 | 30,100 | 30 100 | 30,100 | 0,100 30 | 100 30,10 | 30,100 | 30,100 | 30,100 | 30,100 | 30,100 | 30,100 | 20,100 | 30,100 3 | 0,100 17 | 558 | 9,658 |
| Other | 51,900 | 51,900 | 51 900 | 51,900 | 51,900 | 51,900 | 51,900 | 51 900 | 51 900 | 1,900 51 | 900 51.90 | 51,900 | 51,900 | 51,900 | 51,900 | 51,900 | 51,800 | 51,900 | 51.900 5 | 1,900 30 | 0.2 | 11/1 |
| Barbarino - Olher | 18,000 | 5,000 | 5,000 | 5,000 | 5 000 | 5,000 | 5 000 | 5.000 | 5,000 | 5,000 | 000 2'00 | 2000 | 5,000 | 2000 | 000.0 | 5.000 | 0000 | 000'6 | 5,000 | 0,000 | 100 | 112010 |
| 52856 Legal | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 000 | 1,000 | 0001 | 000'1 | 0001 | 000 000 | NUUL OL | 1,000 | 1,000 | 0001 | 1000 | | 1 000 | 1000 | 1 000 | 1000 | 1 583 |
| General | 1,000 | 1,000 | 1 000 | 1,000 | 1 000 | 1,000 | DOD.1 | 1,000 | 1,000 | 0001 | N.1 000 | | 000.0 | | 00001 | DOD UX | 10000 | 10001 | 100001 | N 000 0 | 000 | 00000 |
| 52858 Engineering | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 000/01 | 10,000 | 10,000 | 10,000 | | | 10,000 | 10,000 | 10,000 | 10.000 | 10,000 | 10.000 | 10,000 | 10.000 | 0.000 20 | 000 | 00000 |
| IGeneral | 000.01 | 765 000 | 200.00 | An Con | 20000 | 10,000 | 20,000 | | 40.000 | | 0100 40 01 | 10 40 001 | 40,000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 40.000 | 0.000 23 | 0.1 DEE. | 6.333 |
| 52501 Environmental Monterior | 30,000 | 30.000 | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 | 30.000 | 30,000 | 00000 | 000 30.00 | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 | 30,000 3 | 0,000 17 | 500 6 | 17,500 |
| Misso | 0 | 10,000 | 10,000 | 10,000 | 10.000 | 10,000 | 10,000 | 10,000 | 10 000 | 0,000 10 | 000 10,00 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 0000 | ,833 2 | 05,833 |
| Ecolomical Risk Assessment | a | 225,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | O | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 000 |
| 55582 Financial Assurance Mechanism Fees | 2,000 | 1,000 | 1,000 | 1,000 | 1,000 | 000'1 | 000'1 | 1,000 | 1,000 | 1,000 | 000 1,00 | 1,000 | 1,000 | 1,000 | 1.000 | 1,000 | 1,000 | 1,000 | 0001 | 0001 | 202 | 1000 Z |
| Financial Assurance Mechanism Fees | 2 000 | 1,000 | 1 000 | 1.000 | 1,000 | 1,000 | 1 000 | 1,000 | 1,000 | 1 000 | 000 1 000 | 10011 00 | NON'L C | COD"L | nnn'i | 1 mm | NW1 | | 00011 | 0 | 1 0 | 000 02 |
| 56605 Construction | 122,000 | 38,000 | | | > c | 2 0 | | | | 0 | >0 | | | | | | 0 | 0 | 0 | 0 | 0 | 22.000 |
| Bernaryo Inprovension and France | 0001221 | 38.000 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ā | 0 | 0 | 0 | 0 | 0 | 38,000 |
| 58001 Contingency | 68.000 | 64.270 | 24,750 | 22,710 | 22,710 | 22,710 | 22,780 | 22.710 | 22.710 | 22,710 22 | 710 22,71 | 80 22,71 | 22,710 | 22,710 | 22,710 | 22,780 | 22,710 | 22.710 | 22,710 2 | 2,710 12 | 247 5 | 19,257 |
| RCRA Corrective Action | 68,000 | 64.270 | 24,750 | 22,710 | 22,710 | 22,710 | 22,780 | 22,710 | 22,710 | 2,710 22 | 710 22.71 | 80 22,71 | 22.710 | 22.710 | 22 710 | 22 780 | 22,710 | 22.710 | 22.710 2 | 2,710 1 | 247 5 | 19.257 |
| xxxxx Administration | 31,500 | 29,600 | 29,600 | 29,600 | 29,600 | 29,600 | 29,600 | 29,600 | 29,600 | 9,600 29 | 600 29,54 | 00 29,600 | 29.600 | 29,600 | 29,800 | 29,600 | 29,600 | 29,600 | 29,600 2 | 9,600 1 | 26/ 6 | 19/10 |
| Professional Services - Direct | 8,000 | 11.000 | 11.000 | 11,000 | 11,000 | 11,000 | 11,000 | 11,000 | 11.000 | 11 000/1 | 000 11 00 | 11.000 | 11,000 | 11,000 | 11,000 | 11,000 | 11,000 | 000'11 | 000/11 | 0001 | 1000 | 115 60 |
| Professional Services - Indirect and Overhead | 750 | 16,200 | 16,200 | 16.200 | 16,200 | 16,200 | 16,200 | 16.200 | 16,200 | 10,200 | 200 16.2 | 107'91 00 | 10,200 | 10.200 | 0001 | 10,200 | 1000 | 0001 | 1 000 | 1 000 | 583 | 583 64 |
| Field Services - Direct | 22,000 | 1 400 | 1,000 | 1,000 | 1,000 | 1 400 | 1,400 | 1,400 | 1.400 | 1,400 | 400 1.4 | 1.40 | 1.400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 817 | 795.92 |
| | 204 800 | 022.501 | 002.001 | UDU YAN | AYA DED | 174 060 | 174 830 | 74 060 | TA ORD 1 | 14:060 174 | 060 174 6 | 30 174 06 | 1 174.060 | 174.060 | 174.060 | 174.630 | 174.060 | 174.060 | 174,060 17 | 4,060 11 | 4.2 | 97.720 |
| TOTAL MAN TASE 18 MAM | 21 400 | 74 500 | 74 500 | 74 500 | 74 500 | 74.500 | 74 500 | 74.500 | 74.500 | 4.500 74 | 500 74.5 | 00 74,50 | 74,500 | 74,500 | 74,500 | 74,500 | 74,500 | 74,500 | 74,500 7 | 4,500 4 | 3,458 1.6 | 04,858 |
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Waterbury Projections

| 52302 Misu Gen | | | CI 14 | PT 10 | - | 2 | | | | | 1 73 1 | 1 47 1- | | 70 | - | | | | | 2 | 11 0 | FY 35 | FY 36 | FY 37 | 11 30 | | | |
|-----------------------|---|-------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------|---------------------------------------|--------------------------------------|------------------------------------|--|--|--------------------------------------|--|--|--------------------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------|--------------------------------|
| 52355 Mile | scellaneous Servicos | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 52355 MIC | neral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Mile | leage Reimbursement eage Reimbursement | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 5 | 00 5 | 00 22 | 20 50 20 50 | 0 50 | 0 500 | 500 | 500 | 500 500 | 208 | 13,24 |
| 52415 Gro | ounds Maintenance | 4,000 | 4,000 | 4,000 | 4 000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 4 | ,000 4 | .000 4.0 | 000 4.1 | 900 4 | 300 4,0 | 900 4,0 | 00 4 0 | 00 4 00 | 0 4,00 | 0 4.000 | 4,000 | 4,000 | 4 000 | 1,667 | 105,61 |
| Mon | Dwing | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 000'1 | ,000 1 | ,000 1,1 | 000 1. | 000 1, | 000 1,C | 000 1,0 | 00 1,0 | 00 1,00 | 0 1,00 | 1,000 | 1,000 | 1,000 | 1,000 | 417 | 26,4 |
| Stor | am Forming amwater Erosion Controls to Repairs | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 200 1 | 800 1,8 | 200 1. | 200 1. | 200 1,2 300 1,8 | 200 1,2 | 00 1,2 | 00 1,20 00 1,80 | 0 1.20 | 0 1,200 | 1,200 | 1,200 | 1,200 | 500 | 31,7 47.5 |
| 52502 Fee: | es/Licenses/Permits | 3,000 | 3,500 | 3,000 | 3,000 | 3,000 | 3 000 | 3,500 | 3,000 | 3,000 | 3,000 | 3,000 | 3,500 3 | .000 | ,000 3,1 | 000 3,1 | E 000 | 500 3.0 | 000 3.0 | 00 3.0 | 3,00 | 0 3,50 | 3,000 | 3,000 | 3,000 | 3,000 | 1 250 | 81,7 |
| DEP | P Stormwater | 3,000 | 3,000 | 3,000 | 3.000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 000 | ,000 3, | 000 3, | E 000 | 900 3.0 | 0 3,0 | 00 3,0 | 0 3,00 | 0 3,00 | 0 3,000 | 3,000 | 3,000 | 3,000 | 1,250 0 | 79,2 |
| 52640 Insu | urance | 9,080 | 9.080 | 9.080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | ,080 | ,080 9.1 | 080 9, | 080 9, | 380 9,0 | 180 9,0 | 80 9.0 | 80 9,08 | 0 9,08 | 9,080 | 9,080 | 9,080 | 9.080 | 3,783 | 602,9 |
| Polle | llution Legal Liability ter | 9,080 | 9.080 | 9,080 13,620 | 9,080 | 9,080 13.620 | 9,080 13,620 | 9,080 | 9.080 | 9,080 13,620 | 9,080 | 9,080 3.620 1: | 9.080 1 3.620 1 | ,080 9 ,620 13 | ,080 9, 620 13,6 | 080 9, 620 13,1 | 080 9 | 080 9.0 | 13.6 9.0 | 80 9.0 20 13.6 | 30 9,08 20 13.62 | 0 9,08 | 0 9,080 0 13,62(| 9,080 | 9,080 13,620 | 9 080 13 620 | 3,783 5,675 | 239,8 |
| 52645 Lan | ndfili Closure/Postclosure | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Gen | neral | 0 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | a | 0 | 0 | 0 | 0 | 0 | |
| 52856 Leg. | gal | 500 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 2 | 200 | 00 | 00 20 | 0 20 | 0 200 | 200 | 200 | 200 | 83 | 10° 1 |
| Gen | neral | 500 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 000 | 00 | 00 27 | 0 20 | 07 | 2002 | 0 | 007 | 50 0 | 0 |
| 52858 Eng | gineering | | | 0 0 | 0 0 | 0 | | | | | 2.0 | 0 0 | | 0 0 | 0 | | 0 0 | 5 0 | 0 0 | 0 0 | | | | - | | 0 0 | | 1 |
| SCOUL Envi | vironmantal Tastino | 15,000 | e non | 6 DOD | E DOD | e ono | 8 000 | 6 DOD | 8 000 | 6 000 | 6 000 | 6 ODD | 000 | 000 | 000 61 | 000 6.0 | 9 000 | 200 6.0 | 000 6.0 | 00 6.0 | 00 6.00 | 6.00 | 0 6.00 | 6 000 | 6.000 | 6.000 | 2,500 | 167.5 |
| AND INSTO | | 000 1 | 00010 | 00010 | 0000 | 0,000 | 0000 | 00010 | 0000 | 4 400 | 4 100 | 1 100 | | 100 | 100 | 100 | 100 | 100 4 1 | 100 01 | 1 1 100 | 00 4.10 | 01.4.10 | 0 4 10 | 4 100 | 4 100 | 4 100 | 1 708 | 108.3 |
| Con | weenmental Monitoring numericy for well repairs etc | 10,900 | 1 900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 1,900 | 4,100 | 1,900 | 006 | 900 1. | 900 | 900 1 | 900 1,5 | 900 1.9 | 00 1.9 | 00 1.90 | 00 1.90 | 0 1,900 | 1.900 | 1,900 | 1,900 | 792 | 59.1 |
| 53304 Elec | tetricity | 0 | 0 | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | • | 0 | 0 | 0 ' | |
| Gen | neral | 0 | 0 | 0 | 0 | 0 | 0 | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | |
| 55585 Ban | nk/Trustee Fees | 1,000 | 0 | 0 | 0 | 0 | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | οI | 0 | 1.0 |
| Clos | sure/Post-Closure Financial Security | 1,000 | 0 | 0 | 0 | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,0 |
| 56605 Con | nstruction | 0 | 20,000 | 140,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ¢ | 0 ' | 0 | 0 | 0 | 0 | 0 | • | 0 | 160,0 |
| Stot | armwater Improvements | | 20 000 | 140,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 160.0 |
| xxxx Adn | ministration | 15,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6 000 | 6,000 | 6.000 | 000 | ,000 6. | .000 6, | 000 6. | 000 6.0 | 000 6.0 | 00 6,0 | 00 6,00 | 0 6,00 | 0 6,00 | 6 000 | 6,000 | 6,000 | 2,500 | 389,6 |
| Prof Prof Field | ofessional Services - Direct Sessional Services - Overhead and Indirect Id Services - Direct Id Services - Overhead and Indirect | 3,000 500 12,000 500 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1 400 | 5,000 7,300 1,000 1.400 | 5,000 7,300 1,000 1 400 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | ,000 7 300 7 400 7 | ,000 5, 300 7, 000 1, 400 1, | 000 5, 300 7, 000 1, 400 1, | 300 5 300 7 900 1, 400 1, | 000 5,1 300 7,5 000 1,4 400 1,4 | 000 5,0 300 7,3 000 1,0 400 1,4 | 00 5.0 00 7.3 00 1.0 00 1.4 | 00 5,00 00 7,30 00 1,00 00 1,40 | 00 5,00 00 7,30 00 1,00 00 1,40 | 0 5,00 0 7,30 0 1,00 0 1,40 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | 5,000 7,300 1,000 1,400 | 2,063 3,042 417 583 | 130.0 186.0 37.4 36,0 |
| TOT | TAL GASB 18 | 48,060 | 49 280 | 168,780 | 28,780 | 28.780 | 28,780 | 29,280 | 28.780 | 28,780 | 28,780 | 28,780 2 | 9,280 21 | 6,780 28 | 1,780 28, | 780 28. | 780 29, | 280 28.7 | 780 28,7 | 80 28,7 | 80 28.76 | 30 29 28 | 0 28,78 | 28.780 | 28,780 | 28,780 | 11,992 | 942,0 |
| TOT | TAL Non-GASB 18 | 17,920 | 22,320 | 22,320 | 22,320 | 22,320 | 22,320 | 22 320 | 22 320 | 22 320 | 22 320 2 | 22.320 2 | 2,320 2: | 320 22 | ,320 22 | 320 22. | 320 22. | 320 22.5 | 320 22,3 | 20 22 3 | 20 22.32 | 22,32 | 0 22,32 | 22,320 | 22.320 | 22,320 | 9,300 | 585,2 |
| TOT | TAL Closure | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOT | TAL | 66,000 | 71,600 | 191,100 | 51,100 | 51,100 | 51.100 | 51,600 | 51,100 | 51,100 | 51,100 | 51,100 5 | 1,600 5 | ,100 51 | .100 51. | 100 51. | 100 51, | 600 51.1 | 100 51,1 | 00 51 1 | 00 51,10 | 00 51,60 | 0 51,10 | 51 100 | 51,100 | 51,100 | 21,292 | 1.527.2 |

