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June 29, 2022

VIA ELECTRONIC FILING

Melanie Bachman
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Docket 492 - Gravel Pit Solar – Application for Certificate of Environmental Compatibility and Public Need to The Connecticut Siting Council Regarding a Solar Project in East Windsor, Connecticut

Dear Ms. Bachman:

I am writing on behalf of my client, Gravel Pit Solar ("GPS") in connection with this Docket. As you are aware, the Council held a meeting on February 10, 2022 where it approved GPS's second Development and Management Plan ("D&M Plan") submittal in the above-referenced Docket. In connection with that approval, the Council placed three conditions on its approval:

1. Submission of stamped racking system drawings prior to installation;
2. Submission of a final Spill Prevention, Control and Countermeasure Plan ("SPCC Plan") for the project; and
3. Submission of the definitions of the term "damaging rainfall event" as found on pp. 13 and 14 of the Stormwater Pollution Control Plan that was submitted with the D&M Plan and the term "critical milestones" as found on page 17 of the second D&M Plan submittal.

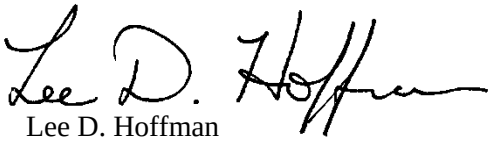
We anticipate that stamped racking system drawings will be submitted within the next month and will certainly be submitted to the Council prior to the installation of the racking system. With respect to the requirement for the submission of an SPCC Plan, the project's SPCC Plan is enclosed with this letter.

With respect to the requested definitions, the definition of the term "damaging rainfall event" means a precipitation event that is linked to a named tropical storm, hurricane, or disaster (i.e. an event that is storm that is recognized by the National Oceanic and Atmospheric Administration ("NOAA"). The term "critical milestones" is defined as those milestones that would necessitate weekend work or longer work hours in order to achieve important Project schedule achievements. Critical milestones would include: resolving any potential worker or public safety concerns, environmental protection measures, repair or reestablish temporary and/or permanent stormwater measures, make-up work due to poor weather conditions, timing of some construction material shipment deliveries, time sensitive activities that should not be interrupted unless absolutely necessary (i.e. trench excavation and backfilling and HDD borings),

and work related to meeting planned transmission outages as part of the Project interconnection to the electrical grid.

If there are any questions concerning this submittal, please contact me directly. I certify that a copy of this submittal has been submitted to the parties listed on the service list for this Docket.

Sincerely,



Lee D. Hoffman

Enclosure

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

Gravel Pit Solar Construction

Windsorville Road and Plantation Road
East Windsor, Connecticut

PREPARED FOR

Gravel Pit Solar, LLC

1166 Avenue of the Americas, 9th Floor
New York, NY 10036

PREPARED BY

100 Great Meadow Road
Suite 200
Wethersfield, Connecticut
860.807.4300

April 2022

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Certification

This Spill Prevention, Control and Countermeasures (SPCC) Plan has been prepared in accordance with the federal requirements Title 40 CFR, Part 112, Oil Pollution Prevention. The plan is being self-certified by the constructors of the Gravel Pit Solar facility.

The undersigned has read, fully understands and agrees to comply with this SPCC Plan written for the Gravel Pit Solar construction site (the "Facility") located at Windsorville Road and Plantation Road in East Windsor, Connecticut attached hereto and incorporated herein. The undersigned agrees to commit the necessary manpower, equipment, and materials to expeditiously control and remove any quantity of oil discharged at the Facility that may be harmful to the public or environment.

By:_____ Date:_____

Personnel:_____

Title:_____

Company:_____

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SPCC Plan Revision Log

Date	Revision by	Description of Revision	Signature

3

General Requirements 112.7(a)

3.1 General Information

Vanasse Hangen Brustlin, Inc. (VHB) has prepared this Spill Prevention, Control and Countermeasures (SPCC) Plan as a component of Gravel Pit Solar, LLC, preparedness plan for a response to petroleum product or liquid hazardous material releases during the construction of a 120-megawatt (MW) alternating current (AC) ground-mounted solar photovoltaic system on approximately 726 acres in East Windsor, Connecticut ("the Facility"). The Clean Water Act requires facilities to develop an SPCC Plan as set forth in Title 40 CFR, Part 112, Oil Pollution Prevention. This SPCC Plan discusses spill prevention and readiness of response materials, equipment, and procedures. The purpose of the SPCC Plan is two-fold:

a) To minimize the chances that a spill of oil will occur; and

b) To prepare for a proper response in case a spill occurs.

This SPCC Plan is written in compliance with the latest version of federal regulations Title 40 CFR, Part 112, Oil Pollution Prevention, which became effective on January 14, 2010.

This section provides a profile of the Facility location and description, applicable regulations for oil and hazardous materials control at the Site, and information on SPCC Plan availability, review, and amendment.

3.1.1 Facility Location and Description

This SPCC Plan has been developed for the proposed construction of the Gravel Pit Solar project, a ±120 MW-AC photovoltaic solar energy facility (the "Project"). The Project will consist of the installation of ground-based solar racks, panels, combiner boxes, power conditioning systems (i.e. inverters), and buried conduit. The Project will also have access roads, perimeter security fences, and paths around the perimeter. The Project will be sited on nine (9) parcels of land in

East Windsor, Connecticut, with access provided from Apothecaries Hall Road, Windsorville Road and Plantation Road as detailed below:

Parcel ID	Area (Acres)
057-65-001	98.0
057-65-002	3.0
048-65-007	124.8
037-65-005A	14.63
025-49-017C	86.5
025-49-017A	124.44
016-49-007	118.66
016-50-001	156.24
Total Area	726.27

The Site is generally bounded by forest with residential developments to the northeast on Windsorville Road and Apothecaries Hall Road. Ketch Brook flows from east to west approximately through the center of the combined parcels. Refer to **Figures 1-5** for maps of the site including surrounding features, wetlands, and groundwater resources. Refer to **Figures 6 and 7** for Site plans depicting oil storage locations and general stormwater flow directions.

The Project Site occupies near level to gently sloping terrace position; however, steep slopes exist today within the active gravel pits and in the riparian buffers off the edges of the farm fields. Most of the Site consists of active farmland and active gravel pits with forest remaining around the site perimeters. Most of the Project development will be on farm fields or gravel pits, but approximately 83 acres of forest will also be cleared. Ketch Brook bisects the parcels and contains a wetland system, and various wetlands exist around the Site in some of the gravel pit and kettle hole areas.

The SPCC Plan has been prepared for use during construction of the Project. Following construction, an updated SPCC Plan will be prepared covering the post-construction Facility activities.

3.1.2 Scope of Onsite Activities

This SPCC Plan is meant for use during construction of the Gravel Pit Solar facility. Prior to operation of the Facility, this Plan should be updated to reflect the storage of dielectric fluid in transformers throughout the Site and the removal of temporary construction equipment. This SPCC Plan covers the following activities that will be conducted as part of construction of the Project:

- One 1,000-gallon off-road diesel (dyed red) tank located in the construction laydown area immediately to the south of Plantation Road.
- One 500-gallon on-road diesel tank located in the construction laydown area immediately to the south of Plantation Road.
- One 1,000-gallon off-road diesel (dyed red) tank located in the construction laydown area immediately to the south of Windsorville Road by the northeast corner of the project.
- One 500-gallon on-road diesel tank located in the construction laydown area immediately to the south of Windsorville Road by the northeast corner of the project.

- A total of up to 500 gallons of diesel fuel stored in portable electric generators located throughout the site to support construction activities.
- Fueling of motive equipment such as excavators and other construction equipment.

3.1.3 Applicable Federal and State Regulations

The Facility stores oil in the above-described containers on-site. The storage of greater than 1,320 gallons of oil in ASTs on-site requires the Facility to maintain an SPCC Plan in accordance with United States Environmental Protection Agency (EPA) regulation Title 40 CFR 112, Oil Pollution Prevention.

3.1.3.1 Federal Regulations

Section 311 of the Federal Water Pollution Control Act/Clean Water Act establishes the authority upon which the EPA issues regulations to mitigate impacts to the environment from oil spills (Oil Pollution Prevention, Title 40 CFR 112). The regulations presently in effect were issued in 1973 and amended in 1974, 1976, 1990, 2002, and 2009. These regulations require the preparation and implementation of a SPCC Plan that is designed to minimize the discharge of oil into navigable waters or adjoining shorelines, or waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or Deepwater Port Act, or affecting certain natural resources. The regulations stipulate that an SPCC Plan should include a description of drainage controls, containment and diversionary structures, monitoring equipment, personnel training programs, inspections and record systems, security, and spill clean-up procedures.

Under these regulations, facilities subject to Title 40 CFR 112 include those that meet the following conditions:

- If the Facility stores "oil of any kind" (Title 40 CFR 112); and
- Total aboveground storage is greater than 1,320 gallons (aggregate total). Containers which hold less than 55 gallons in volume are excluded from the calculation of total volume and as a result are excluded from the Plan; and/or
- Total underground storage is greater than 42,000 gallons. The following underground storage tanks are excluded from this Plan: 1) completely buried tanks subject to all the technical parts of Title 40 CFR 280 or 281, 2) tanks used for consumptive purposes such as heating, and 3) permanently closed tanks are excluded; and
- The Facility can "reasonably" be expected to discharge oil to "navigable waters of the United States" (without consideration of manmade structures designed to prevent a spill from reaching water).

With regard to the determination of applicability, Part 112 defines oil to include "oil of any kind or in any form, including, but not limited to petroleum, fuel oil, sludge, oil refuse, animal fats, vegetable oils and oil mixed with wastes other than dredged spoils" (Title 40 CFR, Part 112.2). The Facility meets these requirements due to the storage of aboveground oil with a combined estimated total capacity of 2,000 gallons and is, therefore, subject to Part 112.

3.1.3.2 State Regulations

The Connecticut Department of Energy and Environmental Protection (CTDEEP) has promulgated hazardous waste regulations applicable to hazardous waste management (CGS 22a-449(c)-102). These regulations incorporate federal RCRA regulations for hazardous waste management. In addition, CTDEEP has established reporting and response requirements for oil and hazardous material releases as part of the State's oil spill response Statutes (CGS 22a-450).

Connecticut State Fire Safety Code Sec. 100 references the National Fire Protection Association (NFPA) Standard 1.0 Fire Code. NFPA Standard 1.0 references NFPA Standard 30: Flammable and Combustible Liquids Code, which sets forth the state regulations regarding the storage of flammables and combustibles including petroleum products and oils. This SPCC plan is intended to satisfy the requirements of 40 CFR 112 and State regulations CGS 22a-450 and Connecticut State Fire Safety Code Sec. 100.

