

BRUCE L. MCDERMOTT 203.772.7787 DIRECT TELEPHONE 860.240.5723 DIRECT FACSIMILE BMCDERMOTT@MURTHALAW.COM

September 9, 2022

Melanie A. Bachman, Esq. Executive Director Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Re: Petition No. 1533 - ReNew Developers, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a customer-side 4.99-megawatt fuel cell facility and associated equipment to be located at 42 Old Amston Road, Colchester, Connecticut.

Dear Ms. Bachman:

Enclosed for filing with the Connecticut Siting Council ("Council") are ReNew Developers, LLC's responses to the Council's first set of interrogatories dated August 25, 2022.

An original and fifteen (15) copies of this filing will be hand delivered to the Council.

Should you have any questions regarding this filing, please do not hesitate to contact me.

Very truly yours,

Bruce L. McDermott

Enclosure

Murtha Cullina LLP 265 Church Street New Haven, CT 06510 T 203.772.7700 F 203.772.7723

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-1: Referencing pp. 7 and 8 and Exhibit C of the Petition, has the Town of

Colchester (aside from the letter provided in Exhibit C of the Petition), the Town of Hebron or abutters provided comments to ReNew since the

Petition filing? If so, please summarize the comments.

A- CSC -1: ReNew has not received any comments from abutters or the Town of

Hebron.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-2: What is the cost of the proposed project?

A-CSC-2: The anticipated cost of the project is approximately \$20 million.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-3: Is the project, or any portion of the project, proposed to be undertaken by

state departments, institutions or agencies, or to be funded in whole or in

part by the state through any contract or grant?

A-CSC -3: No, the Project will neither be undertaken nor funded by a state entity.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-4: Was this project selected in a state or public utility-sponsored

procurement?

A-CSC-4: No, the Project was not selected for construction in a state or public utility-

sponsored procurement.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-5: The Petitioner proposes a mix of 325 kW, 300 kW, 249.9 kW and 250 kW

fuel cell units. However, Exhibit B of the Petition includes specifications sheets for 300 kW and 250-kW fuel cells. Please provide a specifications

sheet for the 325 kW and 249.9 kW fuel cell units.

A-CSC-5: See attached specification sheet for the 325 kW fuel cell Bloom Energy

Servers (Exhibit CSC 5-1). The technical specifications for the 249.9 kW and the 250 kW fuel cell Bloom Energy Servers are fundamentally the same. For this reason, the specification sheet for the 250 kW units lists the design and operating parameters for the 249.9 kW fuel cell Bloom

Energy Server as well.

The Bloom Energy Server 5

Using solid oxide fuel cell technology, Bloom Energy Servers convert natural gas, biogas, or hydrogen into electricity at high efficiency and without combustion, significantly reducing environmental impacts.

Bloom Energy's solid oxide fuel cell (SOFC) platform provides an electrochemical pathway to convert fuel directly to electricity without combustion. Our systems can run on natural gas, biogas, and hydrogen, and our modular platform approach provides a pathway to upgrade existing systems to align with the sustainability goals of our customers over time.

Bloom is working with two leading non-profit organizations, MiQ and Equitable Origin, to help set a responsible standard for sourcing natural gas. Responsibly sourced gas is natural gas whose production has been evaluated across a range of stringent social, environmental, and governance criteria, including climate, community, and labor issues, to ensure that the highest standards and best practices were used to minimize greenhouse gases across its entire value chain.





Clean

Our systems produce near zero criteria pollutants (NOx, SOx, and particulate matter) and far fewer carbon emissions than legacy technologies.



Reliable

Bloom Energy Servers are designed around a modular architecture of simple repeating elements. This enables us to generate power 24 x 7 x 365 and can be configured to eliminate the need for traditional backup power equipment.



Resilient

Our system operates at very high availability due to their fault-tolerant design and use of the robust natural gas pipeline system. Bloom Energy Servers have survived extreme weather events and other incidences and have continued providing power to our customers.



Simple Installation and Maintenance

Our Energy Servers are 'plug and play' and have been designed in compliance with a variety of safety standards. Bloom Energy manages all aspects of installation, operation and maintenance of the systems.