COMPLIANCE CALENDAR – FY2014

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| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | npleted By C | ompleted Date | Commant | FacilityType | Project |
|----------|--------------|--|-------------------------------|------------------|----------------------|-----------------------|-----------|---------------|---------------------|-------------------|--------------|------------------|---------|--------------|-----------------|
| 10/01/13 | Ellington LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permit, General | Stormwater Discharge | GSI000815 | | Quarterly | Tanner, P (OTO | Oakes J | | | | Landfill | Mid-Connecticut |
| 10/15/13 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facllity | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Lendfill | Mid-Connecticut |
| 10/31/13 | Eilington LF | Enclosed Flare Inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Monthly | Letendre, A (SCS) | Bodendorf D | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Ellington LF | Condensate Testing | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Quarterly | Letendre, A (SCS) | Shepard C | | - | | Landfill | Mid-Connecticut |
| 10/31/13 | Ellington LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facllity | Solid Waste | 048-2(E) | | Quarterly | Tanner P (OTO | Shepard, C | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Ellington LF | Gas Monitoring | Complete Activity | Permit, Facllity | Solid Waste | 048-2(E) | | Monthly | Lelendre, A (SCS) | Bodendorf. D | | | | (Landfil) | Mid-Connecticut |
| 10/31/13 | Ellington LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEEP | Quarterly | Bodendorf, D (CRRA) | Egan P | | | | Landfill | Mid-Connecticut |
| 11/15/13 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 11/15/13 | Ellington LF | Comprehensive Site Compliance Evaluation | Complete Document | Permit, General | Stormwater Discharge | GSI000815 | | Semi-Annually | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 11/15/13 | Ellington LF | Stormwater Pollution Prevention Plan (SPPP) Training | Complete Activity | Permit, General | Stormwater Discharge | GS1000815 | | Annually | Shepard C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 11/30/13 | Ellington LF | Enclosed Flam Inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | MId-Connecticut |
| 11/30/13 | Ellington LF | Condensate Testing Report | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEEP | Quarterly | Letendre, A (SCS) | Shepard, C | - | | | Landfill | Mid-Connecticut |
| 11/30/13 | Eilington LF | Gas Monitoring | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/01/13 | Ellington LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEEP | Quarterly | Tanner, P (OTO | Shepard, C | | | | Landfill | Mid-Connecticut |
| 12/01/13 | Ellington LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GS1000815 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfili | Mid-Connecticut |
| 12/15/13 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Ellington LF | Enclosed Flare Inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Etlington LF | Gas Monitoring | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf. D | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Eilington LF | Landfill Inspection | Complete Activity | Permit Facility | Solid Waste | 048-2(E) | | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Ellington LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit. General | Stormwater Discharge | GSI000815 | | Quarterty | Tanner, P (OTO | Óakes, J | | | | Landfill | Mid-Connecticut |
| D1/01/14 | Ellington LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permil, General | Stormwater Discharge | GS1000815 | | Quarterly | Hathaway, R (OTO) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 01/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Perm t, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 01/31/14 | Ellington LF | Enclosed Flare inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Manthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 01/31/14 | Ellington LF | Condensate Testing | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Quarterly | Letendre, A (SCS) | Shepard, C | | - | | Landfill | Mid-Connecticut |
| 01/31/14 | Ellington LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Solid Waste | D48-2(E) | | Quarterly | Tanner, P (OTO | Shepard, C | | | | Landfill | Mid-Connecticut |
| 01/31/14 | Ellington LF | Gas Monitoring | Complete Activity | Permit Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendarí, D | | | | Lendfill | Mid-Connecticut |
| 01/31/14 | Ellington LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | b48-2(E) | DEEP | Quarterly | Bodendorf. D (CRRA) | Egan. P | | | | Landfill | Mid-Connecticut |
| 02/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| b2/28/14 | Ellington LF | Enclosed Flare inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| b2/28/14 | Ellington LF | Condensate Testing Report | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEEP | Quarteriy | Letendre, A (SCS) | Shepard, C | | 1 | | Landfill | Mid-Connecticut |
| b2/28/14 | Ellington LF | Cas Monitoring | Complete Activity | Permit, Facility | Solid Waste | D48-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | - | | | Landfill | Mid-Connecticut |
| 03/01/14 | Ellington LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Solid Waste | D48-2(E) | DEEP | Quarteriy | Tanner. P (OTO | Shepard, C | | | | Landfill | Mid-Connecticuf |
| D3/01/14 | Ellington LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GS1000815 | DEEP | Quarterly | Tanner, P (OTO | Dakes, J | | | | Landfill | Mid-Connecticut |
| 03/10/14 | Ellington LF | Stormwater Structures Cleaning | Notify Contractor to Begin | Permit, Generai | Stormwater Discharge | GSI00815 | | Annually | Dakes, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 03/15/14 | Ellington LF | Gas Monttoring Report | Complete Document | Permit Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | Ī | | | Landfilt | Mid-Connecticut |
| 03/31/14 | Ellington LF | Enciosed Flare Inspection | Complete Activity | Pemlt, Facility | Air | 58-027-002 | | Monthiy | Letendre A (SCS) | Bodendorf, D | | - | | Landfill | Mid-Connecticut |

| | | | | 5 | KKA Environmental D | livision Complian | ce Calendar | | | | | | | | |
|----------|--------------|---|-------------------|------------------|----------------------|-----------------------|-------------|---------------|---------------------|-------------------|--------------|-------------------|---------|--------------|-----------------|
| Due Dete | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
| D3/31/14 | Ellington LF | Gas Monitoring | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 03/31/14 | Ellington LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Duarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Mid-Cannecticut |
| D3/31/14 | Ellington LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | GS1000815 | | Quarterly | Tanner. P (OTO | Dakes, J | | | | Landfill | Mid-Connecticut |
| 04/01/14 | Ellington LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permit, General | Stormwater Discharge | GSI000815 | | Duarterly | Tanner, P (OTO | Oakes, J | | | | Landfill | Mid-Connecticut |
| 04/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Lendfill | Mid-Connecticut |
| 04/30/14 | Ellington LF | Enclosed Flare Inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Vonthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Ellington LF | Condensate Testing | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | quarteriy | Letendre, A (SCS) | Shepard, C | | | | Landfilt | Mid-Connecticut |
| 04/30/14 | Ellington LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Duarterly | Tanner, P (OTO | Shepard, C | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Ellington LF | Gas Monitoring | Complete Activity | Pemit, Facility | Solid Waste | 048-2(E) | | Vonthly | Letendre, A (SCS) | Bodendorf, D | | | | Lendfill | Mid-Connecticut |
| 04/30/14 | Ellington LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEEP | Duarterly | Bodendorf. D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 05/01/14 | Ellington LF | Stormwater Discharge Sampling | Begin Activity | Permit, General | Stormwater Discharge | GSI000815 | | Annually | Alkin S (Anchor) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 05/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | | donthly | Letendre, A (SCS) | Bodendarf, D | | | | Landfill | Mid-Connecticut |
| 05/15/14 | Ellington LF | Comprehensive Site Compliance Evaluation | Complete Document | Permit, General | Stormwater Discharge | GSI000815 | | Semi-Annually | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 05/15/14 | Ellington LF | Stormwater Structures Cleaning | Complete Activity | Permit, General | Stormwater Discharge | GSI000815 | | Annually | Oakes J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 05/31/14 | Ellington LF | Enclosed Flare Inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Aonthly | Letendre, A (SCS) | Bodendorf, D | | | | LandRI | Mid-Connecticut |
| 05/31/14 | Ellington LF | Condensate Testing Report | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEEP | Duarterly | Letendre, A (SCS) | Shepard. C | | | | Landfill | Mid-Connecticut |
| 05/31/14 | Etlington LF | Gas Monitoring | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | - | Aonthly | Letendre, A (SCS) | Badendorf, D | | T | | Landfill | Mid-Connecticut |
| 06/01/14 | Ellington LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEEP | Quarterly | Tanner, P (OTO | Shepard, C | | | | Landfill | Mid-Connecticut |
| 06/01/14 | Ellington LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GS1000815 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 06/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | - | Aonthiy | Latendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Ellington LF | Enclosed Flare Inspection | Complete Activity | Permlt, Facility | AIr | 58-027-002 | E | Aonthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Ellington LF | Gas Monitoring | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | E | Aonthly | Letendre, A (SCS) | Bodendarf D | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Ellington LF | Landfill Inspection | Complete Aclivity | Permit, Facally | Solid Waste | 048-2(E) | | Duarterly | Bodendorí, D (CRRA) | Égan, P | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Ellington LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | GS1000815 | 0 | Quarterly | Tanner, P (OTO | Oakes, J | | | | Landfill | Mid-Connecticut |
| 07/01/14 | Ellington LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permit, General | Slormwater Discharge | GSI000815 | 0 | Duarterly | Tanner, P (OTO | Oakes, J | | | | Landfil | Mid-Connecticut |
| 07/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | 2 | Aonthiy | Letendre, A (SCS) | Badendorf, D | | 1 | | Landfill | Mid-Connecticut |
| 07/31/14 | Ellington LF | Enclosed Flare Inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | 2 | fonthly | Letendre, A (SCS) | Badendarf, D | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Ellington LF | Condensate Testing | Complete Activity | Permit. Facility | Solid Waste | 048-2(E) | 0 | luarterty | Letendre, A (SCS) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Ellington LF | Erwironmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | 0 | luarterly | Tanner, P (OTO | Shepard, C | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Ellington LF | Gas Monitoring | Complete Activity | Permit Facility | Solid Waste | 048-2(E) | A | fonthy | -etendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Ellington LF | Landfill inspection Report | Submit Document | Permit, Facility | Solid Waste | 048-2(E) | DEP 0 | luarterly | 3odendorf, D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 08/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Salid Waste | 048-2(E) | - | tonthly | -etendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |

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Solid Waste

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Gas Monitoring

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58-027-002 048-2(E) 048-2(E) 048-2(E)

Air

Permit, Facility

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Shepard, C Bodendorf, D

Shepard, C

Monthly Annualty

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Environmental Monitoring Report (EMR), Annual