3.1.3.3 Connecticut Department of Public Health (DPH)

The Connecticut Department of Public Health (DPH) has published Best Management Practices (BMPs) for construction sites located within a public drinking water supply area. As shown in **Figure 5**, Connecticut GAA and GA Groundwater Quality areas (indicative of a potential or current drinking water supply area) are present in the northern portion of the Site. Additionally, a wetland system is present throughout the northern and eastern edges of the project. Therefore, construction activities shall comply with the DPH BMPs for construction sites provided in Appendix H.

In addition to the procedures set forth in this SPCC Plan, notification of the project start date should be sent to the Public Water System as soon as it has been determined. Public Water System personnel should be granted daily site access to review compliance with site best management practices. The Public Water System, DPH Drinking Water Section (860-509-7333 OR after hours at 860-509-8000), and appropriate sections of the Department of Energy and Environmental Protection must be notified immediately of any chemical/fuel spill or any major failure of an erosion and sedimentation control at the construction site. Emergency telephone numbers and a statement identifying the construction site as a sensitive public water supply area should be posted where they are readily visible to contractors and other on-site personnel. A note should be added to the construction documents stating the sensitivity of the area

3.1.4 Plan Review and Amendment

Title 40 CFR 112 requires that this SPCC Plan shall be reviewed regularly by the Facility and amended, as necessary. The SPCC shall be reviewed and updated, at a minimum, at a frequency of once every five years. Furthermore, the SPCC Plan will be reviewed more frequently if:

- The inventory or location of spill containment equipment changes;
- Changes to the construction plans, operation, maintenance, or oil storage modifications affect the potential for discharge of petroleum or hazardous substances; or
- The applicable regulations are revised.

The Emergency Response Coordinator shall have authority to make editorial corrections and changes to the list of the Emergency Spill Response Contractor. The Emergency Response Coordinator shall notify all affected personnel of the corrections/changes and maintain a record of the changes in **Section 2** of the Plan.

3.1.5 Plan Availability and Distribution

Copies of the SPCC Plan are maintained at construction trailers located immediately to the south of Plantation Road within the Project area. These copies of the SPCC Plan are available for inspection by designated representatives of the EPA, CTDEEP, and other authorized governmental agencies including local agencies.

3.2 Storage Facilities Inventory

A total of two types of storage facilities for oil will be present at the Facility in quantities greater than 55-gallons during construction of the Project:

- Diesel fuel (on-road and off-road) is stored in four steel holding tanks located in the construction laydown areas immediately to the south of Plantation Road and Windsorville Road (refer to Figures 6 & 7).
- Diesel fuel is stored throughout the Site in a total of up to four portable generators, each containing approximately 100 gallons of diesel fuel. The final location and type of diesel generator will depend on specific project needs.
- Electrical equipment including transformers and inverters will be installed during construction of the solar array. The transformers will each contain a total of 8,696 gallons of oil. The plan will be updated within six months of the installation of inverters and transformers.

The following table provides a summary of diesel storage facilities present at the Facility during construction of the Project:

Tank ID	Location	Size (gal.)	Contents	Year Installed	Status	Protection
AST-001	Construction laydown area to the south of Plantation Road	1,000	Off-Road Diesel Fuel (Dyed Red)	2021-2022 (planned installation)	Operational	Secondary Containment
AST-002	Construction laydown area to the south of Plantation Road	500	On-Road Diesel Fuel	2021-2022 (planned installation)	Operational	Secondary Containment
AST-003	Construction laydown area to the south of Windsorville Road	1,000	Off-Road Diesel Fuel (Dyed Red)	2021-2022 (planned installation)	Operational	Secondary Containment

AST-004	Construction laydown area to the south of Windsorville Road	500	On-Road Diesel Fuel	2021-2022 (planned installation)	Operational	Secondary Containment
GEN-001 through GEN-004	Construction laydown area to the south of Plantation Road	Approx. 125	Off-Road Diesel	2021-2022 (planned installation)	Operational	Secondary Containment, Level Monitoring

Total Oil Storage Volume: 3,500 gallons

3.2.1 Aboveground Storage

3.2.1.1 Bulk Storage Containers

The Facility maintains 1,000-gallon and 500-gallon UL-142 listed single walled steel ASTs for storage of diesel fuel. The diesel fuel ASTs are located within the construction laydown areas to the south of Plantation Road and Windsorville Road. The ASTs are used to provide diesel fuel for construction equipment and machinery and are periodically filled using tanker trucks from an off-Site vendor. The locations of the ASTs are shown on **Figures 6 & 7**.

3.2.1.2 Diesel Generators

Diesel fuel is stored throughout the Site in a total of up to four portable generators, each containing approximately 100 gallons of diesel fuel. The final location and type of diesel generator will depend on specific project needs.

3.2.1.3 Construction Vehicles and Equipment

Construction vehicles such as gasoline or diesel-powered cars and trucks, and construction equipment such as excavators and backhoes are exempt from the SPCC rule as motive power containers.

Maintenance of construction vehicles shall not be performed on-Site. Additionally, fueling of these vehicles is restricted to designated locations where spill kits are readily available.

3.2.2 Drum Storage

No drums are stored at the Facility.

3.2.3 Hazardous Material Storage

Except for small quantities of gasoline, oil, epoxies, paints, flammable sprays, and cleaning supplies that are stored in flammable cabinets for use in general construction activities, no hazardous materials are stored at the Facility.

3.2.4 Electrical Transformers

Oil-filled electrical transformers will be constructed on-Site during the Project. The transformers are defined as "Oil-Filled Operational Equipment" under 40 CFR Part 112. Each transformer will each contain a total of 8,696 gallons of oil. The plan will be updated within six months of the installation of inverters and transformers.

3.3 Drainage Systems

The Facility currently consists primarily of gravel pits and cultivated farm fields. Farm fields are mostly near level with slopes ranging from one to five percent. Gravel mine areas have much more variable slopes as a result of mining and reclamation activities. The Project also includes some forested areas that are flat to gradually sloping.

There are currently no constructed drainage structures on-Site. However, following construction, stormwater control measures including stormwater retention basins will be installed at the Site. Under existing conditions, stormwater runoff from the Northern Array is generally contained on site by a system of depressions created by gravel extraction. Stormwater runoff from the Central Array generally flows to the east towards the railroad tracks where it is captured by natural depressions, or to the north or west towards Ketch Brook where other natural depressions trap some of the runoff. Stormwater runoff from the Southern Array flows to one of two glacial meltwater valleys which infiltrate runoff and convey the rest off-site to wetlands south of the site in the watershed of the Scantic River.

3.3.1 Stormwater System

The Facility has been designed to maintain existing topography and mimic existing drainage patterns to the maximum extent practicable during construction of the Project. In the majority of the Project Area, permanent turf-forming grasses will be planted to stabilize the soil, cycle nutrients and sequester any residual contaminants remaining from past farming activities. These grasses will improve soil structure and promote infiltration which will lower runoff rates from the operational facility. Existing forest vegetation has been preserved to the maximum extent practicable. The majority of the tree clearing is proposed to protect Project assets from damage and minimize shading. The Project will cut approximately 83 acres of woodland across the entire Project Area.

The only impervious surfaces proposed to be constructed are gravel access roads and small pads for utility equipment. Once operational, vehicular access to the Project will be limited to infrequent maintenance visits. The use of natural depressions and vegetated buffers as well as the proposed stormwater basins will provide water quality treatment for the Project.

Large spills such as a catastrophic failure of an AST or prolonged overfill could cause a release of oil to flow down gradient for a significant distance. A release from either of the two aboveground storage tanks would flow to the east or west of the construction laydown area following the general downward slope of the surrounding topography by sheet flow. Stormwater retention ponds are being constructed as part of the Project in the vicinity of the construction laydown

area, however, there are currently no diversionary structures which would contain an oil spill present at the Facility.

3.3.2 Potable Water System

The Facility is not serviced by municipal water. Any existing wells on-Site will be closed as part of construction activities.

3.3.3 Sewer System

The Facility is not serviced by municipal sewer. Any existing septic systems or cesspools on-Site will be closed as part of construction activities.

3.3.4 Drainage Controls

There are no holding tanks, oil/water separators, or other diversionary structures that would retain or delay a release of oil or hazardous materials included as part of the on-site drainage system for the Facility.

3.4 Material Disposal

The Facility has developed and implemented standard operating procedures to reduce the likelihood of a spill or release of oil at the Site. The standard operating procedures are reviewed and updated on a regular basis. The procedures include general emergency generator maintenance, fuel transfer procedures, and regular tank and generator inspections to reduce the likelihood of a spill or release of petroleum at the Facility. Any waste oil or oil impacted materials generated onsite will be managed and recycled or disposed of in accordance with CTDEEP spill cleanup and hazardous waste regulations.

3.5 Discharge Prevention

Section 5 of this Plan describes secondary containment at the Facility. Facility personnel conduct weekly inspections of the oil storage locations, including the ASTs and diesel generators. Spill response kits are located in the vicinity of all of the oil storage locations. In addition, the diesel fuel ASTs are located in secured areas. Security personnel patrol the project area regularly when construction personnel are not on-Site.

3.6 Emergency Response

This section discusses the personnel, procedures, and equipment available to respond to an emergency arising from the handling or storage of oil and hazardous materials at the Facility. This section is organized into the following components:

- Emergency response organization;
- Emergency response procedures;

- Spill reporting procedures; and
- Liaison with outside agencies.

3.6.1 Emergency Response Actions Organizational Structure and Procedures

This section presents a summary overview of the three groups that comprise the Emergency Response Actions Organization. The groups are composed of individuals who respond to hazardous material releases, Facility evacuations and medical emergencies.

3.6.1.1 Oil and Hazardous Material Releases

The Construction Superintendent or their designee acts as the Emergency Response Coordinator. The Emergency Response Coordinator is the central contact and incident commander for all spills or releases, unless the Broad Brook Fire Department, state or federal agents take command of the incident. The Emergency Response Coordinator is responsible for all Facility activities and response measures during and following a petroleum and/or oil release. When a spill is reported, the Emergency Response Coordinator assesses the impact on operations, determines the level of response, coordinates the response and clean-up activities (including calling in outside professional responders), contacts appropriate regulatory agencies, informs Facility personnel when an evacuation is required and when the emergency is over, and completes required written reports. The Emergency Response Coordinator also organizes training and drills and oversees equipment purchase activities and maintenance. The personnel delegated as Emergency Response Coordinator are listed in Appendix D.

3.6.1.2 Evacuation

In the event an evacuation due to a hazardous materials release, spill, or fire is necessary, procedures have been established to coordinate the evacuation. The Emergency Response Coordinator or their designee makes the decision to evacuate the Facility, coordinates traffic flow during the evacuation, and makes the determination when the Facility is safe for re-entry.