Specifications

Outputs

Nameplate power output (net AC) — 325 kW

Load output (net AC) — 325 kW

Electrical connection — 480V, 3-phase, 60Hz

Inputs

Fuels	. Natural gas, directed biogas
Input fuel pressure	. 10-18 psig (15 psig nominal)
Water	. None during normal operation

Efficiency

Cumulative electrical efficiency ____ 65-53% (LHV net AC)¹
Heat rate (HHV) _____ 5,811-7,127 Btu/kWh

Emissions²

NOx	0.0017 lbs/MWh
SOx	Negligible
CO	0.012 lbs/MWh
VOCs	0.01 lbs/MWh
CO ₂ @ stated efficiency	679–833 lbs/MWh on natural ga carbon neutral on directed bioga

1 65% LHV efficiency verified by ASME PTC 50 Fuel Cell Power Systems Performance Test 2 NOx and CO measured per CARB Method 100, VOCs measured as hexane by SCAQMD Method 25.3

Physical Attributes and Environment

Weight	- 15.8 tons
Dimensions (variable layouts)	- 17'11" x 8'8" x 6'9" or 32'3" x 4'4" x 7'2"
Temperature range	20° to 45° C
Humidity	_ 0%–100%
Seismic vibration	BC site class D
Location	- Outdoor
Noise	<70 dBA @ 6 feet

Codes and Standards

Complies with Rule 21 interconnection and IEEE1547 standards.

Exempt from CA Air District permitting; meets stringent CARB 2007 emissions standards.

An Energy Server is a Stationary Fuel Cell Power System. It is Listed by Underwriters Laboratories, Inc. (UL) as a 'Stationary Fuel Cell Power System' to ANSI/CSA FC1-2014 under UL Category IRGZ and UL File Number MH45102.

Additional Notes

Access to a secure website to monitor system performance & environmental benefits. Remotely managed and monitored by Bloom Energy. Capable of emergency stop based on input from the site.



Bloom Energy Headquarters 4353 North First Street San Jose, CA 95134 USA

bloomenergy.com

Flexible. Future Proof.

Accelerate your path to a zero-carbon future.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-6: What is the projected construction schedule for the data center? Will the

proposed fuel cell facility be installed before the data center?

A-CSC-6: The data center is projected to be constructed concurrently with the fuel

cell facility, for which construction is expected to commence at the end of

September 2023 and be completed by the end of June 2024.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

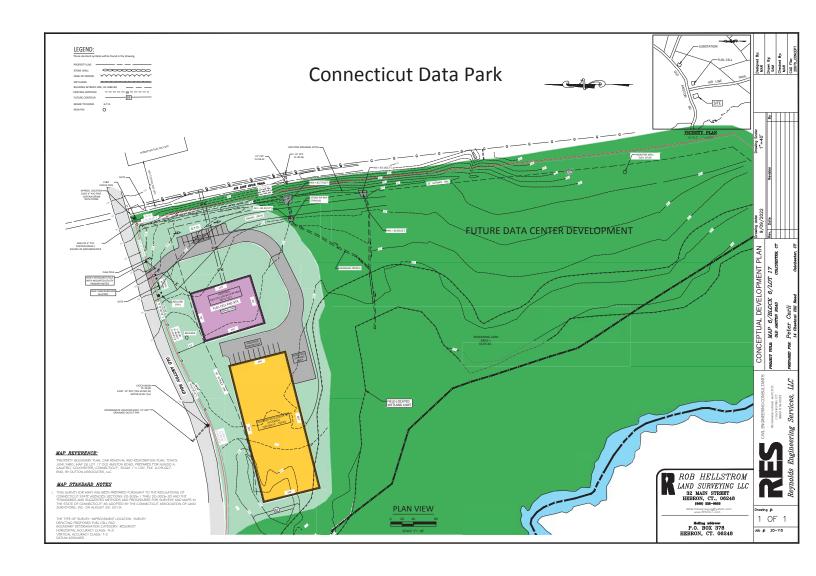
Petition No. 1533 Page 1 of 1

Q-CSC-7: Provide site plans showing the location of the data center in relation to the

proposed fuel cell facility.

A-CSC-7: Site plans depicting the location of the data center relative to the proposed

fuel cell facility are attached. See Exhibit CSC 7-1.



September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-8: What percentage of the data center's electrical power needs/load is

projected to be served from the proposed fuel cell facility?

A-CSC-8: Approximately 99% of the data center's electrical power needs is

projected to be served from the fuel cell facility. The remaining 1%, which is expected to be utilized during fuel cell maintenance downtime, will

come from Eversource Energy.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-9: Would the facility operate as an emergency generating device or under an

ISO-NE or Eversource Energy demand response program?