Mid-Connecticut Mid-Connecticut

Landfill

| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Fraquency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
|----------|--------------|---|-------------------|------------------|----------------------|-----------------------|-----------|-----------|---------------------|-------------------|--------------|-------------------|---------|--------------|-----------------|
| 09/01/14 | Ellington LF | Environmental Monitoring Report (EMR). Quarterly | Submit Document | Permit, Facility | Solid Waste | D48-2(E) | DEP | Quarterly | Tanner, P (OTO | Shepard, C | | | | Landfill | Mid-Connecticut |
| 09/01/14 | Etlington LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GSI000815 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 09/15/14 | Ellington LF | Gas Monitoring Report | Complete Document | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 09/15/14 | Ellington LF | Stormwater Discharge Sampling | Complete Activity | Permit, General | Stormwater Discharge | GSI000815 | | Annually | Atkin, S (Anchor) | Shepard, C | | | | Landfill | Mld-Connecticut |
| 09/30/14 | Ellington LF | Enclosed Flare Inspection | Complete Activity | Permit, Facility | Air | 58-027-002 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Lendfill | Mid-Connecticut |
| 09/30/14 | Ellington LF | Ges Monitoring | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 09/30/14 | Ellington LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 048-2(E) | | Quarterly | Bodendarf. D (CRRA) | Egen, P | | | | Landfill | Mid-Connecticut |
| 09/30/14 | Ellington LF | Stormwater Discharge Monitoring - Semple and Visual | Complete Activity | Permit, General | Stormwaler Discharge | GSI000815 | | Quarterly | Tanner, P (OTO | Oakes, J | | | | Lendfill | Mid-Connecticut |
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| Due Dete | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
|----------|-------------|---|-------------------|---------------------|-----------------------|-----------------------|-----------|---------------|---------------------|-------------------|--------------|-------------------|---------|--------------|-----------------|
| 10/01/13 | Hartford LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permit, General | Stormwater Discharge | | DEEP | Quarterly | Kloss, J (DTC) | Dakes, J | | | | Landfill | Mid-Connecticut |
| 10/15/13 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 10/15/13 | Hartford LF | Gross Power Output Report | Complete Document | Remit, Facely | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfil | Mid-Connecticut |
| 10/15/13 | Hartford LF | Pollutant Emissions Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfil | Mid-Connectlcut |
| 10/15/13 | Hartford LF | Grit Separator Tank Inspection (clean when grit/grase > 20% depth) | Complete Activity | Permit, General | Car Wash Wastewater | GVW000224 | | Semi-Annually | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Environmental Monitoring Report (EMR), Quarterly | Complete Activity | Permit, Facility | Groundwater Discharge | LF000014 | | Quarterly | Kloss, J (DTC) | Shepard, C | | | | Lendfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Landfill Seep Inspection | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEEP | Monthly | Kowzun, J (CRRA) | Badendorf, D | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Piezometer Reading | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterly | Jobmann, P (LBG) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001412 | DEEP | Manthly | Shepard C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Monthiy | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 064-5-L&0640351 | DEEP | Quarterly | Barnasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 10/31/13 | Hartford LF | Tonnage Report | Submit Document | Permit, Facility | Solid Waste | 064-5-L&0640351 | DEEP | Quarterly | Kerr, K (CRRA) | Egan. P | | | | Landfill | Mid-Connecticut |
| 11/15/13 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Monthly | Overhoff (FMG) | Bodendorf. D | | | | Landfill | Mid-Connecticut |
| 11/15/13 | Hartford LF | Gross Pawer Output Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhaff (FMG) | Bodendorf. D | | | | Landfill | Mid-Connecticut |
| 11/15/13 | Hartford LF | Pollutant Emissions Report | Complete Document | Permil, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 11/15/13 | Hartford LF | Comprehensive Site Compliance Evaluation | Complete Document | Permit, General | Stormwater Discharge | GS100500 | | Semi-Annually | Bodendorf, D (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 11/30/13 | Hartford LF | Landfill Seep Inspection | Complete Activity | Permit, Facility | Groundwater Discharge | LF000014 | | Monthly | Kawzun, J (CRRA) | Bodendarf, D | | | | Landfill | Mid-Connecticut |
| 11/30/13 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permil, Faclity | Groundwater Discharge | LF0000014 | DEEP | Monthly | Kowzun, J (CRRA) | Bodendorl, D | | | | Landfill | Mid-Connecticut |
| 11/30/13 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001412 | DEEP | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 11/30/13 | Hartford LF | Bewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Monthly | Klass, J (DTC) | Shepard C | | | | tandfill | Mid-Connecticut |
| 12/01/13 | Hartford LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GS10005000 | DEEP | Quarterly | Cakes, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 12/15/13 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/15/13 | Hartford LF | Gross Power Output Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/15/13 | Hartford LF | Pollutant Emissions Report | Complete Document | Permit, Facility | Alr | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/15/13 | Hartford LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Groundwater Discharge | LF000014 | DEEP | Quarterly | Klass, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Hartford LF | Landfill Seep Inspection | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit. Facility | Groundwater Discharge | LF0000014 | DEEP | Monthly | Kowzun, J (CRRA) | Bodendarf, D | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001412 | DEEP | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfil | Mid-Connecticut |
| 12/31/13 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit. Facility | Sewer Discharge | SP0001412 | | Monthly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticul |
| 12/31/13 | Hartford LF | Action Leakage Rate Exceedance Update. Cell 2 (awaiting documentation from DEEP to eliminating this requirement) | Submit Document | Permlt, Facility | Solid Waste | D640351 | DEEP | Annually | Bodendorf D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Hartford LF | Closure/PostClosure Financial Assurance Demonstration | Submit Document | Permit, Facility | Solid Waste | 0640351 | DEEP | Annually | Egan, P (CRRA) | None | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Hartford LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 064-5-L&0640351 | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Hertford LF | Methane Gas Monitoring (Structures) Report (part of LF Inspection Report) | Complete Document | Permit Facility | Solid Waste | 064-5-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 12/31/13 | Hartford LF | Spill Prevention Control & Countermeasure Plan - Annual Training | Complete Activity | Regulation, Federal | SPCC | 40 CFR Part 112 | | Annually | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |

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| Due Dati | e Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Fraquency | Responsible Person | CRRA Oversight Co | ompleted By | Completed | Comment | FacilityType | Project |
|----------|-------------|---|-------------------|---------------------|-----------------------------------|-----------------------|-----------|---------------|---------------------|----------------------|-------------|-----------|---------|-------------------|-----------------|
| 2/31/13 | Hertford LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permil, General | Stormwater Discharge | | DEEP | Quarterty | Kloss, J (DTC) | Oakes, J | | | | Landfill | Mid-Connecticut |
| 1/01/14 | Hartford LF | Title V Monitoring Report/Compliance Certification | Begin Activity | Permit, Facility | Air | 075-0377-TV | DEEP/EPA | Annually | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 11/01/14 | Hartford LF | Environmentai Monitoring Report (EMR), Annual | Submit Document | Permit, Facility | Groundwater Discharge | LF000014 | DEEP | Annually | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 11/01/14 | Hartford LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permit General | Stormwater Discharge | | DEEP | Quarterly | Kloss, J (DTC) | Dakes J | | | | Landfill | Mid-Connecticut |
| 11/01/14 | Hartford LF | Inspect O/W Separator; Clean if necessary | Complete Activity | Permil, General | Vehicle Maintenance Wastewater | GVM 000522 | | Semi-Annually | Kowzun, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 1/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit Facility | Alr | 0120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 1/15/14 | Hartford LF | Grass Power Output Report | Complete Document | Permit, FacIIIty | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 1/15/14 | Hartford LF | Pollutant Emissions Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhaft (FMG) | Bodendorf, D | | - | | Landfill | Mid-Connecticut |
| 1/31/14 | Hartford LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 1/31/14 | Hartford LF | Environmental Monitoring Report (EMR), Quarterly | Complete Activity | Permil, Facilily | Groundwater Discharge | LF0000014 | | Quarterly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 1/31/14 | Hartford LF | Landfill Seep Inspection | Complete Activity | Permit, Facility | Groundwaler Discharge | LF0000014 | | Monthly | Kowzun, J (CRRA) | Badendorf, D | | | | Landfill | Mid-Connecticut |
| 41/15/10 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permil, Facility | Groundwater Discharge | LF0000014 | DEEP | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 1/31/14 | Hartford LF | Piezometer Reading | Complete Activity | Permit, Facility | Groundwater Discharge | LF000014 | | Quarterly | Jobmann, P (LBG) | Shepard C | | | | Landfil | Mid-Connecticut |
| 1/31/14 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Dacument | Permit, Facility | Sewer Discharge | SP0001412 | DEEP | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 11/31/14 | Hartford LF | Bewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Monthly | Kloss, J (DTC) | Shepard, C | | - | | Landfill | Mid-Connecticut |
| 11/31/14 | Hartford LF | Landfill Inspection Report | Submit Document | Permil, Facility | Solid Waste | 064-5-L&0640351 | DEEP | Quarterly | Barmesse, M (MP) | Bodendorf, D | | | | Landfil | Mid-Connecticut |
| 11/31/14 | Hartford LF | Tonnage Report | Submit Document | Permit, Facility | Solid Waste | 064-5-L&0640351 | DEEP | Duarterly | Kerr K (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 12/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | D120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 2/15/14 | Hartford LF | Grass Power Output Report | Complete Document | Permit, Facility | Air | 0165.66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 2/15/14 | Hartford LF | Pollutant Emissions Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 2/28/14 | Hertford LF | Landfill Seep Inspection | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | - | | Landfill | Mid-Connecticut |
| 2/28/14 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEEP | Monthly | Kowzun, J (CRRA) | Bodendorf. D | | | | Landfill | Mid-Connecticut |
| 2/28/14 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001412 | DEEP | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 2/28/14 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit, Facllity | Sewer Discharge | SP0001412 | | Monthly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 3/01/14 | Hartford LF | Greenhouse Gas Report | Begin Activity | Regulation, Federal | Air | 40 CFR Part 98 | EPA | Annualiy | Shepard, C (CRRA) | Shepard, C | | | | Resource Recovery | Mid-Connecticut |
| 3/01/14 | Hartford LF | Title V Monitoring Report/Compliance Certification | Submit Document | Permit, Facility | Air | 075-0377-TV | DEEP/EPA | Annualty | Shepard, C (CRRA) | Egan, P | | | | Lendfill | Mid-Connecticut |
| 3/01/14 | Hartford LF | Topographic and Aerial Survey | BegIn Activity | Permit, Facility | Solid Waste | 0640351 | | Annually | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 3/01/14 | Hartford LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GS10005000 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 3/01/14 | Hartford LF | Inquiry regarding potential baid eagle nesting activities | Begin Activity | Permit, Facility | Groundwater Discharge | LF000014 | | Annually | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 3/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit. Facility | Air | 0120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 3/15/14 | Hartford LF | Gross Power Output Report | Complete Document | Permit. Facility | Air | 0165,66.67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | - | | Landfil | Mid-Connecticut |
| 3/15/14 | Hartford LF | Pollutant Errissions Roport | Complete Document | Permit. Facility | Air | 0165,66,67 | | Monthly | Overhaff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 3/15/74 | Hartford LF | Environmental Monitoring Report (EMR). Quarterly | Submit Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEEP | Quarterly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 3/31/14 | Hartford LF | Greenhouse Gas Report | Submit Document | Regulation Federal | Aır | 40 CFR Part 98 | EPA | Annually | Shepard, C (CRRA) | Egan, P | | | | Resource Recovery | Mid-Connecticut |
| 3/31/14 | Hartford LF | Lendfill Seep Inspection | Complete Activity | Permit. Facility | Groundwater Discharge | LF0000014 | | Monthly | Kawzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 3/31/14 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEEP | Monthly | Kowzun, J (CRRA) | Bodendorf. D | | | | Landfill | Mid-Connecticut |

| Calendar | |
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| Compliance | |
| Division | |
| Environmental | |
| CRRA | |

| Due Dati | a Facility | DocumentActivity | Activity | Requirement | Permit Type | Requirament Number | Submit To | Frequency | Responsible Person | CRRA Oversight Cor | mpleted By | Completed Date | Comment | FacilityType | Project |
|----------|-------------|--|-------------------|------------------|-----------------------|-----------------------|-----------|---------------|----------------------------|-----------------------|------------|-------------------|---------|--------------|-----------------|
| p3/31/14 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Dacument | Permit. Facility | Sewer Discharge | SP0001412 | DEEP | Manthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 03/31/14 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Monthly | Kloss, J (DTC) | Shepard C | | | | Landfill | Mid-Connecticut |
| 03/31/14 | Hartford LF | Landfill Inspection | Complete Activity | Permit Facility | Solid Waste | 064-5-L&0640351 | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 03/31/14 | Hartford LF | Methane Gas Monitoring (Structures) Report (part of LF Inspection Report) | Complete Document | Permit, Facility | Solid Waste | 064-5-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | - | | Lendfill | Mid-Connecticut |
| 03/31/14 | Hartford LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | | DEEP | Quarterly | Kloss, J (DTC) | Oakes, J | | | | Landfill | Mid-Connecticut |
| 04/01/14 | Hartford LF | Non-Methane Organic Compounds (NMOC) Emissions Rate Report | Submit Document | Permit, Faculty | Air | 0165,66,67 | DEEP | Annuaily | Shepard, C (CRRA) | Egan P | | - | | Landfit | Wid-Connecticut |
| 04/01/14 | | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permit, General | Stormwater Discharge | | DEEP | Quarterly | Kloss, J (DTC) | Oakes, J | | | | Landfill | Mid-Connecticut |
| 04/01/14 | Hartford LF | Inquiry regarding potential baild eagle nesting activities | Complete Activity | Permit, Faculty | Groundwater Discharge | LF000014 | | Annually | Oakes, J (CRRA) | Shepard C | | | | Landfill | Mid-Connecticut |
| 04/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfil | Mid-Connecticut |
| 04/15/14 | Hartford LF | Gross Power Output Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfilt | Mid-Connecticut |
| 04/15/14 | Hartford LF | Potiutant Emissions Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | 1 | | | Landfill | Mid-Connecticut |
| 04/15/14 | Hartford LF | Grit Separator Tank Inspection (clean when grit/grase > 20% depth) | Complete Activity | Permit General | Car Wash Wastewater | GVW000224 | | Semi-Annually | Kowzun J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterly | Kloss, J (DTC) | Shepard. C | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Environmental Monitoring Report (EMR), Quarterly | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Landfill Seep Inspection | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit, Facility | Groundwater Discharge | LF000014 | DEEP | Monthly | Kawzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Piezometer Reading | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterty | Jobmann, P (LBG) | Shepard, C | | | | Lendfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Discharge Manitoring Roport (DMR) | Submit Document | Permil, Facility | Sewer Discharge | SP0001412 | DEEP | Manthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Monthly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 04/30/14 | Hartford LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | D64-5-L&0640351 | DEEP | Quarterly | Barmasse M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| D4/30/14 | Hartford LF | Tonnage Report | Submit Document | Permit Facility | Solid Waste | D64-5-L&0640351 | DEEP | Quarterly | Kerr, K (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 05/01/14 | Hartford LF | Stormwater Discharge Sampling | Begin Activity | Permit, General | Stormwater Discharge | GS100500 | | Annually | Atkin, S (Anchor) | Shepard, C | | | | (randfil) | Mid-Connecticut |
| 05/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | AIr | D120 | | Monthly | Overhoff (FMG) | Badendorf, D | | | | Landfil) | Mid-Connecticut |
| D5/15/14 | Hartford LF | Grass Power Output Report | Complete Document | Permit, Facility | Air | 0165.66.67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfil | Mid-Connecticut |
| 05/15/14 | Hartford LF | Pollutant Emissions Report | Complete Document | Permit, Facility | AIr | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 05/15/14 | Hartford LF | Comprehensive Site Compliance Evaluation | Complete Document | Permit General | Stormwater Discharge | GS100500 | | Semi-Annually | Bodendorf, D (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 05/31/14 | Hartford LF | Landfill Seep Inspection | Complete Activity | Permil, Facility | Groundwater Discharge | LF0000014 | | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | | | tandfill | Mid-Connecticut |
| 05/31/14 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEEP | Manthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Lendfil | Mid-Connecticut |
| 05/31/14 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Document | Permil, Facility | Sewer Discharge | SP0001412 | DEEP | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 05/31/14 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Monthly | Kloss J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 06/01/14 | Hartford LF | Topographic and Aerial Survey | Complete Activity | Permit, Facility | Solid Waste | D640351 | | Annually | Wagonblatt. J (Conklin) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 06/01/14 | Hartford LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Slormwater Discharge | GS10005000 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 06/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfili | Mid-Connecticut |
| 06/15/14 | Hartford LF | Gross Power Output Report | Complete Document | Permil, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 06/15/14 | Hartford LF | Pollutant Emissions Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 06/15/14 | Hartford LF | Environmental Monitoring Report (EMR), Quarterly | Submít Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEEP | Quarterly | Kloss, J (DTC) | Shepard, C | | | | Landfil | Mid-Connecticut |

| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
|----------|-------------|--|-------------------|------------------|-----------------------------------|-----------------------|-----------|---------------|---------------------|-------------------|--------------|-------------------|---------|--------------|-----------------|
| 06/30/14 | Hartford LF | Landfill Seep Inspection | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Aonthiy | Kowzun, J (CRRA) | Bodendorí, D | | | | Landfill | Mid-Connecticul |
| 06/30/14 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit Facility | Groundwater Discharge | LF0000014 | DEEP | Aonthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Document | Permit Facility | Sewer Discharge | SP0001412 | DEEP | Aonthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticul |
| 06/30/14 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Aonthly | Kloss J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Hartford LF | Capacity Survey Report | Submit Document | Pemit, Facility | Solid Waste | 0640351 | DEEP | Annually | Bodendorf, D (CRRA) | Egan P | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Hartford LF | Closure Financial Assurance Report | Submit Document | Permit. Facility | Solid Waste | 0640351 | DEEP | Annually | Egan, P (CRRA) | None | | | | Landfil | Mid-Connecticut |
| 06/30/14 | Hartford LF | Closure Status Report | Submit Document | Permit. Facility | Solid Waste | 0640351 | DEEP | Annualiy | Egan, P (CRRA) | None | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Hartford LF | Landful inspection | Complete Activity | Petmit, Faculty | Solid Waste | 064-5-L&0640351 | | Duarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Hartford LF | Methane Gas Monitoring (Structures) Report (part of LF Inspection Report) | Complete Document | Permit, Facility | Solid Waste | 064-5-L | | Quarterly | Barmasse, M (MP) | Bodendarf, D | | | | Landfill | Mid-Connecticut |
| 06/30/14 | Hartford LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwaler Discharge | | DEEP | Quarterly | Kloss, J (DTC) | Oakes, J | | | | Landfill | Mid-Connecticul |
| 07/01/14 | Hartford LF | Title V Monitoring Report | Begin Activity | Permit, Facility | Aur | 075-0377-TV | DEP/EPA | Annually | Shepard, C (CRRA) | Egan P | | | | Landfil | Mid-Connecticut |
| 07/01/14 | Hartford LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Aclivity | Permil General | Slormwater Discharge | | DEEP | Quarterly | Kloss, J (DTC) | Dakes J | | | | Landfill | Mid-Connecticut |
| 07/01/14 | Hartford LF | Inspect O/W Separator. Clean If necessary | Complete Activity | Permit, General | Vehicle Maintonance Wastewater | GVM 000522 | | Semi-Annually | Kowzun, J (CRRA) | Shepard C | | | | Landfill | Mid-Connecticut |
| 07/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 07/15/14 | Hartford LF | Gross Power Output Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Dverhoff (FMG) | Bodendorf D | | | | Landfill | Mid-Connecticut |
| 07/15/14 | Hartford LF | Pollutant Emissions Report | Complete Document | Permit, Facility | Air | D165,66,67 | | donthly | Overhoff (FMG) | Bodendorf D | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Hartford LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Duarterly | Kloss, J (DTC) | Shepard C | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Hartford LF | Environmental Monitoring Report (EMR). Quarterly | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterly | Klass, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Hartford LF | Landfill Seep inspection | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | donthly | Kowzun, J (CRRA) | Badendorf D | | | | Landfill | MId-Conneclicut |
| 07/31/14 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEP | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfilt | Mid-Connecticut |
| 07/31/14 | Hartford LF | Piezometer Reading | Complete Activity | Permit, Facility | Groundwater Discharge | LF0000014 | | Quarterly | Jobmann, P (LBG) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Hartford LF | Discharge Monitoring Report (DMR) | Submil Document | Permit, Facility | Sewer Discharge | SP0001412 | DEP | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Hartford LF | Sawer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Vorthly | Kloss, J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticul |
| 07/31/14 | Hartford LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 064-5-L&0640351 | DEP | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 07/31/14 | Hartford LF | Tonnage Report | Submit Document | Permit, Fachly | Solid Waste | 064-5-L&0640351 | DEP | Quarteriy | Ken K (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 08/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Vonthly | Overhaff (FMG) | Bodendorf, D | | | | Landfill | Mid-Conneclicut |
| 08/15/14 | Hartford LF | Gross Power Output Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Vianthly | Dverhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 08/15/14 | Hartford LF | Pollulant Emissions Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 08/31/14 | Hartford LF | Landfill Seep inspection | Complete Activity | bermit, Facility | Groundwaler Discharge | LF0000014 | | Monthly | Kowzun J (CRRA) | Bodendorf D | | | | Landfill | Mid-Connecticut |
| 08/31/14 | Hartford LF | Landfill Seep Report (part of Landfill Inspection Report) | Submit Document | Permit, Faculty | Groundwater Discharge | LF0000014 | DEP | Monthly | Kowzun, J (CRRA) | Bodendorf D | | | | Landfill | Mid-Cannecticut |
| 08/31/14 | Hartford LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001412 | DEP | Monthly | Shepard, C (CRRA) | Egan P | | | | Landfill | Mid-Connecticut |
| 08/31/14 | Hartford LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | | Vanthly | Kiass J (DTC) | Shepard, C | | | | Landfill | Mid-Cannecticut |
| 09/01/14 | Hartford LF | Title V Monitoring Report | Submit Document | Permit, Facility | Air | 075-0377-TV | DEP/EPA | Annually | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 09/01/14 | Hartford LF | Stormwater Montloring Report (SMR) | Submit Document | Permit, General | Stormwaler Discharge | GS10005000 | DEEP | Quarterly | Dakes J (CRRA) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 09/15/14 | Hartford LF | Gas Collection System Report | Complete Document | Permit, Facility | Air | 0120 | | Vionthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 09/15/14 | Hartford LF | Gross Power Oulput Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhoff (FMG) | Bodendorf, D | | | | Landfill | Mid-Connecticut |

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| 39/15/14 Hartford LF Pollutant Em 39/15/14 Hartford LF Environment | | | | adf a summer | Number | submit to | Frequency | Responsible Person | Oversight | Completed By | Date | Comment | FacilityType | Project |
|---|--|-------------------|------------------|-----------------------|-----------------|-----------|-----------|--------------------|--------------|--------------|------|---------|--------------|-----------------|
| 09/15/14 Hartford LF Environment | nissions Report | Complete Document | Permit, Facility | Air | 0165,66,67 | | Monthly | Overhaff (FMG) | Bodendorf, D | | | | Lendfill | Mid-Connecticut |
| | tal Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Groundwater Discharge | LF000014 | DEEP | Quarterly | Kloss J (DTC) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 09/15/14 Hartford LF Stormwater (| Discharge Sampling | Complete Activity | Permit, General | Stormwater Discharge | GS100500 | | Annually | Atkin, S (Anchor) | Shepard, C | | | | Landfill | Mid-Connecticut |
| 09/15/14 Hartford LF Stormwater I | Pollution Prevention Plan (SPPP) Training | Complete Activity | Permit, General | Stormwater Discharge | GSI00500 | | Annually | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 09/30/14 Hartford LF Landfill Seep | p Inspection | Complete Activity | Permit, Facility | Groundwater Discharge | L-F0000014 | | Monthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 09/30/14 Hartford LF Landfill Seep | p Report (part of Landfill Inspection Report) | Submit Document | Permit, Facility | Groundwater Discharge | LF0000014 | DEP | Vionthly | Kowzun, J (CRRA) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 09/30/14 Hartford LF Discharge M | fonitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001412 | DEP | Vionthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Mid-Connecticut |
| 09/30/14 Hartford LF Sewer Disch | targe Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001412 | 2 | Monthly | Klass, J (DTC) | Shepard, C | | | | Landfilf | MId-Connecticul |
| 09/30/14 Hartford LF Landfill Inspi | ection | Complete Activity | Permit Facility | Solid Waste | 064-5-L&0640351 | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 09/30/14 Hartford LF Report | as Monitoring (Structures) Report (part of LF Inspection | Complete Document | Permit, Facility | Solid Waste | 064-5-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Mid-Connecticut |
| 09/30/14 Hartford LF Slormwater I | Discharge Monttoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | | DEEP | Quarterly | Kloss, J (DTC) | Dakes J | | | | Landfill | Mid-Connecticut |

| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
|----------|------------|---|-------------------|-------------------|----------------------|----------------------------------|----------------------|---------------|---------------------|-------------------|--------------|-------------------|---------|--------------|------------|
| 10/01/13 | Shelton LF | Ullra-Low Sulfur Fuel for Emergency Generator | Submit Document | Regulation, State | Air | 22a-174-3b and C | CRRA 0 | Quarterly | Kowzun, J (CRRA) | Bodendorí, D | | | | Landfili | Bridgeport |
| 10/01/13 | Shelton LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit. Facility | Stewardship | DEP/HWM/CS-126- 005 | Q | Duarterly | Krechka, J (GZA) | Shepard, C | | | | 1,andfill | Bridgeport |
| 0/01/13 | Shelton LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | | DEEP | Quarterly | Dakes, J (CRRA) | Shepard C | | | | Landfill | Bridgeport |
| 10/15/13 | Shelton LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001459 | | Quarterly | Petrie, E (GZA) | Shepard C | | | | Landfill | Bridgeport |
| 10/31/13 | Shelton LF | Fuel, Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | E | Vonthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgepart |
| 10/31/13 | Shelton LF | Gas System Inspection | Complete Activity | Permit, Facility | Air | 163-119-091 | E | Vonthiy | Basconi, B (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 10/31/13 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permlt, Facility | Sewer Discharge | Stratford Special S | Stratford | Monthly | Shepard, C (CRRA) | Egan P | | | | Landfill | Bridgeport |
| 10/31/13 | Shelton LF | Landfill Inspection & Liner Function Report (part of LF Inspection Report) | Submit Document | Permit, Facility | Solid Waste | 1260181 & C | DEEP | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 11/15/13 | Shelton LF | Comprehensive Sile Compliance Evaluation | Complete Document | Permil, General | Stormwater Discharge | G\$1000512 | | Semi-Annually | Bodendorf D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 11/30/13 | Shelton LF | Fuel. Operation and Emissions Records Report | Complete Document | Permit, Facility | Alr | 163-119-091 | - | Monthly | Letendre, A (SCS) | Bodendorí, D | | | | Landfil) | Bridgeport |
| 11/30/13 | Shelton LF | Gas System Inspection | Complete Activity | Permit, Facility | Air | 163-119-091 | | Vionthiy | Basconi, B (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 1/30/13 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001459 | DEEP | Quarterly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 11/30/13 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permlt, Facility | Sewer Discharge | Stratford Special 8 Permit | Stratford | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 11/30/13 | Shelton LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permlt, Facility | Stewardship | DEP/HW/M/CS-126- | DEEP | Quarterly | Krechko, J (GZA) | Shepard. C | | | | Landfill | Bridgeport |
| 12/01/13 | Shelton LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GSI000512 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | (_andfill | Bridgeport |
| 2/30/13 | Shelton LF | Landfill Inspection & Liner Function Report (part of LF Inspection Report) | Complete Activity | Permit, Facility | Solid Waste | 1260181 & 1260227 | | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | (_andfil) | Bridgeport |
| 12/30/13 | Shelton LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GSI000512 0 | DEEP | Annually | Shepard, C (CRRA) | Egan, P | | | | -andfill | Bridgeport |
| 12/31/13 | Shelton LF | Fuel. Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 2/31/13 | Shelton LF | Gas System Inspection | Complete Activity | Permit. Facility | Air | 163-119-091 | | Monthly | Basconi, B (SCS) | Bodendarf, D | | | | Landfill | Bridgeport |
| 12/31/13 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | Stratford Special Special | Stratford | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 2/31/13 | Shelton LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 1260181 & 1260227 | | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 11/01/14 | Shelton LF | Ultra-Low Sulfur Fuel for Emergency Generator | Submit Document | Regulation, State | Air | 22a-174-3b and 22a-174-22 | CRRA | Quarterly | Kowzun, J (CRRA) | Bodendorf D | | | | Landfill | Bridgeport |
| 1/101/14 | Shelton LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Stewardship | DEP/HW/M/CS-126- 005 | | Quarterly | Krechko, J (GZA) | Shepard, C | | | | Landfill | Bridgeport |
| 1/01/14 | Shelton LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Bridgeport |
| 1/31/14 | Shelton LF | Fuel. Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
|)1/31/14 | Shelton LF | Gas System Inspection | Complete Activity | Permit, Facility | Air | 163-119-091 | | Monthly | Basconi, B (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 1/31/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Fermil, Facility | Sewer Discharge | Stratford Special Special Permit | Stratford | Monthly | Shepard. C (CRRA) | Egan, P | | | | Lendfill | Brdgeport |
| 11/31/14 | Shelton LF | Landfill Inspection & Liner Function Report (part of LF Inspection Report) | Submit Document | Permit, Facility | Solid Waste | 1260181 & 1260227 | DEEP | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Budgeport |
| 12/16/14 | Shelton LF | Permit Renowal Application | Begin Activity | Permit, Facility | Sewer Discharge | Stratforto Special Permit | Town of Stratford | One-Time | Oakes, J (CRRA) | Egan, P | | | | Landfit | Bridgeport |
| 12/28/14 | Shelton LF | Fuel, Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 12/28/14 | Shelton LF | Gas System Inspection | Complete Activity | Permit. Facility | Alr | 163-119-091 | | Monthly | Basconi, B (SCS) | Badendorf, D | | | | Landfil | Bridgeport |
| 12/28/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001459 | DEEP | Quarterly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 12/28/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit Facility | Sewer Discharge | Stratford Special Porme | Stratford | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 33/01/14 | Shelton LF | Hazardous Waste Report | Submit Document | Regulation, State | Hazardous Waste | | EPA | Biennial | Egan, P (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 33/01/14 | Shelton LF | Environmental Monitoring Report (EMR), Annual | Submit Document | Permit. Facility | Slewardship | DEP/HWM/CS-126- 005 | DEEP | Annually | Krechko, J (GZA) | Shepard, C | | | | Landfill | Bridgeport |
| 13/01/14 | Shelton LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Slormwater Discharge | GSI000512 | DEEP | Quarterly | Dakes, J (CRRA) | Shepard, C | | | | Landfill | Bridgeport |