3.6.1.3 Medical Emergencies

For medical emergencies, the Emergency Response Coordinator or their designee and security personnel will contact an ambulance service or notify on-site first aid personnel that are trained to respond to medical emergencies during an oil or hazardous material release.

3.6.2 Emergency Response Procedures

3.6.2.1 Oil or Hazardous Material Releases

Construction staff will notify the Construction Superintendent, who is also acting as the Emergency Response Coordinator, in the event of a spill. Based on the size and type of spill the Emergency Response Coordinator will contact the appropriate agencies such as the Broad Brook Fire Department, CTDEEP, and Emergency Spill Response Contractor who would manage and/or clean up the spill.

3.6.2.2 Evacuation

If a condition that requires an evacuation occurs, the Emergency Response Coordinator and staff will ensure that all personnel are evacuated from the Facility to safe areas.

3.6.2.3 Medical Emergencies

In case of a medical emergency, the Emergency Response Coordinator or their designee and security personnel will contact the ambulance service, stay with the injured person (if not in any physical danger) until the ambulance arrives. Security is contacted for all medical emergencies.

3.6.3 Spill Reporting Procedures

Depending on the nature of the spill or discharge to the environment, it may also be necessary to contact regulatory agencies. The agency to be contacted will depend on the nature and amount of the spilled material and the location of the spill. The local emergency agencies that may need to be contacted are provided in Appendix E. The criteria for reporting a petroleum release and the agencies that must be contacted are provided in Appendix F.

The Emergency Response Coordinator is responsible for notifying the appropriate agencies. The Broad Brook Fire Department must be notified immediately if a spill or release poses a risk of fire or danger to the public. The CTDEEP must be contacted immediately in the event of an uncontrolled spill or release of petroleum. The EPA must be notified of oil discharges which cause a sheen or discoloration on surface water, spills that are equal to or greater than 1,000 gallons or discharges equal to or greater than 42 gallons that occur more than twice in a 12-month period.

The typical information that may be required during notification includes:

- Facility name and address;
- Telephone number;
- Person making the notification;
- Facility contact for follow-up information;
- Date and time of spill or release;
- Material spilled or released;
- Estimated volume of spill or release;
- Source of spill or release;
- Cause of spill or release;
- Media affected by the spill or release;
- Actions being implemented to stop or control the spill or release;
- Name of the Emergency Spill Response Contractor;
- Name of Licensed Site Professional;
- Damage or injuries caused by the spill or release;
- Other agencies notified of the spill or release.

3.6.4 Liaison with Outside Agencies

The Facility uses outside professional response organizations to respond to emergencies. A list of local outside emergency agencies is provided in Appendix D.

3.7 Deviations from SPCC Plan Requirements

This SPCC Plan does not deviate from the requirements set forth in 40 CFR 112, Oil Pollution Prevention regulations.

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Fault Analysis 112.7(b)

When there is a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), the spill plan should include a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of a major equipment failure.

4.1 Spill History

No spills have been recorded at the Facility under the current ownership. A review of available files from the CTDEEP Emergency Response Unit was conducted and no oil spills within the boundaries of the Facility were identified. However, there may have been historical spills which were not captured by the review.

4.2 Potential Release Locations

Based on the documented releases at the Facility, there are no known sources of recurrent leaks from onsite equipment or tanks. Therefore, it is not possible with a high degree of certainty to predict the direction, rate of flow, and total quantity of oil that could be discharged as a result of equipment failures at the Facility.

4.3 Potential Flow Paths

For planning purposes, as an example for worst case discharge scenario, one of the 1,000-gallon off-road diesel tanks was selected as the maximum potential discharge scenario.

4.3.1 Off-Road Diesel Tank

The most likely release from one of the 1,000-gallon off-road diesel tank is a spill during filling. The maximum estimated discharge quantity of a spill which occurred during tank filling is approximately 150 gallons (i.e. 30 gallons per minute discharged 5 minutes from a tanker truck). The tanks will be situated on a high point within the construction laydown areas, which slope gradually downward to the west and southeast. Oil would travel by sheet flow in those directions in the event of a spill. The nearest water body, Ketch Brook, is more than 900 feet south of the northern tank and more than 1,500 feet to the northwest of the southern tank. In the event of a large spill from an off-road diesel tank, which is not controlled by the secondary containment dike, active spill containment measures such as construction of earthen berms and contaminated soil recovery could be implemented prior to oil reaching a navigable waterway.

Small spills which occur during overfilling up to about 20 gallons of oil can be contained by the secondary containment dikes or managed by on-Site spill kits. Spills will be immediately reported to CTDEEP and the spill response contractor may be contacted to handle larger spills.

4.4 Threat of Oil Release to Navigable Waters

It is unlikely that a release of oil from the Facility would reach a navigable water course through a release of a large quantity of diesel fuel. There are no nearby catch basins which lead to a navigable waterway. The nearest water body, Ketch Brook, is located at a distance of more than 900 feet from the northern tanks and more than 1,500 feet from the southern oil storage tanks. A large release of diesel fuel up to the AST capacity of 1,000 gallons that could not be readily contained and recovered by the Facility personnel, as directed by the SPCC Plan, would be addressed by notification of the Emergency Spill Response Contractor currently under contract with the Facility. The Emergency Spill Response Contractor has the capability for containment and recovery of large quantities of petroleum products and/or hazardous materials to prevent them from reaching Ketch Brook.

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Secondary Containment 112.7(c)

The Contractor has a policy of maintaining and operating the Facility to minimize the possibility of spills or discharges of petroleum and/or oil to the environment. This section describes provisions at the Facility to implement this policy.

5.1 Aboveground Storage and Transfer Areas

Aboveground storage tanks at the construction area are equipped with overfill protection including high-level alarms and automatic high-level pump shutoffs. Each of the tanks is equipped with portable secondary containment dikes providing more than 110% of the tank volume, plus sufficient freeboard for rainwater accumulation.

Additionally, spill kits are provided at the aboveground storage locations as discussed in Section 6. The spill kits allow for diversion or cleanup of spills. Active secondary containment is the primary means for controlling spills from the diesel generators. Secondary containment has been provided for all aboveground storage tanks.

Transfer areas are controlled by active secondary containment measures. The majority of fuel transfers during construction will occur at the main fuel storage areas near the construction laydown areas. The following standard procedures shall be followed during transfer operations of diesel fuel to the ASTs to reduce the likelihood of a spill or release of diesel fuel.

- Prior to the transfer, the driver measures the existing volume of diesel fuel in the storage tank and the condition of the transfer equipment. The truck driver supervises the transfer operation and a Facility representative observes the filling operations at all times.
- The delivery truck wheels will be chocked as soon as the truck is parked in the fuel transfer position.
- No bulk deliveries take place without operating personnel supervision and approval. Operating personnel will be trained in accordance with Section 8 of this plan. The term “Facility Staff”, when used in this Plan, shall mean employees trained in accordance with Section 8 of this Plan.

- Unless emergency deliveries are required, bulk fuel oil deliveries will be accepted during daylight hours only.
- The tank gauges will be compared against the measured level and corrected accordingly. The level and gauge checks are conducted each time the fuel oil storage tank is filled.
- The truck driver making the delivery will be present at the point of transfer to supervise the operation. The truck driver shall not be permitted by Facility staff to leave the point of transfer while fuel is being transferred.
- Flexible transfer hoses will be inspected for cuts, abrasion, and damaged ends by Facility staff.
- The tank gauges will be monitored by Facility staff while the fuel is being transferred.
- Tanks will not be filled to overflow capacity; sufficient volume will be available for product expansion. It shall be the responsibility of the tank truck driver to ensure that the tank is not overfilled.
- Final inspection of the tank truck and tank feed lines will be conducted by Facility staff before the wheel chocks are removed by the delivery truck driver to assure that all valves and ports are closed and that no leaks have occurred.
- The Bulk Fuel Delivery Driver will complete and sign a Fuel Oil Bulk Delivery Acceptance Checklist for each bulk fuel oil delivery to the Facility. The completed checklist is maintained on file at the Facility for three years. A copy of a checklist is presented in Appendix A.
- Written verification from the fuel supply company that their truck operators are properly trained, the tank trucks and equipment are maintained, and that the unloading procedures are in accordance with the Department of Transportation regulations.

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Contingency Planning 112.7(d)

In accordance with the use of the onshore containment requirements of Section 112.7 (c) and the impracticable requirements of Section 112.7 (d) this section describes provisions for spill response not including secondary containment and any cases of impracticability to meet secondary containment requirements.

6.1 Spill Countermeasures, Discharge Cleanup and Removal Plan

The bulk storage containers on-site have secondary containment in accordance with the requirements of 40 CFR 112.7(c). The Facility maintains spill response kits, provides employee training for fuel deliveries, and maintains an on-call services agreement with an Emergency Spill Response Contractor as part of its spill countermeasures plan. Facility personnel will notify the Emergency Response Coordinator in the event of a spill or a release. The Emergency Response Coordinator would determine if Facility personnel could clean up the discharge or if the Emergency Spill Response Contractor is required to clean up the discharge. If the cleanup of the spill has been performed by the Facility personnel, a licensed hazardous waste transporter would transport the containerized material with the appropriate shipping documentation to a licensed treatment and disposal facility.

In case of larger spills or releases, the Emergency Spill Response Contractor would mobilize to the Facility. The Emergency Spill Response Contractor would then impede the discharge and clean up the oil. The method of stockpiling or containerizing the oil and impacted media depends on the quantity of oil and type of impacted media generated as required by CTDEEP regulations. The removal and disposal of the oil and impacted media would be conducted in accordance with CTDEEP regulations.

6.2 Emergency Response Equipment

The Facility maintains equipment to respond to small spills or releases and depends on professional Emergency Spill Response Contractors to provide the personnel and equipment to respond to a large spill or release. The Facility maintains a contract with Clean Harbors Environmental of Bristol Connecticut for professional spill cleanup remediation of oil releases.

6.2.1 Spill Response and Containment Equipment

All personnel, contractor, subcontractor personnel, operators, technicians, and temporary employees, working at the project site are briefed in hazardous material management and spill prevention as part of their new hire Environmental, Safety and Health orientation (ES&H). In addition, Supervisor Environmental Awareness Training will be provided for non-manual personnel, supervisors, foremen, and subcontractor supervision, as needed. Those personnel responsible for actively responding to and cleaning up small and incidental spills and handling wastes shall be trained in the proper use of response materials and equipment and the use of personal protective equipment for potential hazards. Supervisors and foreman will be responsible for supervising training of new employees and after to ensure the best practices are being carried out to prevent a spill.