A-CSC-9: No. The fuel cell facility is intended to only produce power for on-site use

by the data center.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-10: Would the facility be capable of providing uninterruptable power?

A-CSC-10: Yes. The fuel cell system has black start capability; therefore, the fuel cell

facility will be capable of acting as an uninterruptable power source for the

data center.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-11: Referencing Petition p. 5, "The Project will be interconnected for backup

power to Eversource's Judd Brook Substation." Explain.

A-CSC-11: ReNew proposes that backup power be provided from the grid at

Eversource's Judd Brook Substation if the fuel cell plant goes down. Other on-site backup power generation will be available, if necessary, to

supplement the Eversource grid.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-12: Referencing the letter from the Town of Colchester in Exhibit C of the Petition, the First Selectman refers to the proposed project as "pre-positioned to serve the generation component of a future community microgrid..." Explain.

A-CSC-12: Initially, when the Project was discussed with the First Selectman from the Town of Colchester, ReNew was contemplating the option of constructing a fuel cell facility that could support a microgrid. However, the Company ultimately opted for the Project, as proposed, which the First Selectman had been informed about.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-13: Has an interconnection study been conducted by Eversource? If so, what

is the status of the interconnection study?

A-CSC-13: No. The Interconnection Application was filed on April 11, 2022, but

Eversource has not requested an interconnection study at this time. The Company anticipates that an interconnection study will be required and

that it will take no more than 180 days to complete.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-14: Is the project interconnection required to be reviewed by ISO-NE?

A-CSC-14: The Company does not intend to export power to the grid. For this

reason, ReNew does not anticipate that the project interconnection will

need to be reviewed by ISO-NE.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-15: Would the proposed gas and water lines be connected to the same water and gas mains as the 10 MW fuel cell facility located at 160 Old Amston Road (Petition No. 1387) referenced on p. 2 of the Petition? How would the proposed facility impact gas and water supply to both facilities?

A-CSC-15: Yes, the proposed gas and water lines will be connected to the water and gas mains utilized by the facility at 160 Old Amston Rd. The Project is not expected to negatively impact the gas and water supply at both facilities. Yankee Gas has reserved the required natural gas for the Project and the Project requires minimal water usage - only 1,536 gallons on start-up.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-16: Provide the distance of the existing water and gas mains from the

proposed facility interconnection points.

A-CSC-16: The existing water main is located approximately 265 feet from the

proposed facility interconnection point, while the gas main is located at

approximately 175 feet from the interconnection point.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-17: Provide the distance of the new utility pole from the proposed facility

interconnection point.

A-CSC-17: At this time the Project's Interconnection Application has not been

approved. For this reason, Eversource has not determined the exact

location of the facility's interconnection point.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-18: Referring to Petition p. 22, identify the media to be used for pipe cleaning

procedures at the proposed facility in accordance with Public Act 11-101, An Act Adopting Certain Safety Recommendations of the Thomas

Commission and Connecticut General Statutes § 16-50ii.

A-CSC-18: Nitrogen will be used for the pipe cleaning procedures at the proposed

facility in accordance with Public Act 11-101.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson:

Petition No. 1533 Page 1 of 1

Q-CSC-19: What measures would be employed during construction of the proposed

facility to protect the Town-designated Aquifer Protection Zone?

A-CSC-19: An Aquifer Protection Zone Resource Protection Plan will be implemented.

See Exhibit CSC 19-1. The measures outlined in the attached plan will be incorporated into the Project's construction drawings. These measures include education of all contractors and sub-contractors prior to initiation of work on the site; installation of erosion controls; petroleum materials storage and spill prevention; herbicide, pesticide, and salt restrictions; and

reporting.

ENVIRONMENTAL NOTES - RESOURCES PROTECTION MEASURES

PUBLIC WATER SUPPLY WATERSHED PROTECTION PROGRAM

As a result of the project's location within a town-designated aquifer protection zone, the following Best Management Practices ("BMPs") shall be implemented by the Contractor to avoid unintentional impacts to possible public drinking water resources during construction activities. BMPs associated with this resource will be implemented regardless of the time of year.

The town-designated aquifer protection zone protection measures included herein satisfy typical BMPs recommended by the Drinking Water Section of the Connecticut Department of Public Health.