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| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
|-----------|-------------|---|----------------------|-------------------|----------------------|-------------------------------------|-------------|---------------|-----------------------------|-------------------|--------------|-------------------|---------|--------------|-------------|
| 13/30/14 | Shelton LF | Landfill Inspection & Liner Function Report (part of LF Inspection Report) | Complete Activity | Permit, Facility | Solid Waste | 1260181 & 1260227 | Q | tuarterly B | 3odendorf, D (CRRA) | Egan P | | | | Landfill | Bridgeport |
| 33/31/14 | Shelton LF | Fuel, Operation and Emissions Records Report | Complete Document | Permit Facility | Air | 163-119-091 | 5 | fonthly L | slendre, A (SCS) | Bodendorf. D | | | | ILandfilt | Bridgeport |
| 33/31/14 | Shelton LF | Gas System Inspection | Complete Activity | Permit Facility | Air | 163-119-091 | 2 | fonthly B | Basconi B (SCS) | Bodendorf, D | | | | Landfil) | Bridgeport |
| 33/31/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Faculty | Sewer Discharge | Strattord Special Special Special | Stratford N | fonthly 5 | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 33/31/14 | Shelton LF | Landfill Inspection | Complete Activity | Permit, Facilly | Solid Waste | 1260181 & 1260227 | a | Juarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 04/01/14 | Shelton LF | Ultra-Low Sulfur Fuel for Emergency Generator | Submit Document | Regulation, State | Alr | 22a-174-3b and 22a-174-22 | CRRA C | tuarterly | (CRRA) ((CRRA) | Badendorf, D | | | | Landfill | Bridgeport |
| 04/01/14 | Shelton LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Stewardship | DEP/HWM/CS-126- 005 | 0 | tuarterly h | (rechko, J (GZA) | Shepard, C | | | | Landfill | Bridgeport |
| 04/01/14 | Shelton LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permil. General | Stormwater Discharge | | DEEP | buarterly 0 | Dakes J (CRRA) | Shepard, C | | | | I-andfill | Bridgeport |
| 04/15/14 | Shelton LF | Sewer Discharge Sampling | Complete Activity | Permit, Facility | Sewer Discharge | SP0001459 | 0 | Juarterly | Petrie, E (GZA) | Shepard, C | | | | t_andfil | Bridgeport |
| 04/16/14 | Shetton LF | Notice of Intent to Renew | Submit Document | Permit, Facility | Sewer Discharge | Stratford Special S Permit | Stratford C | Dne-Time | Egan, P (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 04/26/14 | Shelton LF | Annual Exceedance Report | Begin Activity | Permil, Facility | Air | 163-119-091 | đ | unually | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 04/30/14 | Shelton LF | Fuel, Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | 2 | Aonthly | etendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 34/30/14 | Shelton LF | Gas System inspection | Complete Activity | Permit. Facility | Air | 163-119-091 | 2 | Aonthly | Basconi, B (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 04/30/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | Strattord Special | Stratford A | Aonthly | Shepard. C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 14/30/14 | Shelton LF | Landfill Inspection & Liner Function Report (part of LF Inspection Report) | Submit Document | Permit, Facility | Solid Waste | 1260181 & 1260227 | DEEP | Duarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
|)5/01/14 | Shelton LF | Stormwater Discharge Sampling | Begin Activity | Permit, General | Stormwater Discharge | GSI000512 | ď | Annually | Shepard, C (CRRA) | Egan, P | | | | ILandfill | Bridgeport |
|)5/15/14 | Shelton LF | Comprehensive Site Compliance Evaluation | Complete Document | Permit, General | Stormwater Discharge | GSI000512 | 0 | Semi-Annually | Sodendorf, D (CRRA) | Egan, P | | | | Landfili | Bridgepart |
| 15/26/14 | Shelton LF | Annual Exceedance Report | Submit Document | Permit, Facility | Air | 163-119-091 | q | Annually | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 15/30/14 | Shelton LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Slewardship | DEP/HWM/CS-126-0 | DEEP | Duarterty | <pre>Krechka. J (GZA)</pre> | Shepard, C | | | | Landfill | Bridgeport |
| 15/31/14 | Sheiton LF | Fuel, Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | 2 | Aonthly | etendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 15/31/14 | Shelton LF | Gas System Inspection | Complete Activity | Permit, Facility | Air | 163-119-091 | e | Vonthly | Basconi, B (SCS) | Bodendorf, D | | | | Landfil | Bridgeport |
| 15/31/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001459 | DEEP | Duarterty | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 5/31/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit. Facility | Sewer Discharge | Stratford Special Stratford Special | Stratford A | Monthly | Shepard, C (CRRA) | Egan, P | | | | Lendfil | Bridgeport |
| 06/01/14 | Shelton LF | Stormwater Monitoring Report (SMR) | Submit Document | Permil, General | Stormwater Discharge | GSI000512 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | I-andfill | Bridgeport |
| 36/16/14 | Shelton LF | Permit Expiration | Expiration | Permil, Facility | Sewer Discharge | Stratford Special Permit | | Dne-Time | Egan, P (CRRA) | Egen, P | | | | Landfill | Bridgeport |
| 16/30/14 | Shelton LF | Fuel. Operation and Emissions Records Report | Complete Document | Permit Fachty | Air | 163-119-091 | 2 | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | (.andfill | Bridgeport |
| 06/30/14 | Shelton LF | Gas System Inspection | Complete Activity | Permit, Facility | Air | 163-119-091 | 4 | Monthly | Basconi, B (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 06/30/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | Stratford Special | Stratford h | Manthly | Shepard, C (CRRA) | Egan, P | | | | I_andfil | Bridgeport |
| 06/30/14 | Shelton LF | Landfil Inspection | Complete Activity | Permit, Facility | Solid Waste | 1260181 & 1260227 | | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 16/30/14 | Shelton LF | Landfill Inspection & Liner Function Report (part of LF Inspection Report) | Complete Activity | Permit, Facility | Solid Waste | 1260181 & 1260227 | | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 06/30/14 | Shelton LF | Financial Assurance Demonstration | Submit Document | Regulation, State | Stewardship | | DEEP | Annually | Egan, P (CRRA) | Egan. P | | | | Landfil | IBridgeport |
| 97/01/14 | Shelton LF | Surface Emission Monitoring Event | Prepare for Activity | Permit, Facility | Air | 163-119-091 | JEP 4 | Annually | Letendre, A (SCS) | Bodendorf, D | | | | Lendfill | Bridgeport |
| 97/01/14 | Shelton LF | Ultra-Low Sulfur Fuel for Emergency Generator | Submit Document | Regulation, State | AIF | 22a-174-3b and 22a-174-22 | CRRA | Quarterly | Kowzun, J (CRRA) | Bodendorf, D | | | | Indfill | Bridgeport |
| 97/01/14 | Shelton LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Stewardship | DEP/HW/M/CS-126- 005 | | Quarterly | Krachko, J (GZA) | Shepard, C | | | | LandRil | Bridgeport |
| 37/01/14 | Shelton LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | - | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | |
| A PLOCH C | Pt-llas I E | | 100 A | Dameth Ecolities | Califat Manata | DEP/HW/M/CS-126- | 030 | Internet | Cann D (FRRA) | Enan P | | | | Landfill | Bridgebort |

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| Calendar |
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| Compliance |
| Division |
| CRRA Environmental |

| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
|----------|------------|---|-------------------|------------------|----------------------|-----------------------------|-------------------|-----------|---------------------|-------------------|--------------|-------------------|---------|--------------|------------|
| 07/15/14 | Shelton LF | Sewer Discharge Sampling | Complete Activity | Permit Facility | Sewer Discharge | SP0001459 | | Quarterly | Petrie, E (GZA) | Shepard, C | | | | Landfill | Bridgeport |
| 07/31/14 | Shelton LF | Fuel. Operation and Emissions Records Report | Complete Document | Permit Facility | A.F | 163-119-091 | | Manthly | Lelendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 07/31/14 | Shelton LF | Gas System Inspection | Complete Activity | Permit Facility | Air | 163-119-091 | | Monthly | Basconi, B (SCS) | Badendorf, D | | | | Landfill | Bridgeport |
| 07/31/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit. Facility | Sewer Discharge | Strattord Special Permit | Stratford | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 07/31/14 | Shelton LF | Landfill Inspection & Liner Function Report (part of LF Inspection Report) | Submit Document | Permit, Facility | Solid Waste | 1260181 & 1260227 | DEP | Quarteriy | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 08/21/14 | Shelton LF | Surface Emission Monitoring Report | Submit Document | Permit Facility | Air | 163-119-091 | DEP | Annualiy | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| D8/30/14 | Shelton LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Stewardship | DEP/HWM/CS-126- 005 | DEP | Quarterly | Krechko, J (GZA) | Shepard, C | | | | Landfill | Bridgeport |
| 08/31/14 | Shelton LF | Fuel Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | | Monthly | Letendre, A (SCS) | Badendorf, D | | | | Landfill | Bridgeport |
| 08/31/14 | Shelton LF | Gas System Inspection | Complete Activity | Permil. Facility | Air | 163-119-091 | | Monthly | Basconi, B (SCS) | Bodendorí, D | | | | Landfill | Bridgeport |
| 08/31/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | SP0001459 | DEP | Quarterly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 08/31/14 | Shelton LF | Discherge Manitaring Report (DMR) | Submit Document | Permil, Facility | Sewer Discharge | Stratford Special Permit | Stratford POTW | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 09/01/14 | Shelton LF | Stormwater Discharge Monitoring - Sample and Visual | Submit Document | Permit General | Stormwater Discharge | GS1000512 | DEEP | Quarterly | Cakes, J (CRRA) | Shepard. C | | | | []andfil] | Bridgeport |
| 09/01/14 | Shelton LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit General | Stormwater Discharge | GSI000512 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Bridgeport |
| 09/15/14 | Shelton LF | Stormwater Discharge Sampling | Complete Activity | Permit, General | Stormwater Discharge | GSI000512 | | Annually | Petrie, E (GZA) | Shepard. C | | | | Landfil | Bridgeport |
| 09/15/14 | Shelton LF | Stormwater Pollution Prevention Plan (SPPP) Training | Complete Activity | Permit, General | Stormwater Discharge | GSI000512 | | Annually | Petrie, E (GZA) | Shepard, C | | | | Landfill | Bridgeport |
| 09/16/14 | Shelton LF | Progress Report, Annual | Submit Document | Permit, Facility | Stewardship | DEP/HWM/CS-126- 005 | DEEP | Annually | Egan, P (CRRA) | Egan, P | | | | Landfill | Budgeport |
| 09/30/14 | Shelton LF | Fuel. Operation and Emissions Records Report | Complete Document | Permit, Facility | Air | 163-119-091 | | Monthly | Letendre, A (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 09/30/14 | Sheiton LF | Gas System Inspection | Complete Activity | Permit, Facility | Alr | 163-119-091 | | Monthly | Basconi, B (SCS) | Bodendorf, D | | | | Landfill | Bridgeport |
| 09/30/14 | Shelton LF | Discharge Monitoring Report (DMR) | Submit Document | Permit, Facility | Sewer Discharge | Stratford Special Permit | Stratford | Monthly | Shepard, C (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 09/30/14 | Shelton LF | Landfilt Inspection | Complete Activity | Permit, Facility | Solid Waste | 1260181 & 1260227 | | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 09/30/14 | Shelton LF | Landfill inspection & Liner Function Report (part of LF inspection Report) | Complete Activity | Permit, Facility | Solid Waste | 1260181 & 1260227 | | Duarterly | Bodendorf, D (CRRA) | Egan, P | | | | L and filt | Bridgeport |