6.2.1.1 Vehicle Spill Kits

Each vehicle on site should carry a spill kit which meets the following specifications:

- Packaged spill kit to absorb up to 5 gallons of oil
- Absorbent mats/pads
- Absorbent socks
- Temporary disposal bags
- Protective gloves/Tyvek suit/labels

Vehicles and equipment with chronic leaking issues will be stored with plastic sheeting under to catch any leaks until equipment can be repaired or removed from site.

6.2.1.2 Large Spill Stations

A large spill station shall be provided in all areas where liquid chemicals, oils or other fluids are used or stored. Fueling locations and jobsite trailers will contain large spill stations. Large spill stations shall provide sufficient absorbent and response materials to mitigate a variety of spill conditions and situations. The spill station shall be contained in a weather-proof box, drum, wheeled/lidded container, or trunk which can be mobilized to the spill site. They shall have the following attributes:

- Plastic/metal 55-gallon barrel or 40-gallon wheeled trash container with lid and labeled
- Bulk granular, diatomaceous earth, absorbent material
- Oil-absorbent pads and booms
- Large trash bags

- Rubber gloves
- Safety goggles
- Tyvek suits and coverall

6.2.1.3 Granular Absorbent Materials and Oil Absorbent Pads

Granular absorbent will be maintained for use in areas where there is a likelihood of small spills, drips, or splashes of oil. Granular absorbent can be clay, cellulose, peat, cat litter, or other appropriate biodegradable or natural proven absorbent material. Loose absorbent will be packaged or containerized in such a manner as to facilitate ease of use and distribution. Polypropylene or other man-made, non-biodegradable materials are not permitted.

A sufficient quantity of bulk oil absorbent pads will be maintained onsite for response to spills to land or water. Pads must be hydrophobic and float on water. Sufficient inventory will be maintained to absorb at least 100 gallons (400 liters) of oil.

6.2.2 Fire Protection Emergency Equipment

The Facility maintains multiple hand-held dry ABC type chemical fire extinguishers on-site.

6.2.3 Emergency Communication Equipment

The Construction Trailers, located onsite, are the focal point for communications during an emergency situation. The primary means of communication are cellular telephones and two-way radios.

6.3 Secondary Containment

Secondary containment or its equivalent, as specified in Section 112.7 (c) (1) (vii), has been provided at all required locations.

7

Inspections, Tests and Records 112.7(e)

The purpose of this section is to set forth procedures to conduct inspections and tests in accordance with written procedures that have been develop for the Facility. The Facility must maintain these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for this plan.

7.1 Inspection Program

The Facility will conduct a weekly inspection program to inspect the bulk fuel storage and fuel transfer areas. The purpose of this program is to detect any condition or malfunction of containers and equipment that could result in the release of petroleum or oil to the environment. Records of all inspections are maintained at the Facility with the SPCC Plan. Indications of leaks are required to be reported immediately to the Construction Superintendent or designated person. Copies of the Bulk Fuel Storage Area Weekly Inspection Checklists are included in Appendix B.

During the weekly inspections, the bulk fuel areas, tanks, spill containment basins, fill and other gauges, flange joints, expansion joints, valve glands and bodies, pipeline supports, tank surfaces, and concrete foundations are examined for signs of damage or leakage. The liquid level sensing devices test buttons and lights are also tested to ensure proper operation. The fill gauge readings on diesel fuel tanks will be taken and compared to the reading for the previous week (to identify potential leakage) or the interstitial space is manually gauged for the presence of liquid, if applicable.

If the Emergency Response Coordinator or other designated personnel identify a condition causing or contributing to a leak or potential release, they shall ensure that the condition is corrected immediately.

The onsite tanks were designed and are operated in a manner that limits the possibility of a leak or spill to the environment. Standard operation and maintenance procedures designed to prevent leaks and spills include:

› Facility staff will physically inspect the tanks on a weekly basis.

- A list of emergency phone numbers, and spill response procedures are posted in the vicinity of each AST.

7.2 Testing Programs

Due to the expected duration of the project of less than one-year, weekly visual inspections are considered sufficient for tank testing.

7.3 Recordkeeping

The Facility will maintain SPCC records for a minimum of three years with the Plan. The records include weekly inspection reports, fuel delivery checklists, tank testing reports, employee training documentation and any documentation related to a spill or release at the Facility. Following completion of the Project, the records associated with this SPCC Plan will be kept along with records associated with the SPCC Plan for the completed solar array.

8

Personnel Training and Discharge Prevention Procedures 112.7(f)

All personnel, contractor, subcontractor personnel, operators, technicians, and temporary employees, working at the project site are briefed in hazardous material management and spill prevention as part of their new hire Environmental, Safety and Health orientation (ES&H). In addition, Supervisor Environmental Awareness Training will be provided for non-manual personnel, supervisors, foremen, and subcontractor supervision, as needed. Those personnel responsible for actively responding to and cleaning up small and incidental spills and handling wastes shall be trained in the proper use of response materials and equipment and the use of personal protective equipment for potential hazards. Supervisors and foreman will be responsible for supervising training of new employees and after to ensure the best practices are being carried out to prevent a spill.

Operating personnel will be trained in the maintenance and acceptance of bulk fuel deliveries. The Facility will ensure that all personnel involved in the storage and transfer of bulk fuel deliveries receive on-the-job training directed at spill prevention and safe methods of handling diesel fuel transfers. The training covers the following activities:

- General inspection and maintenance;
- Procedures for accepting bulk deliveries;
- Procedures for inspecting trucks and feed lines before and after bulk deliveries;
- Spill prevention and containment aspects of Facility design;
- Spill reporting procedures and requirements; and
- Spill containment equipment such as absorbent materials.

The extent of training given to personnel depends on the individual's level of involvement in the handling of bulk fuel; personnel with less extensive involvement receive only those portions of the training applicable to their job duties. The Construction Superintendent will maintain records of personnel training.

9

Security 112.7(g)

The ASTs are located in well-lit areas in full view of the respective construction trailers. In addition, these bulk storage areas and access points to the site are periodically checked by Facility security personnel. Fuel storage areas will be fenced during construction.

10

Facility Tank Car and Tank Truck Loading/Unloading 112.7(h)

The Facility does not utilize tanker truck loading or unloading racks. The Facility receives diesel fuel deliveries from a commercial fuel suppler utilizing small tanker trucks designed to pump fuel into the aboveground tanks, similar to a home heating oil delivery truck. This system does not require the design and installation of a quick drainage system or containment system specifically for the tanker truck.

The bulk fuel delivery checklist provided in Appendix A, and the material handling procedures described in Section 3 of the Plan document the safety procedures and spill prevention procedures conducted during a diesel fuel delivery.

11

Brittle Fracture Evaluation Requirements 112.7(i)

None of the aboveground containers at the Facility are field-constructed or have undergone repairs, alterations, reconstruction, or a change of service; therefore, this section does not apply to this Facility.

12

Conformance with State Discharge Prevention Requirements 112.7(j)

The ASTs are constructed, installed, and maintained in accordance with Connecticut Fire Code and national codes including National Fire Protection Association (NFPA) 30. CTDEEP fire code sets the requirements for tanks, containers and monitoring systems to store flammable and combustible liquids such as diesel fuel. NFPA 30 includes design requirements such as secondary containment to prevent discharges to the environment. The Connecticut Fire Code includes design requirements such as secondary containment to prevent discharges to the environment. Connecticut's environmental regulations, including the Connecticut oil spill response Statutes (CGS 22a-450) and Hazardous Waste Regulations (CGS 22a-449(c)-102), provide the requirements for responding to spills or releases and conducting the clean-up and removal of oil and hazardous waste.

13

Facility Drainage 112.8(b)

The Facility has been designed to maintain existing topography and mimic existing drainage patterns to the maximum extent practicable during construction of the Project. In the majority of the Project Area, permanent turf-forming grasses will be planted to stabilize the soil, cycle nutrients and sequester any residual contaminants remaining from past farming activities. These grasses will improve soil structure and promote infiltration which will lower runoff rates from the operational facility. Existing forest vegetation has been preserved to the maximum extent practicable. The majority of the tree clearing is proposed to protect Project assets from damage and minimize shading. The Project will cut approximately 83 acres of woodland across the entire Project Area.

The only impervious surfaces proposed to be constructed are access roads and small pads for utility equipment. Once operational, vehicular access to the Project will be limited to infrequent maintenance visits. The use of natural depressions and vegetated buffers as well as the proposed stormwater basins will provide water quality treatment for the Project.

Large spills such as a catastrophic failure of an AST or prolonged overfill could cause a release of oil to flow down gradient for a significant distance. A release from either of the two aboveground storage tanks would flow to the east or west of the construction laydown area following the general downward slope of the surrounding topography by sheet flow. Stormwater retention ponds are being constructed as part of the Project in the vicinity of the construction laydown area, however, there are currently no diversionary structures which would contain an oil spill present at the Facility.

The tanks are not located in areas subject to flooding.

14

Bulk Storage Containers 112.8(c)

The materials and construction methods used to make the bulk storage containers are compatible with the chemicals stored in them and the conditions of storage. All of the bulk storage containers have at least 110 percent secondary containment. Rainwater that collects in the secondary containment will be inspected for sheens and subsequently disposed of. There are no buried diesel fuel storage tanks or piping at the Facility. The bulk storage containers will be visually inspected at least once per week.