It is of the utmost importance that the Contractor complies with the requirement for the installation of protective measures and the education of its employees and subcontractors performing work on the project site. All-Points Technology Corporation, P.C. ("APT") will serve as the Environmental Monitor for this project to ensure that these protection measures are implemented properly and will provide an education session on the project's location within a town-designated aquifer protection zone prior to the start of construction activities. The Contractor shall contact Dean Gustafson, Senior Wetland Scientist at APT, at least 5 business days prior to the pre-construction meeting. Mr. Gustafson can be reached by phone at (860) 552-2033 or via email at dgustafson@allpointstech.com.

The Town of Colchester will be contacted at least 3 business days prior to the pre-construction meeting with an invitation to attend the pre-construction meeting. Town of Colchester personnel shall also be allowed to periodically inspect this project during construction to ensure that the aquifer protection zone is being adequately protected.

This resources protection program consists of several components including: education of all contractors and sub-contractors prior to initiation of work on the site; installation of erosion controls; petroleum materials storage and spill prevention; herbicide, pesticide, and salt restrictions; and, reporting.

1. Contractor Education:

- a. Prior to work on site and initial deployment/mobilization of equipment and materials, the Contractor shall attend an educational session at the preconstruction meeting with APT. This orientation and educational session will consist of information such as, but not limited to, the need to follow the aquifer protection zone protection measures.
- b. The Contractor will be provided with phone (24-hour contact) and email for Town of Colchester personnel to immediately report any releases of sediment, fuel or hazardous materials.
- c. The Contractor's Project Monitor will be provided with cell phone and email contacts for APT personnel to immediately report any releases from the project during construction.
- d. APT will also post Caution Signs throughout the project site for the duration of the construction project providing notice of the environmentally sensitive

2. Erosion and Sedimentation Controls/Isolation Barriers

- a. Plastic netting used in a variety of erosion control products (i.e., erosion control blankets, fiber rolls [wattles], reinforced silt fence) has been found to entangle wildlife, including reptiles, amphibians, birds and small mammals. No permanent erosion control products or reinforced silt fence will be used on the project. Temporary erosion control products that will be exposed at the ground surface and represent a potential for wildlife entanglement will use either erosion control blankets and fiber rolls composed of processed fibers mechanically bound together to form a continuous matrix (netless) or netting composed of planar woven natural biodegradable fiber to avoid/minimize wildlife entanglement.
 - b. Installation of erosion and sedimentation controls, required for erosion control compliance and creation of a barrier to possible migrating/dispersing wildlife, shall be performed by the Contractor if any soil disturbance occurs or heavy machinery is anticipated to be used on slopes. The Environmental Monitor will inspect the work zone area prior to and following erosion control barrier installation.
- The Contractor is responsible for daily inspections of the sedimentation and erosion controls for tears or breeches and accumulation levels of sediment, particularly following storm events that generate a discharge, as defined by and in accordance with applicable local, state and federal regulations. The Contractor shall notify the APT Environmental Monitor within 24 hours of any breeches of the sedimentation and erosion controls and any sediment releases beyond the perimeter controls. The APT Environmental Monitor will provide periodic inspections of the sedimentation and erosion controls throughout the duration of construction activities only as it pertains to their function to protect the town-designated aguifer protection zone. Such inspections will generally occur once per month. The frequency of monitoring may increase depending upon site conditions, level of construction activities in proximity to sensitive receptors, or at the request of regulatory agencies. If the Environmental Monitor is notified by the Contractor of a sediment release, an inspection will be scheduled specifically to investigate and evaluate possible impacts to resources.
- d. Third party monitoring of sedimentation and erosion controls will be performed by other parties, as necessary, under applicable local, state and/or federal regulations and permit conditions.
- e. The extent of the erosion controls will be as shown on the site plans. The Contractor shall have additional erosion control materials should field conditions warrant extending the fencing as directed by the Environmental Monitor.
- f. All silt fencing and other erosion control devices shall be removed within 30 days of completion of work and permanent stabilization of site soils. If fiber rolls/wattles, straw bales, or other natural material erosion control products are used, such devices will not be left in place to biodegrade and shall be promptly removed after soils are stable so as not to create a barrier to wildlife movement. Seed from seeding of soils should not spread over

fiber rolls/wattles as it makes them harder to remove once soils are stabilized by vegetation.