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|----------|-----------------|---|-------------------|-------------------|----------------------|-----------------------|-------------|---------------|---------------------|-------------------|--------------|-------------------|---------|--------------|-------------|
| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
| 10/01/13 | Wallingford LF | Stormwater Discharge Monitoring - Sample and Visual | Beain Activity | Permit, General | Stormwater Discharge | | | Quarterly | Hughes, T (LBG) | Oakes. J | | | | Landfill | Wallinoford |
| 10/01/13 | Wallingford LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GSI000499 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Walingford |
| 10/31/13 | Wallingford LF | Gas Monitoring Report (part of LF Inspection Report) | Complete Document | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Wallingford |
| 10/31/13 | Wallingford LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 148-4-L | DEEP | Quarterly | Bodendorf, D (CRRA) | Egan. P | | | | Landfill | Wallingford |
| 11/15/13 | Wallingford LF | Comprehensive Site Compliance Evaluation | Complete Document | Permit, General | Stormwater Discharge | GS 000499 | | Şemi-Annually | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Wallingford |
| 11/15/13 | Wallingford LF | Stormwater Pollution Prevention Plan (SPPP) Training | Complete Activity | Permit, General | Stormwater Discharge | GSI000499 | | Annually | Shepard, C (CRRA) | Egan, P | | | | Landfill | Wallingford |
| 12/31/13 | Wallingford LF | Closure/PostClosure Financial Assurance Demonstration | Submit Document | Permit, Facility | Solid Waste | 148-4-L | DEEP | Annually | Egan P (CRRA) | None | | | | Landfill | Wallingford |
| 12/31/13 | Wallingford LF | Gas Monitoring | Complete Activity | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Wallingford |
| 12/31/13 | Wallingford LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 148-4-L | | Duarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Wallingford |
| 12/31/13 | Wallingford LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit. General | Stormwater Discharge | | | Quarterly | Hughes, T (LBG) | Oakes, J | | | | Landfill | Wallingford |
| 01/01/14 | Walilingford LF | Stormwater Discharge Monitoring - Semple and Visual | Begin Activity | Permit General | Stormwater Discharge | | | Quarterly | Hughes, T (LBG) | Oakes, J | | | | Lendfill | Wallingford |
| 01/01/14 | Wallingford LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GS1000499 | DEEP | Duarterly | Oakes, J (CRRA) | Shepard, C | | | | Itandfill | Watlingford |
| 01/31/14 | Wallingford LF | Gas Monitoring Report (part of LF Inspection Report) | Complete Document | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Wallingford |
| 01/31/14 | Wallingford LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 148-4-L | DEEP | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Wallingford |
| 03/01/14 | Wallingford LF | Hazardous Waste Report | Submit Document | Regulation, State | Hazardous Waste | | EPA | Bienníal | Egan, P (CRRA) | Egen, P | | | | Landfill | Wallingford |
| 03/31/14 | Wallingford LF | Gas Monitoring | Complete Activity | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Barmesse, M (MP) | Bodendorf, D | | | | Indfill | Wallingford |
| 03/31/14 | Wallingford LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Bodendorf, D (CRRA) | Egan P | | | | Indfill | Wallingford |
| 03/31/14 | Wallingford LF | Stormwater Discharge Monitoring - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | | | Quarterly | Hughes, T (LBG) | Oakes, J | | | | Landfill | Wallingford |
| 04/01/14 | Wallingford LF | Slormwaler Discharge Monitoring - Sample and Visual | Begin Activity | Permit General | Stormwater Discharge | | | Quarteriv | Hughes, T (LBG) | Oakes J | | | | Landfill | Walthaford |
| 04/01/14 | Wallingford LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit General | Stormwater Discharge | GS1000499 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Wallingford |
| 04/30/14 | Wallingford LF | Gas Monitoring Report (part of LF Inspection Report) | Complete Document | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Wallingford |
| 04/30/14 | Wallingford LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 148-4-L | DEEP | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Wallingford |
| 05/15/14 | Wallingford LF | Comprehensive Site Compliance Evaluation | Complete Document | Permit, General | Stormwater Discharge | GSID00499 | | Semi-Annually | Bodendorf, D (CRRA) | Egan, P | | | | Landfil | Wallingford |
| 06/30/14 | Wallingford LF | Gas Moniforing | Complete Activity | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Barmasse, M (MP) | Bodendorf, D | | | | Landfill | Wallingford |
| 06/30/14 | Wallingford LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Wallingford |
| D6/30/14 | Wallingford LF | Financial Assurance Demonstration | Submit Document | Regulation, State | Stewardship | | DEEP | Annually | Egan, P (CRRA) | Egan, P | | | | Landfill | Wallingford |
| 06/30/14 | Wallingford LF | Stormwalter Discharge Montocing - Sample and Visual | Complete Activity | Permit, General | Stormwater Discharge | | | Quarterly | Hughes, T (LBG) | Oakes, J | | | | Landfill | Walingford |
| 07/01/14 | Wallingford LF | Stormwater Discharge Monitoring - Sample and Visual | Begin Activity | Permit, General | Stormwater Discharge | | | Quarterly | Hughes, T (LBG) | Oakes, J | | | | Landfilt | Wallingford |
| 07/01/14 | Walfingford LF | Stormwater Monitoring Report (SMR) | Submit Document | Permit, General | Stormwater Discharge | GSI000499 | DEEP | Quarterly | Oakes, J (CRRA) | Shepard, C | | | | Landfill | Wallingford |
| 07/31/14 | Wallingford LF | Gas Monitoring Report (part of LF Inspection Report) | Complete Document | Permit, Facility | Solid Waste | 148-4-L | | Quarterly | Bermasse, M (MP) | Bodendorf, D | | | | Landfil | Wallingford |

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Barmasse, M (MP)

Quarterly

148-4-L

Solid Waste

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Solid Waste

Permit, Facility

148-4-L

Stormwater Discharge

Permit, General

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Stormwater Discharge Monitoring - Semple and Visual

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Gas Monitoring Landfill Inspection

Wallingford LF

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Bodendorf, D (CRRA) Egan, P

Oakes, J

Hughes, T (LBG)

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Egan, P

Egan, P (CRRA)

Annually

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148-4-L

Solid Waste Stewardship

Permit, Facility

Submit Document

Landfill Inspection Report Progress Report, Annual

Waltingford LF

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| Due Date | Facility | Document/Activity | Activity | Requirement | Permit Type | Requirement Number | Submit To | Frequency | Responsible Person | CRRA Oversight | Completed By | Completed Date | Comment | FacilityType | Project |
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| 10/31/13 | Waterbury LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Solid Waste | 151-B | | Quarterly | Sylvester_C (BRE) | Shepard, C | | | | Landfill | Bridgeport |
| 10/31/13 | Waterbury LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 151-B | DEEP | Duarterly | Bodendorf D (CRRA) | Egan P | | | | Landfill | Bridgeport |
| 11/15/13 | Waterbury LF | Environmental Monitoring Report Draft (EMR). Quarterly | Submil Document | Permit Facility | Solid Waste | 151-B | CRRA | Duarterly | Sylvester C (BRE) | Shepard, C | | | | I-andfill | Bridgeport |
| 11/30/13 | Waterbury LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Solid Waste | 151-B | DEEP | Duarterly | Sylvester, C (BRE) | Shepard, C | | | | Landfill | Bridgeport |
| 12/15/13 | Waterbury LF | Environmental Monitoring Report Draft (EMR) Annual | Submit Document | Permit Facility | Solid Waste | 151-B | CRRA | Annually | Sylvester C (BRE) | Shepard, C | | | | t_andfill | Bridgeport |
| 12/31/13 | Waterbury LF | Closure/PostClosure Financial Assurance Demonstration | Submit Document | Regulation. State | Solid Waste | RCSA | DEEP | Annually | Egan, P (CRRA) | Nane | | | | Landfil | Bridgeport |
| 12/31/13 | Waterbury LF | Comprehensive Site Compliance Evaluation | Submit Document | Regulation State | Solid Waste | RCSA | DEEP | Annually | Egan, P (CRRA) | None | 1 | | | Landfil | Bridgeport |
| 12/31/13 | Waterbury LF | Environmental Monitoring Report (EMR), Annual | Submit Document | Permit Facility | Solid Waste | 151-B | DEEP | Annuaily | Sylvester, C (BRE) | Shepard C | | | | (Landfill | Bridgeport |
| 12/31/13 | Waterbury LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 151-B | | Duarterly | Bodendarf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 01/31/14 | Waterbury LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit Facility | Solid Waste | 151-B | | Quarterly | Sylvester, C (BRE) | Shepard, C | | | | Landfill | Bridgeport |
| 01/31/14 | Waterbury LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 151-B | DEEP | Duarterly | Bodendorf, D (CRRA) | Egan P | | | | Landfill | Bridgeport |
| 02/15/14 | Waterbury LF | Environmental Monitoring Report Draft (EMR), Quarterly | Submit Document | Permit, Facility | Solid Waste | 151-E | CRRA | Duarteriy | Sylvester, C (BRE) | Shepard, C | | | | Landfill | Bridgeport |
| 02/28/14 | Waterbury LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit Facility | Solid Waste | 151-B | DEEP | Duarterly | Sylvester, C (BRE) | Shepard, C | | | | Landfili | Bridgeport |
| 03/31/14 | Waterbury LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 151-B | | Quarterly | Bodendorí, D (CRRA) | Egan. P | | | | Landfill | Bridgeport |
| 04/30/14 | Waterbury LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit, Facility | Solid Waste | 151-B | | Duarterly | Sylvester, C (BRE) | Shepard C | | | | Landfill | Bridgeport |
| 04/30/14 | Waterbury LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 151-B | DEEP | Quarterly | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 05/15/14 | Waterbury LF | Environmental Monitoring Report Draft (EMR), Quarterly | Submit Document | Permit, Facility | Solid Waste | 151-B | CRRA | Quarterly | Sylvester, C (BRE) | Shepard, C | | | | I.andfill | Bridgeport |
| 05/31/14 | Waterbury LF | Environmental Monitoring Report (EMR). Quarterly | Submit Document | Permit Facility | Solid Waste | 151-B | DEEP | Quarterly | Sylvesler, C (BRE) | Shepard, C | | | | Landfil | Bridgeport |
| 06/30/14 | Waterbury LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Waste | 151-B | | Quarterly | Bodendorf D (CRRA) | Egan, P | | | | Landfill | Bridgeport |
| 07/31/14 | Waterbury LF | Environmental Monitoring Report (EMR) Sampling | Complete Activity | Permit. Facility | Solid Waste | 151-B | | Quarterly | Sylvester, C (BRE) | Shepard, C | | | | Landfill | Bridgeport |
| 07/31/14 | Waterbury LF | Landfill Inspection Report | Submit Document | Permit, Facility | Solid Waste | 151-B | DEP | Quarterly | Bodendorf, D (CRRA) | Egan P | | | | Landfill | Bridgeport |
| 08/15/14 | Waterbury LF | Environmental Monitoring Report Draft (EMR). Quarterly | Submit Document | Permit, Facility | Solid Waste | 151-B | CRRA | Quarterly | Sylvester, C (BRE) | Shepard C | | | | Landfill | Bridgeport |
| 08/31/14 | Waterbury LF | Environmental Monitoring Report (EMR), Quarterly | Submit Document | Permit, Facility | Solid Waste | 151-B | DEEP | Quarterly | Sylvester, C (BRE) | Shepard, C | | | | ILandfill | Bridgeport |
| 09/30/14 | Waterbury LF | Landfill Inspection | Complete Activity | Permit, Facility | Solid Wasle | 151-B | | Quarteriy | Bodendorf, D (CRRA) | Egan, P | | | | Landfill | Bridgeport |

10/8/2013

Exhibit M

Summary of Public Comments

Summary of Public Solicitation for Comment Regarding Section 9 of Public Act 13-285

Summary of Public Solicitation for Comment Regarding Section 9 of Public Act 13-285

As part of its development of a Transition Plan per Section 9 of Public Act 13-285, CRRA invited comment from stakeholders and the public at large.

CRRA solicited comments via the CRRA website, along with direct contact outreach to customers and other stakeholders, including municipal leaders, municipal organizations, environmental groups, waste generators, commercial and residential waste haulers, and processors.

To accomplish this outreach, CRRA created an online comment form and placed it on the CRRA website. CRRA notified recipients of CRRA interest in their comments, providing a link to the comment form, and encouraging recipients to participate. A copy of this email is attached.

The email was sent to 382 recipients – 308 officials from all 169 Connecticut municipalities and regional municipal organizations such as councils of governments, and 74 private waste hauling companies with which CRRA as had contractual relationships. CRRA also encouraged the submission of comments by speaking to several regional governmental bodies, including the Northwestern Connecticut/Litchfield Hills Recycling Advisory Committee, the Council of Governments of the Central Naugatuck Valley, the Capitol Regional Council of Governments, and the Lower Connecticut River Valley Council of Governments. The Connecticut Council of Small Towns also sent an email directly to the leaders of more than 100 member municipalities.

CRRA received a modest number of written comments and oral comments. Comments ranged from critical of the CRRA model to supportive of CRRA, its performance and it mission. These comments are summarized below. Each of the actual written comments received by CRRA is included following this summary.

A summary of the comments received from CRRA stakeholders and other commenters:

- The CRRA model has worked well, insuring stable, reliable and affordable disposal to various stakeholders and the State.
- Trash-to-energy is necessary for Connecticut and preferable to landfilling. It provides necessary and valuable benefits for the states and the residents of CT.
- CRRA should receive full benefit for the renewable energy it produces (i.e. Class 1 RECs similar to solar and wind generation).
- CRRA transfer stations must remain available to all parties. Particular concern was sited to the viability of the market and concerns for disposal and or transfer capacity in the event CRRA and the South Meadows Facility were to be operated by the private sector.
- Towns operating within CRRA should not have responsibility for statewide waste activities.

- CRRA should work to phase out trash-to-energy in favor of recycling and diversion.
- Questions raised regarding whether private sector organizations can provide services as costeffectively as the Non-Profit CRRA with CRRA's publicly owned advantages in taxes and pricing.
- How will the State pursue implementation of the State Solid Waste Management Plan and environmental policy if CRRA and its financial capability are not available to do this? Will the State have General Fund money to implement solid waste policy?
- Can a private sector or non-state public agency (regional authority or inter-local) deliver services more efficiently than CRRA?
- CRRA landfills must be properly managed and municipalities must be protected from financial and environmental risk long-term from closed landfills.
- Closing of the South Meadows Facility will create unacceptable financial and operations difficulty on small haulers and concentrate pricing power in the hands of larger disposal companies.
- Insuring CT manages its own waste is an important consideration in future decisions about how to manage solid waste.
- Insuring municipalities enjoy similar pricing regardless of geographic location, or population is an important consideration.

Original email:

Ladies and Gentlemen:

CRRA is developing a plan for its future as specified in Public Act 13-285, and we'd like your thoughts as we develop this plan.

To make it easy for you to comment, please use this page on our website – <u>http://www.crra.org/pages/Comment-form-8-23-2013.htm</u>. Just fill out the form and click "Send email."

We look forward to hearing from you.