15

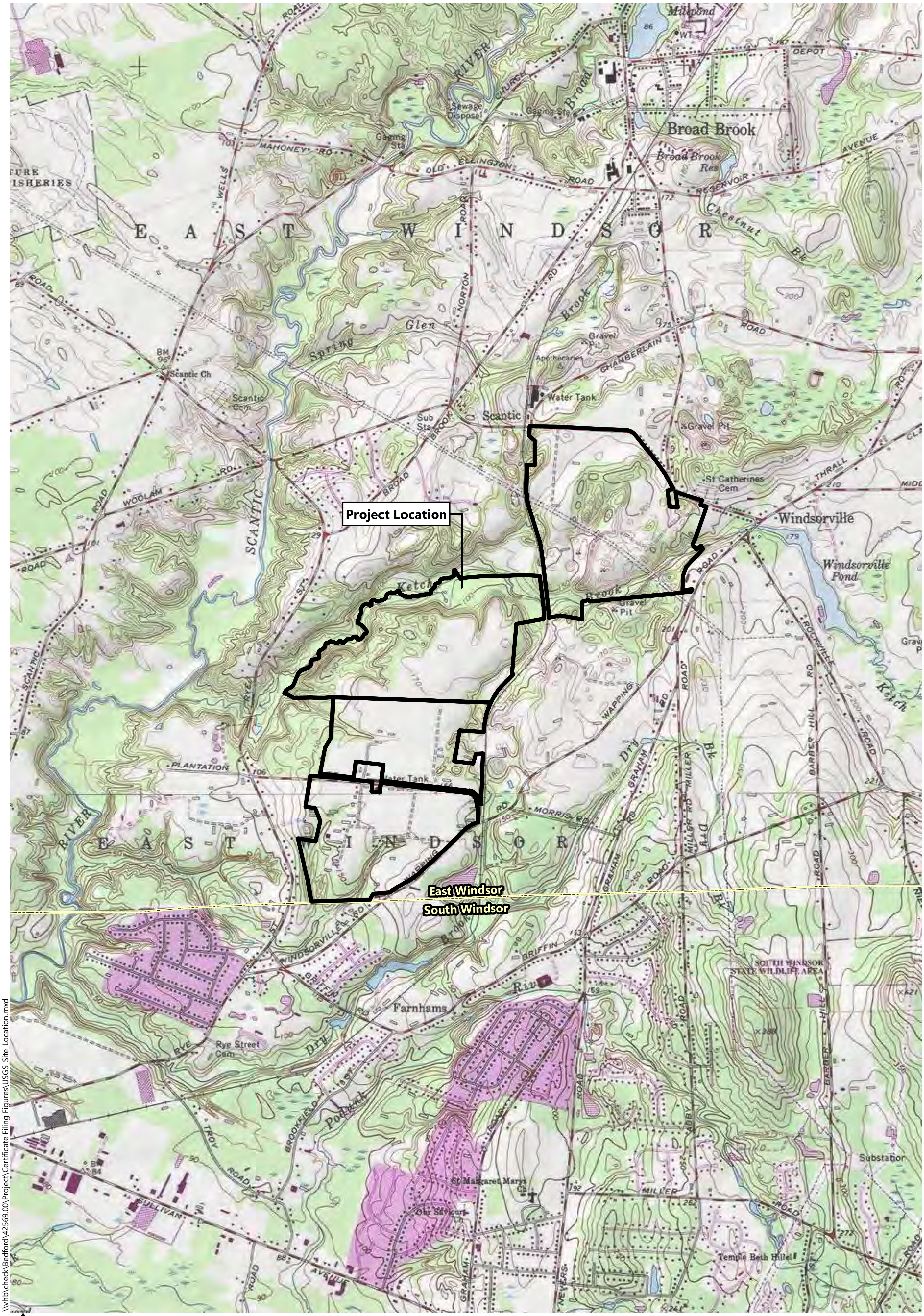
Facility Transfer Operations, Pumping and Facility Process 112.8(d)

There is no buried diesel fuel piping at the Facility. The diesel fuel pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction. All aboveground diesel fuel valves, piping and appurtenances are inspected on a weekly basis. Aboveground piping and oil transfer operations are located away from general vehicle traffic.

Figures

Figure 1

May 05, 2020



0 1000 2000 4000 Feet

Property Boundary

Town Boundary

Gravel Pit Solar | East Windsor, Connecticut

USGS Project Location Map

Source: VHB, CTDEEP, ESRI

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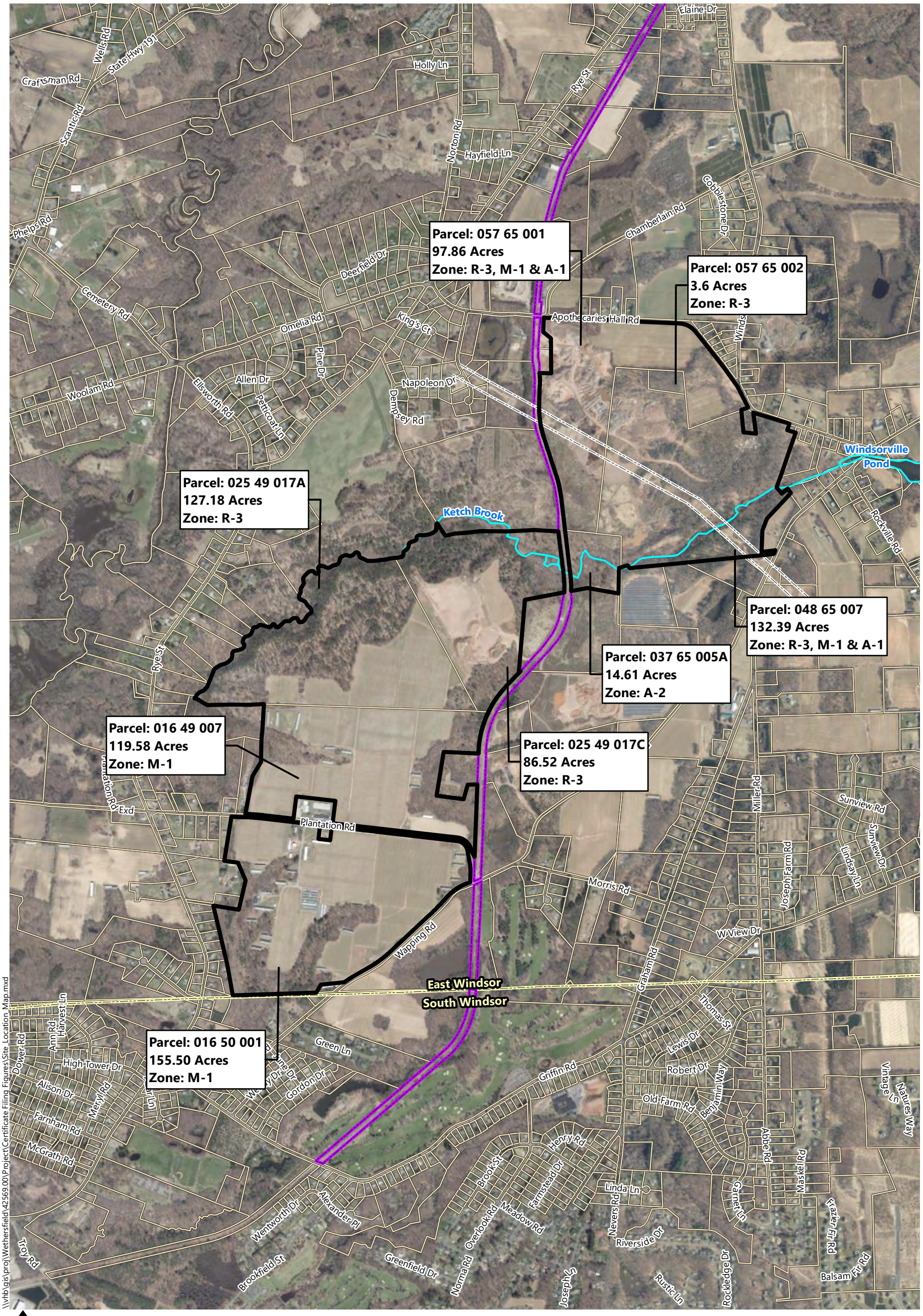
Figure 2