3. Petroleum Materials Storage and Spill Prevention

- a. Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill due to the project's location within an aquifer protection zone.
- b. A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the Contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper and timely disposal off site in accordance with applicable local, state and federal laws.
- c. Servicing of machinery shall not be performed on the project site and shall only be completed outside of the aquifer protection zone.
- d. At a minimum, the following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.
 - i. Petroleum and Hazardous Materials Storage and Refueling
 - Refueling of vehicles or machinery shall occur a minimum of 100 feet from wetlands and shall take place on an impervious pad with secondary containment designed to contain fuels.
 - 2. Fuel and other hazardous materials shall not be stored within the aquifer protection zone, which encompasses the entire subject property, during non-working hours.
 - Any fuel or hazardous materials that must be kept on site during working hours shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands.
 - ii. Initial Spill Response Procedures
 - 1. Stop operations and shut off equipment.
 - 2. Remove any sources of spark or flame.
 - 3. Contain the source of the spill.
 - 4. Determine the approximate volume of the spill.
 - 5. Identify the location of natural flow paths to prevent the release of the spill to wetlands.
 - 6. Ensure that fellow workers are notified of the spill.
 - iii. Spill Clean Up & Containment
 - 1. Obtain spill response materials from the on-site spill response kit. Place absorbent materials directly on the release area.
 - 2. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
 - 3. Isolate and eliminate the spill source.
 - 4. Contact the Town of Colchester along with appropriate local, state and/or federal agencies, as necessary.

5. Contact a disposal company to properly dispose of contaminated materials.

iv. Reporting

- 1. Complete an incident report.
- 2. Submit a completed incident report to local, state and federal agencies, as necessary, including the Town of Colchester and the Connecticut Siting Council.

4. Herbicide, Pesticide, and Salt Restrictions

- a. The use of herbicides and pesticides at the Facility shall be avoided when possible. In the event herbicides and/or pesticides are required at the Facility, their use will be used in accordance with current Integrated Pest Management ("IPM") principles with particular attention to avoid applications within 100 feet of wetlands.
- b. Maintenance of the Facility during the winter months shall not include the application of salt or similar products for melting snow or ice.

5. **Reporting**

- a. Compliance Monitoring Reports (brief narrative and applicable photos) documenting each APT inspection will be submitted by APT to the permittee for compliance verification. Any observations of corrective actions will be included in the reports.
- b. Following completion of the construction project, APT will provide a final compliance monitoring report to the permittee documenting implementation of the aquifer protection zone program and monitoring observations. The permittee shall provide a copy of the final compliance monitoring report to the Town of Colchester and Connecticut Siting Council for compliance verification.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson:

Petition No. 1533 Page 1 of 1

Q-CSC-20: Would the proposed stormwater management basin require periodic

maintenance? If so, please provide details.

A-CSC-20: The proposed stormwater management basin will require minimal

maintenance, which will include annual mowing and inspections for signs

of erosion, trash, and proper outlet functionality.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson:

Petition No. 1533 Page 1 of 1

Q-CSC-21: Would landscaping be installed? If so, provide details and drawings

showing the landscaping locations and design.

A-CSC-21: No landscaping is proposed.

September 9, 2022

ReNew Developers, LLC Witnesses: Peter Carli and

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-22: Provide a decommissioning plan for the proposed facility.

A-CSC-22: Upon the end of the Facility's 25-year operational life, the decommissioning plan is as follows:

- Isolate, lock out and disconnect all piping for natural gas fuel infrastructure at the gas utility meter set assembly at the site to the fuel processing modules at each Energy Server. Remove gas piping to the unit.
- Isolate, lock out and disconnect all electrical feeders to the Energy Servers and associated upstream electrical distribution required to safely disconnect the solution from the point of common coupling. This includes power to all the Energy Servers and balance of plant ancillary equipment.
- Return the portion of the Site where the fuel cell facility is located to its original condition with the exception of the Site foundations and any retaining walls.
- 4. The decommissioned fuel cells will be removed from the Site, disassembled, and the parts will be separated and either recycled, reclaimed or transported to a landfill.

September 9, 2022

Witnesses: Peter Carli and ReNew Developers, LLC

John Matheson

Petition No. 1533 Page 1 of 1

Q-CSC-23: Provide a Spill Prevention, Control and Countermeasure Plan that

includes mitigation measures as well as complete contact information for

the spill response contractor.

A-CSC-23: Spill prevention, control and countermeasure plan details are included in the Aquifer Protection Zone Resource Protection Plan referenced in the

response to interrogatory CSC-19.

The spill response contractor contact information will be provided to the Council when a contractor is selected for the Project and prior to the

initiation of any construction activities.