Donald S. Stein Chairman, Connecticut Resources Recovery Authority CRRA encourages you to consider the environment before printing this e-mail.

| | | HOME SITE MAP GLOSSARY CUNTACT CRRA SITE SEARCH |
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| | | Connecticut Resources Recovery Authority |
| | | Contraction and the second state of the second states are second |
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| ► | Profile | |
| > | Projects | We'd like to know what you think. |
| ⊁ | Environmental Stewardship | Dublic Act 12 395 requires the Connecticut Resources Recovery Authority to think about how it |
| * | Recycling | Public Act 13-285 requires the Connecticut Resources Recovery Authority to think about now it can best serve the state. |
| * | Education | |
| * | Public Records | One provision of this law requires CRRA to develop a transition plan for either achieving a sustainable business model OR dissolving the Authority and disposing of its assets. Specifically, |
| • | Press Releases | this plan must discuss the benefits and consequences of |
| ⊁ | Board of Directors | closing or setting the <u>martroro trash-to-energy plant</u>. converting it into "an alternative use such as a solid waste management facility," |
| • | Management Team | selling CRRA's assets and reductions in expenses, including management fees, labor costs, contract obligations |
| ₽ | Careers | and legal fees and whether they could be eliminated or mitigated. |
| | Embracing the Future | - |
| | | The plan must also consider the operational requirements of CRRA's other facilities: |
| • | B2B | CRRA's statewide role and how the transition plan affects that role; and |
| • | Business Opportunities | CRRA's post-closure landtill liabilities. |
| ۶ | Disposal Permits | Since CRRA's mission is to work for - and in - the best interests of the municipalities and |
| • | Project Business | residents of the State of Connecticut," your input is a fundamental part of this project. Please take a few minutes to share your thoughts using the comment form below. |
| ≱ | Resource Links | |
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file:///I:/webroot/pages/Comment-form-8-23-2013.htm

Sent: Monday, August 26, 2013, 10:54 a.m.

Your name: E.V. Mone Your city / town: Thomaston Your email address: emone@thomastonct.org Your comments:

1. Unless it is possible to send Mid Connecticut's trash to another facility that can handle the load, it would seem to make sense to keep Hartford operational. Some manner of trash to energy must be the operational model. Landfills are ineffective and create long term liability that is unacceptable. If there is another manner of converting trash to energy, and it is economically viable it should be considered, otherwise burning seems to be the only viable way to go and if need be must be subsidized in some manner.

2. Operational efficiencies will be examined as part of the planned audit. Whatever comes of that should be followed.

3. CRRA serves a large number of towns and cities in the state. If it can not be run in a cost effective manner then we will be compelled to privatize and go with those such as Covanta who provide the service. If this is the case then the state should bring private companies into the discussion to see if they can handle the additional tonnage and if they can provide the service as cost effectively as CRRA once revamped.

4. The plan being floated has the state assuming all of our post closure liability of landfills. They take the CRRA set aside along with the responsibility. This seems to be an acceptable solution.

Sent: Monday, August 26, 2013, 9:04 a.m.

Your name: John Phillips

Your city / town: Town of West Hartford

Your email address: johnp@westhartford.org

Your comments: I believe the greater Hartford area is a very viable location for a trash to energy facility. However I do not necessarily agree it should be operated and managed by a state quasi authority. It is this man s opinion that a private trash to energy firm is more suited to operate such a facility with national and or global expertise.

Sent: Monday, August 26, 2013, 10:12 a.m.

Your name: Ralph Eno
Your city / town: Lyme
Your email address: selectman@townlyme.org
Your comments:
The scope of the mandate is overwhelming.
Given the statute's charge, the time frame is ludicrous.
The cost of the exercise is going to be well over \$800,000.00.
It is being borne by the member towns most of whom I suspect don't see any value in the process.
We have a working model in place which has served the state well for the past 30 years.
It would seem more prudent if changes are needed to work within the existing system.

The scenarios CRRA is being asked to consider are purely hypothetical and not grounded in reality.

Dissolving a functioning enterprise in order to replace it with some kind of transfer station/landfilling model is a giant step backward from an environmental perspective and is not sustainable over a protracted period of time.

If there is no clear concept for a workable alternative, why are we doing this?

Give CRRA Rec. 1 status for its electricity and the problem is solved, allowing sufficient time to explore other possible business models.

Sent: Monday, August 26, 2013, 7:57 a.m.

Your name: Ronald McDaniel Your city / town: Montville Your email address: rmcdaniel@montville-ct.org Your comments: I have found that our area, SCRRA, works extremely well due to the positive participation of the participating communities.

Sent: Thursday, September 12, 2013, 1:10 p.m.

Your name: Susan Dyer Your city / town: Norfolk Your email address: townnorfolk@snet.net

Your comments: It is important to our town that we keep CRRA as a viable resource for our MSW and recycling. It is also important that we do not lose our ability to track our trash-we do not want expose our town to any future liability. To totally discount a trash to energy program is very short sighted of the state.

Sent: Thursday, August 29, 2013, 9:41 a.m.

Your name: Doreen Zaback Your city / town: Wallingford Your email address: towngovwallingford@sbcglobal.net Your comments: As the Project Coordinator for the Wallingford Regional Solid Waste Project, I can say that the municipalities of Cheshire, Hamden, Meriden, North Haven and Wallingford are very interested in the future of CRRA due to CRRA's current responsibility for the Wallingford Landfill and its holding of the funds to monitor the landfill through the post-closure period.

Sent Tuesday, September 17, via U.S. Mail

September 17, 2013

Mr. Donald S. Stein, Chairman Connecticut Resources Recovery Authority 100 Constitution Plaza, 6th floor Hartford, Connecticut 06103-7722

Dear Chairman Stein:

The Litchfield Hills/Northwestern CT Recycling Advisory Committee recently met and discussed your request for comments related to Public Act 13-285 and the development of a plan for CRRA's future. Following are comments that the Committee unanimously agreed to forward to you for consideration.

1) Regardless of the outcome of CRRA's transition plan under PA 13-285, the Torrington Transfer Station is a critical local and regional resource and should remain in place and available for future use.

2) The trash-to-energy approach to managing municipal solid waste is far preferable to land filling. Trash to energy technology makes economic and environmental sense, and also allows towns to better monitor the movement and disposal of their MSW while limiting their long-term liability exposure.

3) We support the continuation of CRRA and would like to see increased State financial support for CRRA so that its statutorily defined responsibilities can be better addressed. For example, with improved funding support CRRA can provide a leadership role in the planning and development of regional composting facilities which will ultimately save the towns and taxpayers money in avoided disposal costs.

Thank you for your consideration.

Sincerely, Susan Dyer Chairman

Sent Monday, September 23, 2013, 1:17 p.m.

Your name: Joseph wasserman Your city / town: West Hartford Your email address: joewass64@yahoo.com Your comments: I write to urge you to come forth with a plan to phase out trash incineration in Hartford and increase recycling and diversion levels to that to San Fransisco which is at 80%.

I am concerned about the release of dioxin and other toxic chemicals resulting from the burning of trash and the impact of these chemicals on human health and the environment.

The 80% diversion level achieved by San Fransisco shows that we could do much better in the areas of reuse, composting and recycling

Sent Monday, September 23, 2013, 7:01 p.m.

Your name: Kenneth R Kahn Your city / town: Hartford

Your email address: Krkfinearts@me.com

Your comments: Have lived for 13 years across river from plant and began suffering bronchial ailments; am concerned about particulate matter blown into atmosphere and also possible toxic materials. What are the facts about possible pollutants generated by operations. Thanks.

Sent Thursday, September 26, 2013, 12:30 p.m.

Your name: Catherine Iino Your city / town: Killingworth Your email address: <u>ciino@townofkillingworth.com</u> Your comments: I hope that a comparative analysis can be done of the environmental impact of running the trash-to-energy plant vs. transporting trash out of state.

Small towns like Killingworth need CRRA or a comparable organization to exist; we do not have the staff to negotiate separate arrangements for town trash removal.

Sent Thursday, September 26, 2013, at 5:11 p.m.

Your name: Abe Scarr Your city / town: Hartford Your email address: <u>abe@connpirg.org</u> Your comments: To CRRA Board Members and Staff,

Thank you for the opportunity to comment on your transition plan for: (1) Achieving a sustainable business model that improves the long-term financial stability of said authority, or (2) conducting the dissolution of said authority and the disposing of said authority's assets as required by Public Act 13-285.

At this time we have the following comments:

1. While we appreciate this opportunity to comment, it is insufficient. Unfortunately, this is in line with a history of poor engagement with municipalities, community groups, and citizen groups.

2. The public engagement process should be more aggressive and rigorous. We have the opportunity to provide general comments but we do not, as of yet, have the opportunity to offer comments on a specific draft plan. We request such an opportunity. We suggest a process similar to that of the Title V permitting process.

3. Connecticut needs to take significant action to hit its goal of 58%

diversion by 2024 as laid out in the Solid Waste Master Plan. Our state s over-reliance on incineration has been an impediment to achieving higher diversion rates.

4. CRRA s operational and organizational focus on incineration has been to

the detriment of other statutory responsibilities outlined in General Statutes, Sec. 22a-262 (a) including: a.implementation of some or all of the state s Solid Waste Master Plan,

b. assistance and coordination of source separation and recycling efforts,

and

c.the development of new industries, technologies and commercial

enterprises in Connecticut for source reduction, reuse, recycling and composting.

5. CRRA should examine and change its mission to be more in line with the state of Connecticut s Solid Waste Hierarchy and Solid Waste Master Plan.

The current mission,

Our mission is to work for and in the best interests of the municipalities and residents of the State of Connecticut in developing and implementing environmentally sound solutions and best practices for solid waste disposal and recycling management on behalf of our constituents,

does not place appropriate priority on diversion over disposal. The mission should emphasize reduction, reuse, recycling and composting before disposal.

6. In order to hit our state s diversion goals, we need more reuse,

recycling, and composting infrastructure. As diversion increases, we need less incineration capacity. CRRA should reduce incineration capacity at the Mid Connecticut facility one boiler at a time until it can take the facility offline. CRRA should diversify its facilities and services to manage this transition.

7. CRRA should develop this transition plan to phase out incineration as soon as practically possible in coordination with DEEP and with structured input from affected municipalities and communities. The plan should have an aggressive timeline, balanced by the need for reliable, predictable, and affordable services during the transition.

8. CRRA should make changes to its board and staff composition to reflect

this change in mission focus.

Again, thank you for the opportunity to comment, and we hope to have further opportunities to comment on the plan as it develops.

Connecticut Citizen Action Group Connecticut Coalition for Environmental Justice ConnPIRG Clean Water Action Environment Connecticut Toxics Action Center

Sent Thursday, September 26, 2013, 7:22 p.m.

Your name: Jeff Bridges Your city / town: CCSWA Your email address: jeff.bridges@wethersfieldct.com Your comments: *Also being sent via U.S. Mail*

On behalf of the Central Connecticut Solid Waste Authority (CCSWA) which represents sixteen (16) towns and cities currently customers of the CRRA, we are submitting comments in response to your request per your transition plan.

Although electricity pricing may be a new complicating market condition, it is compounded by the age of the technology and historical lack of a long term plan for the facility. As part of any continued model or new model of operation we would expect a robust long term plan for the facility and its operation.

We also believe that CRRA needs to articulate and implement a vision that is beyond the current service delivery model. We want to see CRRA move toward a more customer driven model that incorporates best practices in materials management to help CT municipalities manage their waste. This includes recycling, diversion and overall visioning of solid waste disposal alternatives.

Sincerely yours,

Jeffrey K. Bridges Town Manager, Wethersfield Chairman, CCSWA

(Letter received Oct. 1, 2013)

September 26, 2013

Don Stein Chairman Connecticut Resources Recovery Authority 100 Constitution Plaza, 6th Floor Hartford, CT 06103-7722

Dear Mr. Stein,

On behalf of the Central Connecticut Solid Waste Authority (CCSWA) which represents sixteen (16) towns and cities currently customers of the CRRA, we are submitting comments in response to your request per your transition plan.

Although electricity pricing may be a new complicating market condition, it is compounded by the age of the technology and historical lack of a long term plan for the facility. As part of any continued model or new model of operation we would expect a robust long term plan for the facility and its operation.

We also believe that CRRA needs to articulate and implement a vision that is beyond the current service delivery model. We want to see CRRA move toward a more customer driven model that incorporates best practices in materials management to help CT municipalities manage their waste. This includes recycling, diversion and overall visioning of solid waste disposal alternatives.

Sincerely yours,

Jeffrey K. Bridges Town Manager, Wethersfield Chairman, CCSWA

NOTE: Four of the 16 CCSWA communities – Bolton, Enfield, Somers and Suffield – signed elsewhere when their contracts with CRRA expired.

Sent Saturday, September 28, 2013, 8:51 p.m.

Your name: Nickolas J. Themelis

Your city / town: New York, NY

Your email address: njt1@columbia.edu

Your comments: Columbia's Earth Engineering Center conducts a bi-NNUl (bi-annual?) survey of waste management in the fifty states of the Union. Our 2010 Survey showed that Connecticut was the

foremost state in the Union with regard to sustainable waste management because of its high recycling and also high rate of combustion with energy recovery (Waste-to-energy).

Any new legislation, should discourage landfilling, either within the state or by exporting MSW to other states.

PROF. NICKOLAS THEMELIS COLUMBIA UNIVERSITY

NOTE: Professor Themelis is head of the Earth Engineering Center.

Sent Wednesday, October 2, 2013, at 9:25 a.m.

Your name: Jason A Manafort Your city / town: Hartford Area Your email address: jam@cwpm.net

Your comments: I have been in the waste hauling business for over 25 years and have relied on CRRA the entire time for consistent, local and neutral cost disposal of MSW. If you look at the landscape of the waste industry in CT you can see that it consists of locally owned, privately held companies. The reason for this is that our largest operational cost, disposal fees, is cost neutral with CRRA. The national publicly traded waste hauling companies have steered clear of CT for the reason that the can not control that portion of the business. Private local hauling companies utilizing publicly owned and operated disposal facilities and been a successful marriage for as long as I have been in business. The CRRA and the level playing field it provides has had an important role in in the growth of my business from 5 employees to now over 200.

Sent Friday, October 4, 2013, at 10:02 a.m.

Your name: Sheila Baummer

Your city / town: Naugatuck

Your email address: sbaummer@naugatuck-ct.gov

Your comments: Several items regarding CRRA are important from Naugatuck's perspective. Obviously keeping tip fees at a reasonable amount (close to current rates) is important. Naugatuck self hauls MSW to Watertown transfer station and keeping that location open is paramount in keeping our expenses low.