July 20, 2020



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Gravel Pit Solar

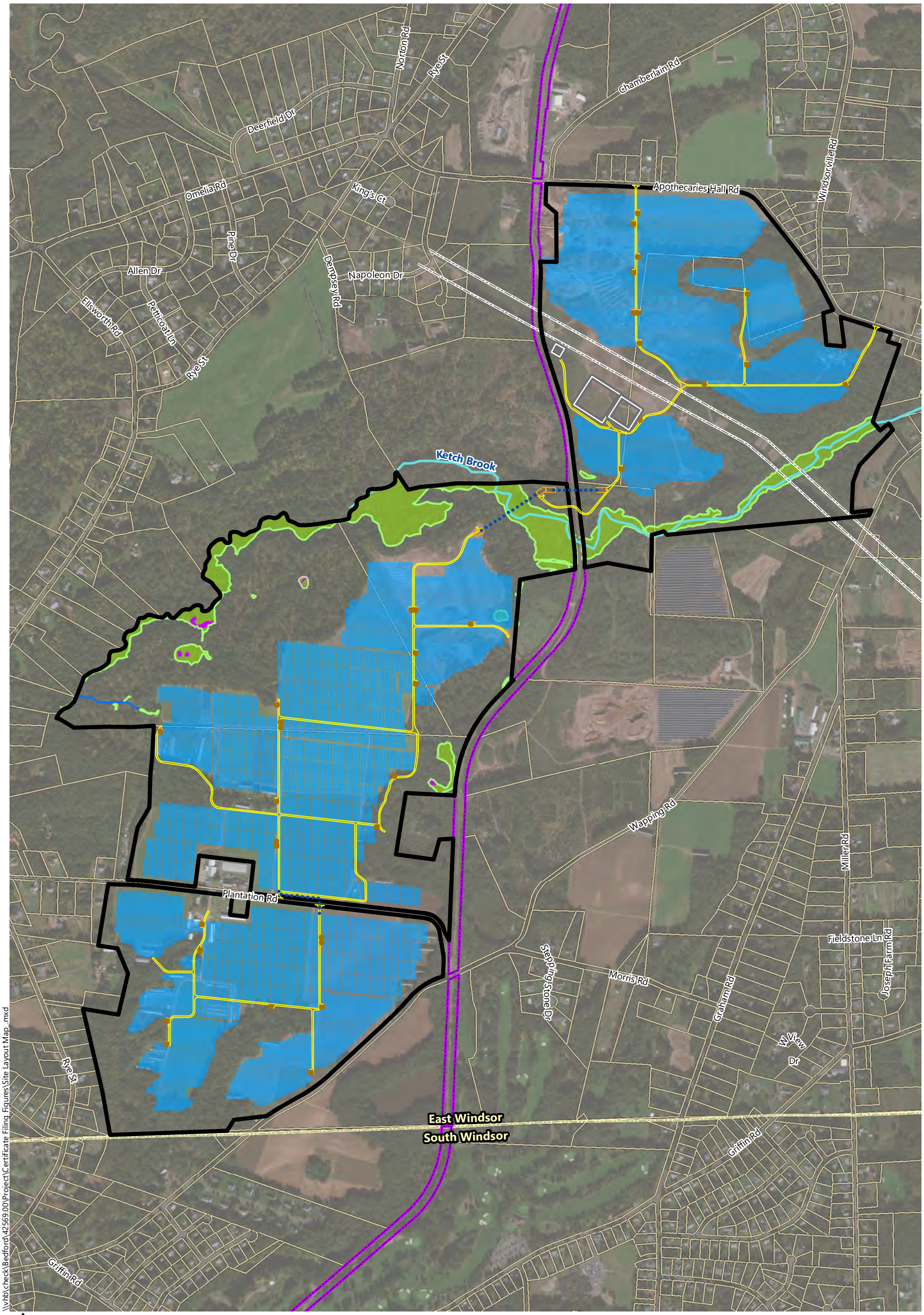
East Windsor, Connecticut

Site Location Map

Source: VHB, CTDEEP, ESRI

Figure 3

May 15, 2020

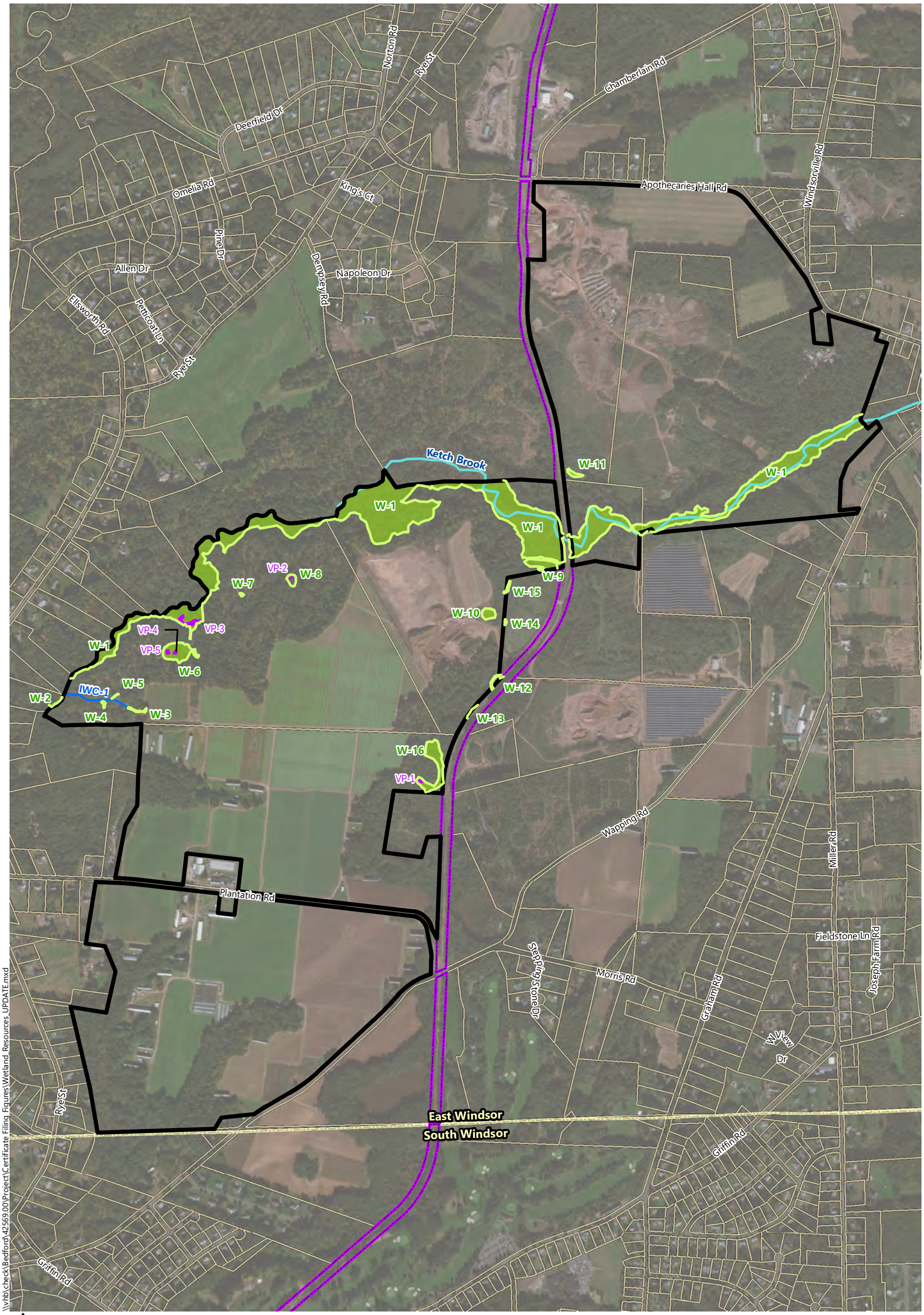


Gravel Pit Solar

East Windsor, Connecticut

Project Layout Map

Source: VHB, CTDEEP, ESRI



0 500 1000 2000 Feet

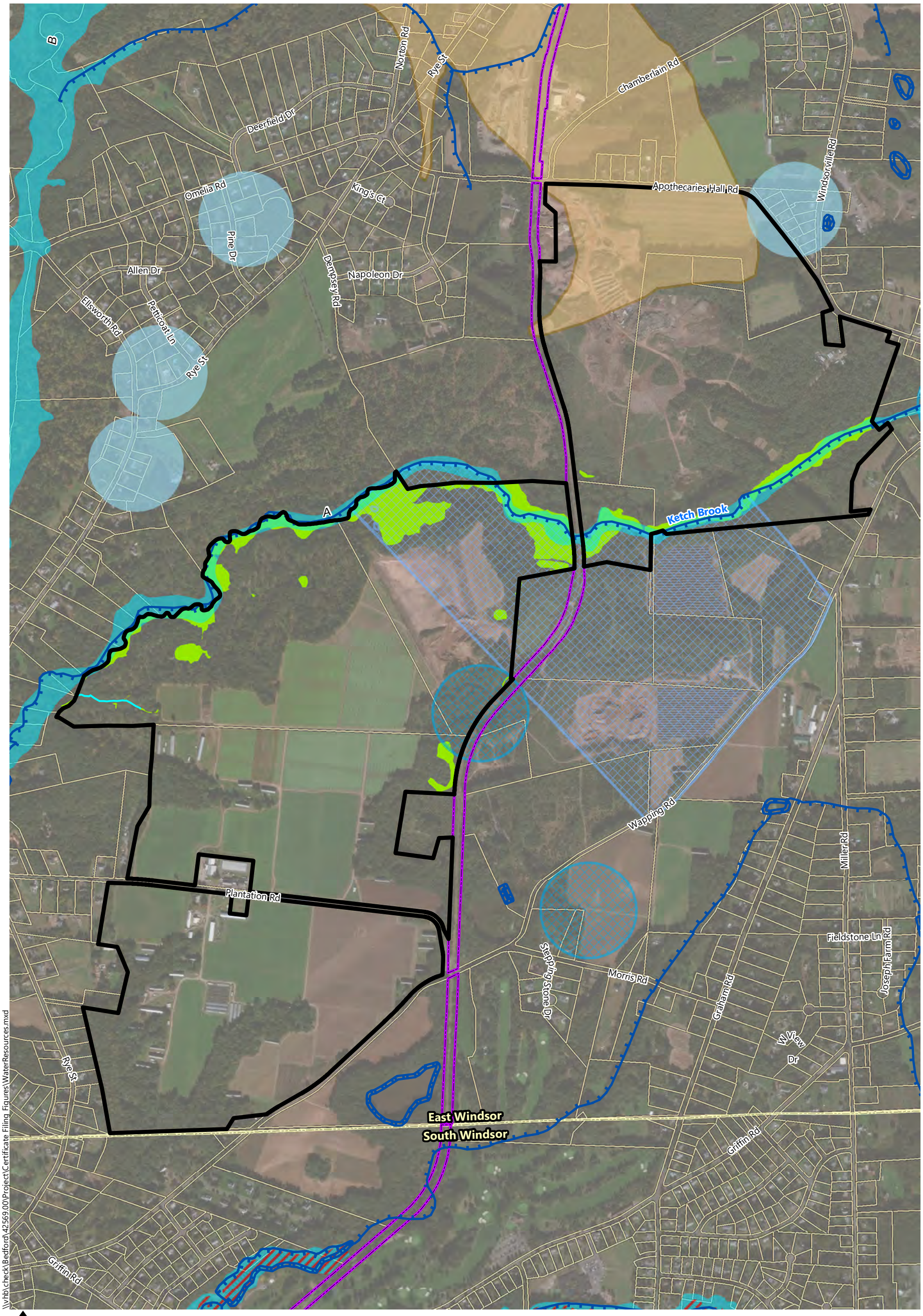
Property Boundary
Adjacent Parcels
Town Boundary
Approximate Railroad ROW
Connecticut Inland Wetlands
Delineated Wetland Edge
Vernal Pool
Stream/River
Delineated Intermittent Watercourse

Gravel Pit Solar

East Windsor, Connecticut

Wetland Delineation Map

Source: VHB, CTDEEP, ESRI



0 500 1000 2000 Feet

- Property Boundary
- Adjacent Parcels
- Town Boundary
- Approximate Railroad ROW
- Wetland Resource Areas
- Delineated Wetland Edge
- Approximate Wetland Edge
- Approximate Delineation Buried Wetland
- Delineated Intermittent Watercourse
- Surface Water Quality - Class A
- Aquifer Protection Area
- Ground Water Quality - GAA, GAAs
- Ground Water Quality - GA, GAA May be impaired
- Ground Water Quality - GB
- 100-Year Floodplain (FEMA)
- Regulatory Floodway (FEMA)

Gravel Pit Solar

East Windsor, Connecticut

Floodplain, Surface & Groundwater Resources Map

Source: VHB, CTDEEP, FEMA, ESRI

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PERMANENT STORMWATER BASIN 36

PROPOSED RIPRAP SPILLWAY 36. REFER TO SIZING TABLE FOR DIMENSIONS

40' WIDE ENERGY DISSIPATOR

LIMIT OF WORK

EXISTING BUILDING

PROPOSED 30' WIDE EASEMENT

PROPOSED DOUBLE CONDUIT BORE UNDER ROAD

PLANTATION ROAD

OHW

LIMIT OF WORK

Approximate Construction Laydown Area. Location of on-road and off-road diesel fuel ASTs.