Concluding the long and drawn out litigation with MDC, hopefully in CRRA's favor, is vital to the fiscal health of both CRRA and the involved Municipalities.

Sent Tuesday, October 8, 2013, at 1:45 p.m.

Your name: Bill Dunbar

Your city / town: Watertown, CT

Your email address: wldunbar@copeswaste.com

Your comments: My company has two on-going business relationships with CRRA. The first is our contract to operate the Torrington Transfer Station.

The second is that we dump all of the MSW & recycling we collect on our residential and commercial routes at the Watertown Transfer Station. Given that these comments are not anonymous, I feel that our business dealings put me in a difficult spot to fully provide feedback.

What I can say is that CRRA operates clean & efficient transfer stations.

There is no favoritism shown to any individual hauler in terms of pricing or priority access to their sites. This is not the case in the private market, particularly the C&D transfer stations in the state, where pricing and access are often used by the owners as competitive advantages.

While I've always had reasonable dealings with CRRA, there is a definite perception amongst haulers & municipalities that CRRA can be heavy-handed in their contracts and inefficient in their operations. It may or may not be true, but that's the perception.

At the end of the day, haulers & municipalities are going to bring their MSW & recycling to whoever offers them the best price and are going to avoid signing any long term contract if they can.

Sent Friday, October 11, 2013, at 8:55 a.m.

Your name: Windsor Sanitation Inc.

Your city / town: Windsor

Your email address: kbrynes@windsorsantitation.com

Your comments: Windsor Sanitation Inc. is a small family run business. We rely on the CRRA to provide us with a convenient cost effective way to dispose of our trash and recyclables. The CRRA enables us to set schedules to maximize route efficiencies and provide fast reliable service to our customers. We have been very happy with our relationship with the CRRA. From compliance to billing our experiences have been seamless. This allow us to stay competitive with the other haulers. We beseech you to keep the Hartford CRRA open.

Regards,

Kevin Byrnes Windsor Sanitation Exhibit N

La Capra Associates Summary Letter and Qualifications

(a Capra) Associates

November 13, 2013

LETTER PROPOSAL Sent via E-mail

Ms. Virginia Raymond Connecticut Resource Recovery Authority !00 Constitution Plaza 6th Floor Hartford, Connecticut 06103-7722

RE: Thoughts on the Price Forecast used in the Revenue Projections

Dear Ms. Raymond,

This letter is to supplement our discussions regarding the La Capra Associates choice in methodology used to estimate revenues for output from the waste-to-energy steam generation units at South Meadow. My understanding is that there has been some review of CRRA operations to establish an independent outlook for CRRA operational and financial performance. In this review, the assumption for future electric generation revenue was for fiscal year 2014 to have the same price for energy as CRRA had realized in the prior fiscal year. In the review fiscal year 2015 was assumed to escalate by 2% over 2014. My comments below were developed to communicate our rationale for using prices from the forwards markets for electricity in New England to provide a 'better' indication of future CRRA revenues.

FORECASTED ENERGY PRICES VERSUS HISTORICAL

La Capra Associates used rather standard and best practices to decide on the underlying electric energy prices necessary to forecast CRRA revenue from energy sales. La Capra Associates routinely advises clients on energy sales and purchasing decisions based upon the "current electric market forwards. We routinely convert the monthly forwards for peak period energy and off-peak period energy to hourly prices using historical variations from average. We do not rely on historical price levels, but do utilize historical hourly price variations from average.

In our experience the assumption that future prices will mimic historical prices has proven to be an oversimplification resulting in significant forecasting error. The availability of forward market prices is based upon actual trades made between buyer and seller. The forward prices are a much better, although not perfect, predictor of future prices. Typically the forwards in New England electric energy market prices capture the market participants knowledge of changes in natural gas prices, announce development of new generation or the retirement of existing generation, the activities in New England regarding energy efficiency program spending, renewable energy generation, developments in natural gas pipelines whether that be increased capacity through additional compression, new construction or any growing constraints. The electric energy price forwards for New England are strongly correlated to the forwards for natural gas, since the generation in New England that sets market clearing prices for more than 80-90% of the time burn natural gas. The forwards represent market participants' view of how changes expected in the regional and national economy affect energy prices.

La Capra Associates, Inc. One Washington Mall, 9th Floor Boston, Massachusetts 02108

lacapra.com

The readily available forward prices can be easily incorporated into our revenue forecasting, including for CRRA, and allow us to capture the known or expected changing conditions that impact energy markets in New England.

UNCERTAINTY IN PRICE FORECAST - A HIGHER UPSIDE POTENTIAL

It is also important to discuss the uncertainty surrounding the New England Energy prices. Simply put, there is more potential for significantly higher prices while the same potential for lower prices is a much smaller magnitude. The following factors could increase prices (over expectations) in New England for a portion of the year such as weeks or months. The price increases that have been seen in the past can easily be \$100-200/MWh as compared with an average annual price that has historically been in the \$35-50/MWh.

Factors that would spike or increase energy prices:

- Severe regional winter or summer weather. This is especially a large impact when a winter period experiences temperatures lower than the low temperatures of a normal winter.
- Winter natural gas pipeline deliverability constraints ISO-NE has implemented a number of actions in order to minimize the probability that there will be a highly constrained natural gas supply for electric generation. We have yet to see if those actions will perform as expected. Our general understanding is that most market participants expect these actions to be successful.
- Unforeseen outages of one or more larger generating capacity, such as a nuclear plant.
- External factors can result in trading entity becoming fearful of natural gas or electric power supply. Examples of these would be US politics affecting the economy and financial markets, weather interruptions in natural gas supply regions, global unrest affecting world-wide oil and natural gas markets.

There are also factors that can drive energy prices lower in the region. In the past the factors that are described below will impact energy prices resulting in a drop in prices from expected or normal levels somewhere between \$5-20/MWh. This is much lower in magnitude than the markets reactions to the factors discussed above.

Factors that would dampen or decrease energy prices:

- Mild regional winter or summer weather. This tends to soften natural gas prices in the winter, and also reduces the use of less efficient generation in New England.
- A fall off from expectation of the economy growth in the region and nationally.
- More generation coming online such as renewable energy based generation.
- Greater success in reducing consumption through energy efficiency programs

Overall, I would summarize that La Capra Associates maintains that the use of forward market based energy prices not only improves the accuracy of a forecast but represents standard or best practices by consultants, utilities, generation owners and large energy consumers. We also would characterize that the uncertainty in our revenue forecast is such that the magnitude of which energy prices respond to upside risks is much greater than the way energy markets respond to downsize risks.

I hope you and your organization find this explanation and clarification useful. Should you need to discuss any of these factors please contact me at your convenience.

Sincerely,

John G. Athas *Principal Consultant* La Capra Associates, Inc.

Contact Information

John Athas, Principal Consultant La Capra Associates, Inc. One Washington Mall, 9th Floor Boston, Massachusetts 02108

Tel: 617-778-2451 E-mail: jathas@lacapra.com







ABOUT OUR ENERGY SERVICES CONSULTING FIRM



30 Years of Industry Expertise

La Capra Associates is an employee-owned consulting firm which has specialized in the electric and natural gas industries for 30 years. Our expertise includes power resources planning, market policy and analysis (wholesale, retail, and renewable), power procurement, economic/ financial analysis of energy assets and contracts, and regulatory policy.

Our firm provides services to a broad range of organizations involved with energy markets, including regulatory agencies and consumer advocates, public policy and energy research organizations, public and private utilities, energy producers and traders, financial institutions and investors, and consumers.

Throughout our history, we have extended services at the forefront of change in the industry, including areas such as marginal cost pricing, integrated resource planning, competitive procurement of resources, and demand-side management. Our expertise in energy matters is interdisciplinary. We regularly provide services ranging from broad policy development, to analysis of rate applications, analysis of major investments, and short-term planning and operations.

Our work frequently leads to presentation of expert testimony or opinion before state or federal regulatory agencies, financial institutions, and corporate management and boards, and has consistently withstood detailed scrutiny.

For more information, contact:

John G. Athas, Treasurer 617-778-5515, ext 131 + jathas@lacapra.com

Areas of Specialization

- Integrated Resource Planning
- Generation Planning and Asset Valuation
- Power System Planning
- Transmission Planning
- Market Analytics
- Renewable Energy Planning
- Energy Efficiency Planning
- Procurement and Portfolio Management
- Regulated Rates, Cost of Service and Rate Design
- Competitive Bidding and Evaluation
- Utility Regulatory Policy
- Environmental Planning for Energy Systems
- Merger and Acquisition Analysis
- Retail Electric Markets Policy and Design
- Wholesale Electric Markets Policy and Design
- Utility Strategic Planning

Relevant Experience

POWER GENERATION

- Forecasts of Revenue Expectations for Generating Facilities (Numerous clients)
- Power Supply Advisory Services and Power Procurement (Amtrak)
- Valuation of Generation Assets Owned by Pennsylvania Utilities (Office of the Consumer Advocate)

TRANSMISSION & DISTRIBUTION

- Need Analysis for Transmission Line Siting Application (Cape Wind Associates)
- Detailed Economic Assessment of Non-Transmission Alternatives (Vermont Electric Power Company)
- Preparation of Gas Demand Forecast for Local Gas Distribution Company (North Attleborough Gas Company)

UTILITY RATES & REGULATORY

- Electric Cost Allocation and Ratemaking (Various clients)
- Regional Transmission Operators' Rates and Cost Allocation (Wisconsin Citizens Utility Board)

RENEWABLE ENERGY

- Market and Portfolio Analysis of Renewable Energy Projects (Various clients)
- Renewables Project Due Diligence for Financing (MTC)
- Wind Power Project Reviews; Utility IRP Review of Coal Project (Oklahoma Industrial Energy Consumers)





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For more information, contact:

Stan Faryniarz, Managing Consultant 617-778-5515, ext 114 • sfaryniarz@lacapra.com

Areas of Specialization

- Energy Procurement
- Energy Contracts Assessment
- Renewable Projects & Markets
- Merger and Acquisition Analysis
- Asset Valuation Planning
- Market Price Forecasting
- Retail Rate Regulation
- Wholesale and Retail Portfolio Management
- Market Systems
- Electric Regulatory Policy
- Transmission Project Evaluation
- Integrated Resource Planning

Relevant Experience

POWER GENERATION

- Power Supply Advisory Services and Power Procurement (Amtrak)
- Forecasts of Revenue Expectations and Project Feasibility for Generating Facilities (Numerous clients)
- Valuation of Generation Assets Owned by Pennsylvania Utilities (Office of the Consumer Advocate)

RENEWABLE ENERGY

- Market and Portfolio Analysis of Renewable Energy Projects (Various clients)
- Renewables Project Due Diligence for Financing (MTC)
- Wind Power and LFG Project Reviews; Utility IRP Review of Coal Project (Oklahoma Industrial Energy Consumers)

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UTILITY RATES & REGULATORY

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Power Supply Services

1. Wholesale and Retail Electric & Gas Supply Analysis

Our team of professionals has conducted technical, financial, and contractual review, and then successfully closed numerous wholesale and retail transactions. Our extensive experience with power market assessment and power transactions in the New England, New York and PJM electricity markets provides clients with both a broad market perspective and access to commercial experts practiced in managing energy portfolios and budgets.

CLIENTS INCLUDE

RETAIL: Amtrak • Massachusetts Water Resource Authority • Narragansett Bay Commission • Defense Contractor

WHOLESALE: Green Mountain Power Corporation • Vermont Electric Cooperative • Washington Electric Cooperative (VT) • Littleton Water & Light Department (NH)

2. Preparation and Execution of Competitive Transactions

We have considerable experience in power market transactions – wholesale and retail; and for a number of our clients, we manage their entire portfolio. Since 'wholesale drives retail,' we focus on evaluating conditions in the prevailing wholesale markets. We help our clients identify their power procurement goals, and their risk tolerances and preferences. The results have included successful vendor solicitations (RFPs/RFQs), enhanced price negotiations, and millions of dollars in power cost savings.

3. Project Evaluation

We have assisted various utilities and private and public sector clients in evaluating the inclusion of generation projects into their supply portfolio. We have conducted feasibility studies and due diligence on potential projects involving a number of technologies including wind, solar, biomass, landfill and farm methane, and combined heat and power.

4. Rates and Interconnection Negotiations

Our consultants are experienced in designing and negotiating special distribution and generation rates and contracts for unique end users. In addition to retail power supply rates and terms, we have experience designing, negotiating and evaluating specific non-generation and interconnection rates and services for our retail clients.

Procurement & Portfolio Management

Market View

- Historical statistics, trends, and analyses of forward and spot energy markets and drivers (e.g. natural gas).
- Customized monthly reports on market performance (e.g. short position, or load vs. control area loads or power prices).

Market Price Forecasts

- Using La Capra Northeast Market Model (AURORA platform) and Forward Price Curves.
- Energy: peak and off-peak by zone.
- Capacity: ICAP by zone or market.
- Ancillary services: reserves, regulation, etc.
- Renewable Energy Certificates: by technology and by state.

Active Procurement & Portfolio Management

- Load Forecasting: Forecast load requirements and resources output, and project energy position and product requirements.
- Dispatch Models: Create simulation models to forecast cost and budget variance, monitor performance.
- Procurement Strategy: Develop approaches to procuring power supply (from day-ahead to long-term).
- Wholesale Market Interface: Procure short-term energy, prepare and submit load and resource bids to the ISO.
- Procurement Process: Establish the processes and RFP documents or alternative procedures through which to acquire power supply.
- Contract Negotiations: Develop form of power purchase agreement(s) and negotiate details with suppliers.
- Risk Management: Assess and mitigate market risk of each portfolio.
- Monitoring & Evaluation: Assess portfolio performance and product alternatives.
- Budgeting: Prepare monthly, quarterly, seasonal and annual budgets for clients' internal use.

Billing & Settlement

Review and verify billing and settlement statements from the ISO and wholesale suppliers for accuracy.

La Capra Associates • One Washington Mall • Boston, Massachusetts, 02108 • Tel: 617-778-5515 • www.lacapra.com