PERMANENT STORMWATER BASIN 38

PERMANENT STORMWATER BASIN 39; EXISTING KETTLE HOLE

PERMANENT STORMWATER BASIN 50 CREATED BY BERM

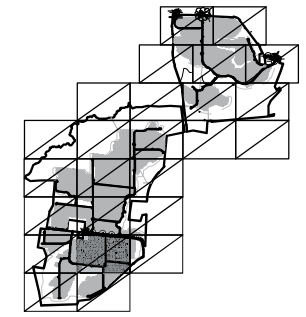
PERMANENT STORMWATER BASIN 51 CREATED BY BERM

LIMIT OF WORK

vhb.com

vhb

100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300



Key

Not To Scale

Approximate stormwater sheet flow direction

0 30 60 120 Feet

Gravel Pit Solar

Apothecaries Hall Road,
Windsorville Road, Wapping Road
and Plantation Road
East Windsor, Connecticut

No.	Revision	Date	Apprvd.
1	CSC Set 1 Interrogatories	10/28/2020	SJK
2	CTDOT/Eversource Revisions	1/18/2021	SJK

Designed by | Checked by

Issued for: **Application** | Date: July 29, 2020

Not Approved for Construction

Grading and Drainage Plan

Drawing Number

C-4.22

Sheet 15 of 83

Project Number
42569.00

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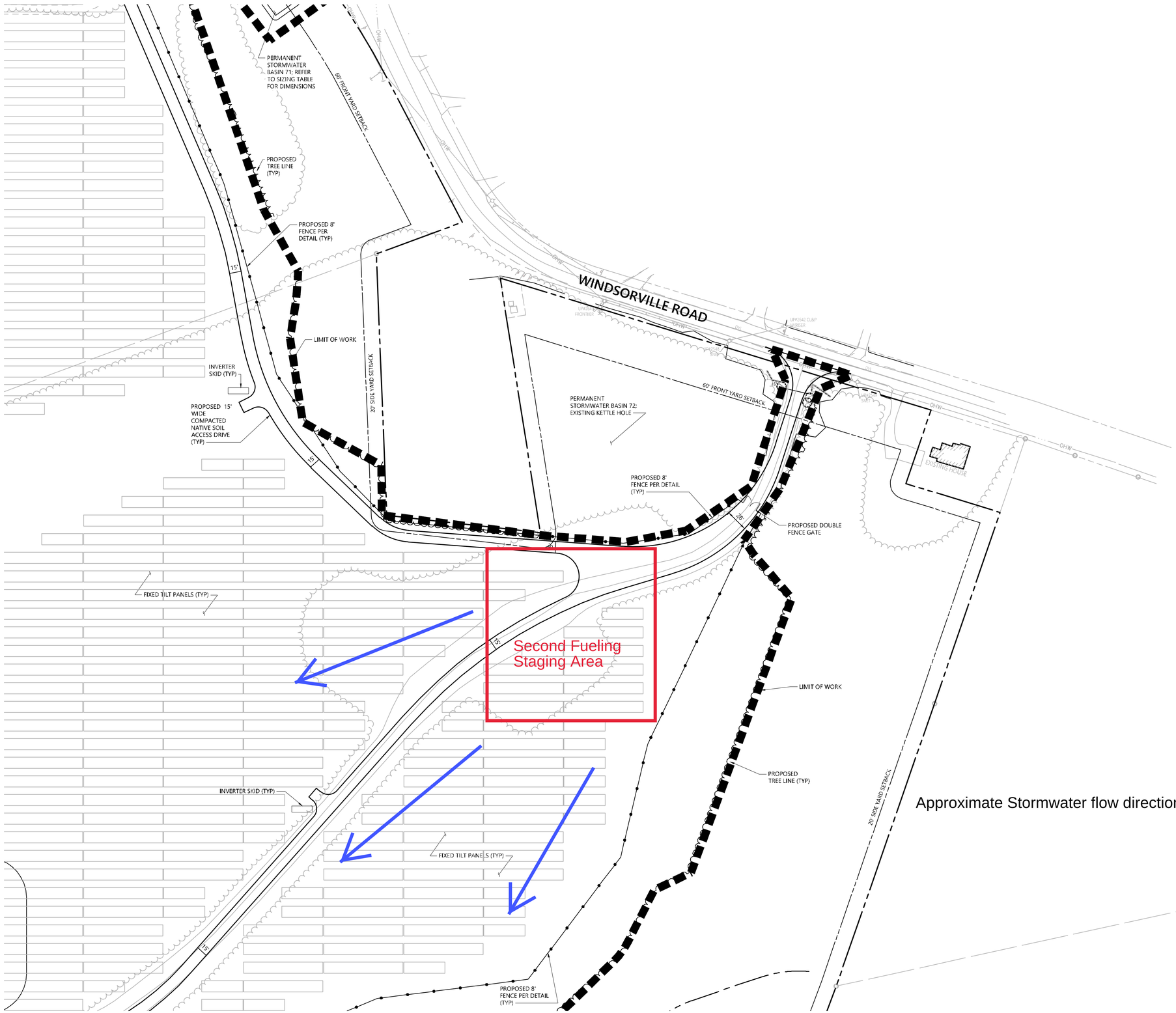
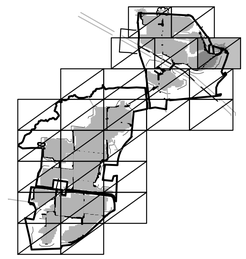


vhb.com

vhb

100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300



Key
Not To Scale

Gravel Pit Solar

Apothecaries Hall Road,
Windsorville Road, Wapping Road
and Plantation Road
East Windsor, Connecticut

No.	Revision	Date	Apprvd.
1	CSC Set 1 Interrogatories	10/28/2020	SJK
2	CTDOT/Eversource Revisions	1/18/2021	SJK
3	CTDEEP Stormwater Permit	2/16/2021	SJK
4	CSC Partial D&M	3/30/2021	SJK
5	CTDEEP Stormwater Comments	8/18/2021	SJK
6	Electrical Layout & Grading	12/20/2021	SJK

Designed by | Checked by

Issued for: Construction
Date: July 29, 2020

Issued for Construction

Layout and Materials Plan

Drawing Number
C-3.5

Sheet 8 of 82

Project Number
42569.00

Appendix A: Bulk Fuel Delivery Acceptance Checklist

GRAVEL PIT SOLAR
BULK FUEL DELIVERY
ACCEPTANCE CHECKLIST
(Make multiple copies as necessary)

Fuel Delivered: Diesel Fuel

Date: _____

Fuel Tank Supplied For: On-Road Off-Road (Circle One)

Time of Delivery: _____

Fuel Delivery Company: _____

Completion Time of Delivery: _____

Delivery Truck Registration Number and State:
_____

Ambient Temperature: _____

Trailer Registration Number and State:
_____

Weather Conditions: _____
Quantity of Oil Prior to Filling Tank: _____ Gallons
Is spill containment kit located within 15 feet of tank being filled: ___Yes ___No

Item	Comments
Check Truck for Defective Valves	
Condition of Truck Tires	
Condition of Hose Connections	
Location of Emergency Shut-Off	
Placement of Truck Wheel Chocks	
Checked Trucks for leaks	
Replace Lock on Fill Pipe	
Check Tank Vents	

(circle one)	Interior Gauge
Tank Level After Delivery	
Tank Level Before Delivery	
Total Diesel Fuel Delivered	

_____ _____
Bulk Fuel Delivery Driver's Signature Employee Signature

_____
Manager's Signature

Appendix B Bulk Fuel Storage Areas Weekly Inspection Checklist

GRAVEL PIT SOLAR
BULK FUEL STORAGE AREAS
WEEKLY INSPECTION CHECKLIST
(Make multiple copies as necessary)

Inspector's Name:_____

Inspector's Signature:_____

Date:_____

NOTE: Check yes or no for each item. If no, indicate corrective action.

ITEMS	YES	NO	IF NO, CORRECTIVE ACTION
1,000-GALLON OFF-ROAD DIESEL AST 001 1. Are the tank surfaces in good condition and free of fuel stains? 2. No sign of fuel stains or oil spillage surrounding the tank enclosure? 3. Does the secondary containment appear to be free of fuel? 4. Are all alarm systems working properly? 5. Are all monitoring and alarm system bulbs working? 6. Do the spill kits have a complete supply of absorbent pads/booms and other emergency spill containment/cleanup equipment?			
500-GALLON ON-ROAD DIESEL AST 002 1. Are the tank surfaces in good condition and free of oil stains? 2. No sign of fuel stains or oil spillage surrounding the tank enclosure? 3. Does the secondary containment appear to be free of fuel? 4. Are all alarm systems working properly? 5. Are all monitoring and alarm system bulbs working? 6. Do the spill kits have a complete supply of absorbent pads/booms and other emergency spill containment/cleanup equipment?			

GRAVEL PIT SOLAR
BULK FUEL STORAGE AREAS
WEEKLY INSPECTION CHECKLIST
(Make multiple copies as necessary)

Inspector's Name:_____

Inspector's Signature:_____

Date:_____

NOTE: Check yes or no for each item. If no, indicate corrective action.

ITEMS	YES	NO	IF NO, CORRECTIVE ACTION
1,000-GALLON OFF-ROAD DIESEL AST 003 1. Are the tank surfaces in good condition and free of fuel stains? 2. No sign of fuel stains or oil spillage surrounding the tank enclosure? 3. Does the secondary containment appear to be free of fuel? 4. Are all alarm systems working properly? 5. Are all monitoring and alarm system bulbs working? 6. Do the spill kits have a complete supply of absorbent pads/booms and other emergency spill containment/cleanup equipment?			
500-GALLON ON-ROAD DIESEL AST 004 1. Are the tank surfaces in good condition and free of oil stains? 2. No sign of fuel stains or oil spillage surrounding the tank enclosure? 3. Does the secondary containment appear to be free of fuel? 4. Are all alarm systems working properly? 5. Are all monitoring and alarm system bulbs working? 6. Do the spill kits have a complete supply of absorbent pads/booms and other emergency spill containment/cleanup equipment?			

GRAVEL PIT SOLAR
DIESEL FUEL GENERATORS
WEEKLY INSPECTION CHECKLIST
(Make multiple copies as necessary)

Generator Location:_____

Inspector's Name:_____

Inspector's Signature:_____

Date:_____

NOTE: Check yes or no for each item. If no, indicate corrective action.

ITEMS	YES	NO	IF NO, CORRECTIVE ACTION
1. Is the surface of the generator enclosure free of stains and in good condition? 2. No sign of fuel stains or oil spillage surrounding the generator? 3. Does the generator secondary containment appear to be free of fuel? 4. Are all alarm systems working properly? 5. Are all monitoring and alarm system bulbs working? 6. Do the spill kits have a complete supply of absorbent pads/booms and other emergency spill containment/cleanup equipment?			

Appendix C: Training Forms

APPENDIX C

ANNUAL TRAINING FORM

Discharge Prevention Briefing		
Instructor		
Printed Name	Email Address	Signature
Attendees		
Printed Name	Email Address	Signature

Training Date: _____

Appendix D: Local Emergency Response Contacts

Appendix D: Local Emergency Response Contacts

Facility Owner: Gravel Pit Solar Connor Cox Analyst, Asset Management D.E. Shaw Renewable Investments 1166 Avenue of the Americas, 9th Floor New York, NY 10036	**Site Contact:** Kate Norskog – SOLV Energy Kate.Norskog@solvenergy.com 858-376-1849
Local Fire Department: East Windsor Fire Marshal (Interim) 125 Maine Street, Broad Brook, CT (860) 993-4086 Emergency: 911	**Local Police Department:** East Windsor Police 25 School Street East Windsor, Connecticut (860) 292-8240 Emergency (911)
Construction Project Manager: Nick Edgmon – SOLV Energy nedgmon@solvenergy.com 858-472-9175	**Construction Assistant Project Manager:** TBD
Hospital: Hartford Hospital Emergency Room 80 Seymour St. Hartford CT 06106 860-545-5000 Emergency: 911	**Operator/O&M Contractor:** TBD
Emergency Response Contractor Clean Harbors Connecticut – 24 Hour Emergency Response 800.645.8265	

Appendix E: State and Federal Emergency Agencies for Notifications of Releases to the Environment

Appendix F: State and Federal Emergency Agencies for Notifications of Releases to the Environment

CRITERIA FOR RELEASE	AGENCIES TO BE CONTACTED
Notify CTDEEP immediately upon knowledge of a release Report any discharge, release, and/or leaking of diesel fuel, oil, or any other hazardous material.	**CT Department of Energy and Environmental Protection - Spill Response and SERC** (860) 424-3338 (24-Hour Statewide Emergency Response Unit) (860) 424-3333 If main number is unavailable
Notify CT DPH Drinking Water Section immediately upon knowledge of a release Report any discharge, release, and/or leaking of diesel fuel, oil, or any other hazardous material.	**Connecticut DPH Drinking Water Section** 860-509-7333 OR after hours at 860-509-8000
Greater than or equal to 100 pounds (Ignitable Waste) or PCB oil. Greater than or equal to 1,000 gallons of Oil or greater than or equal to 42 gallons of Oil more than once in a 12-month period.	**National Response Center** 1-800-424-8802 The National Response Center will notify other federal agencies as necessary.
The USEPA SPCC Coordinator for Region 1 – New England	**USEPA SPCC Coordinator** (617) 918-1236

Appendix F: Certification of Applicability of the Substantial Harm Criteria

Certification of the Applicability of the Substantial Harm Criteria

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes _____ No X

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons, and if so, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes _____ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons, and if so, is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife sensitive environments?
   Yes _____ No X

4. Does the facility have a storage capacity greater than or equal to 1 million gallons, and if so, is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?
   Yes _____ No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons, and if so, has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the past 5 years?
   Yes _____ No X

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature	Title
Date	

Appendix G: Safety Data Sheets

Safety Data Sheet

Material Name: Diesel Fuel, All Types

SDS No. 9909
US GHS

Synonyms: Ultra Low Sulfur Diesel; Low Sulfur Diesel; No. 2 Diesel; Motor Vehicle Diesel Fuel; Non-Road Diesel Fuel; Locomotive/Marine Diesel Fuel

* * * Section 1 - Product and Company Identification * * *

Manufacturer Information

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS
Emergency # 800-424-9300 CHEMTREC
www.hess.com (Environment, Health, Safety Internet Website)

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Flammable Liquids - Category 3
Skin Corrosion/Irritation – Category 2
Germ Cell Mutagenicity – Category 2
Carcinogenicity - Category 2
Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)
Aspiration Hazard – Category 1
Hazardous to the Aquatic Environment, Acute Hazard – Category 3

GHS LABEL ELEMENTS

Symbol(s)

Signal Word

DANGER

Hazard Statements

Flammable liquid and vapor.
Causes skin irritation.
Suspected of causing genetic defects.
Suspected of causing cancer.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.
Harmful to aquatic life.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking
Keep container tightly closed.
Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands and forearms thoroughly after handling.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing fume/mist/vapours/spray.

Response
In case of fire: Use water spray, fog or foam to extinguish.
IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting.
IF exposed or concerned: Get medical advice/attention.

Storage
Store in a well-ventilated place. Keep cool.
Keep container tightly closed.
Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
68476-34-6	Fuels, diesel, no. 2	100
91-20-3	Naphthalene	<0.1

A complex mixture of hydrocarbons with carbon numbers in the range C9 and higher.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin
Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

First Aid: Ingestion
DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

Incompatibilities

Keep away from strong oxidizers.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Fuels, diesel, no. 2 (68476-34-6)

ACGIH: 100 mg/m3 TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel)
Skin - potential significant contribution to overall exposure by the cutaneous route (listed under Diesel fuel)

Naphthalene (91-20-3)

ACGIH: 10 ppm TWA
15 ppm STEL
Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA: 10 ppm TWA; 50 mg/m3 TWA
NIOSH: 10 ppm TWA; 50 mg/m3 TWA
15 ppm STEL; 75 mg/m3 STEL

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Clear, straw-yellow.	**Odor:**	Mild, petroleum distillate odor
Physical State:	Liquid	**pH:**	ND
Vapor Pressure:	0.009 psia @ 70 °F (21 °C)	**Vapor Density:**	>1.0
Boiling Point:	320 to 690 °F (160 to 366 °C)	**Melting Point:**	ND
Solubility (H2O):	Negligible	**Specific Gravity:**	0.83-0.876 @ 60°F (16°C)
Evaporation Rate:	Slow; varies with conditions	**VOC:**	ND
Percent Volatile:	100%	**Octanol/H2O Coeff.:**	ND
Flash Point:	>125 °F (>52 °C) minimum	**Flash Point Method:**	PMCC
Upper Flammability Limit (UFL):	7.5	**Lower Flammability Limit (LFL):**	0.6
Burning Rate:	ND	**Auto Ignition:**	494°F (257°C)

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Naphthalene (91-20-3)

Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild irritation.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This material has been positive in a mutagenicity study.

Carcinogenicity

A: General Product Information

Suspected of causing cancer.

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

B: Component Carcinogenicity

Fuels, diesel, no. 2 (68476-34-6)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Diesel fuel)

Naphthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen
NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)
IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Fuels, diesel, no. 2 (68476-34-6)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	35 mg/L [flow-through]	

Naphthalene (91-20-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	5.74-6.44 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	1.6 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	0.91-2.82 mg/L [static]	
96 Hr LC50 Pimephales promelas	1.99 mg/L [static]	

96 Hr LC50 Lepomis macrochirus	31.0265 mg/L [static]
72 Hr EC50 Skeletonema costatum	0.4 mg/L
48 Hr LC50 Daphnia magna	2.16 mg/L
48 Hr EC50 Daphnia magna	1.96 mg/L [Flow through]
48 Hr EC50 Daphnia magna	1.09 - 3.4 mg/L [Static]

Persistence/Degradability
No information available.

Bioaccumulation
No information available.

Mobility in Soil
No information available.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging
Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 14 - Transportation Information * * *

DOT Information
Shipping Name: Diesel Fuel
NA #: 1993 **Hazard Class:** 3 **Packing Group:** III
Placard:

* * * Section 15 - Regulatory Information * * *

Regulatory Information

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Naphthalene (91-20-3)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

SARA Section 311/312 – Hazard Classes

Acute Health	Chronic Health	Fire	Sudden Release of Pressure	Reactive
X	X	X	--	--

SARA SECTION 313 - SUPPLIER NOTIFICATION

This product may contain listed chemicals below the de minimis levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right- To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Fuels, diesel, no. 2	68476-34-6	No	No	No	Yes	No	No
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Information

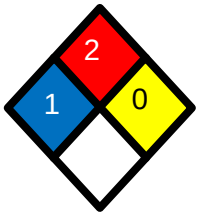
Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Fuels, diesel, no. 2	68476-34-6	Yes	DSL	EINECS
Naphthalene	91-20-3	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

NFPA® Hazard Rating

Health	1
Fire	2
Reactivity	0



HMIS® Hazard Rating

Health	1*	Slight
Fire	2	Moderate
Physical	0	Minimal
		*Chronic

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Literature References

None

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Chevron Hydraulic Oil AW 32, 46, 68

Product Use: Hydraulic Oil
Product Number(s): 255673, 255674, 255675, 293130, 293131, 293132
Company Identification
Chevron Products Company
a division of Chevron U.S.A. Inc.
6001 Bollinger Canyon Rd.
San Ramon, CA 94583
United States of America
www.chevronlubricants.com

Transportation Emergency Response
CHEMTREC: (800) 424-9300 or (703) 527-3887
Health Emergency
Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623
Product Information
email : lubemsds@chevron.com
Product Information: 1 (800) 582-3835, LUBETEK@chevron.com

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION: Not classified as hazardous according to 29 CFR 1910.1200 (2012).

HAZARDS NOT OTHERWISE CLASSIFIED: Not Applicable

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	70 - 99 %weight

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Most important symptoms and effects, both acute and delayed

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER HEALTH EFFECTS: Not classified

Indication of any immediate medical attention and special treatment needed

Note to Physicians: In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.
Unusual Fire Hazards: Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

PROTECTION OF FIRE FIGHTERS:
Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.
Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.
Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.
Precautionary Measures: DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.
Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose

such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Silver Shield, Viton, Nitrile Rubber.

Respiratory Protection: No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	OSHA Z-1	5 mg/m3	--	--	--
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m3	10 mg/m3	--	--

Consult local authorities for appropriate values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Colorless to yellow
Physical State: Liquid
Odor: Petroleum odor
Odor Threshold: No data available
pH: Not Applicable
Vapor Pressure: <0.01 mmHg @ 37.8 °C (100 °F)
Vapor Density (Air = 1): >1
Initial Boiling Point: 315°C (599°F)
Solubility: Soluble in hydrocarbon solvents; insoluble in water.
Freezing Point: Not Applicable
Melting Point: No data available
Density: 0.87 kg/l @ 15°C (59°F) (Typical)
Viscosity: 28.80 mm2/s @ 40°C (104°F) Minimum
Coefficient of Therm. Expansion / °F: No data available
Evaporation Rate: No data available
Decomposition temperature: No data available
Octanol/Water Partition Coefficient: No data available

FLAMMABLE PROPERTIES:
Flammability (solid, gas): No Data Available

Flashpoint: (Cleveland Open Cup) 170 °C (338 °F) Minimum
Autoignition: No data available
Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not Applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Incompatibility With Other Materials: Not applicable
Hazardous Decomposition Products: None known (None expected)
Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects
Serious Eye Damage/Irritation: The eye irritation hazard is based on evaluation of data for product components.

Skin Corrosion/Irritation: The skin irritation hazard is based on evaluation of data for product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for product components.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for product components.
Acute Toxicity Estimate: Not Determined

Germ Cell Mutagenicity: The hazard evaluation is based on data for components or a similar material.

Carcinogenicity: The hazard evaluation is based on data for components or a similar material.

Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Single Exposure: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Repeated Exposure: The hazard evaluation is based on data for components or a similar material.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

This material is not expected to be harmful to aquatic organisms.
The product has not been tested. The statement has been derived from the properties of the individual components.

MOBILITY

No data available.

PERSISTENCE AND DEGRADABILITY

This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.
The product has not been tested. The statement has been derived from the properties of the individual components.

POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.
Octanol/Water Partition Coefficient: No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description: NOT REGULATED AS A HAZARDOUS MATERIAL UNDER 49 CFR

IMO/IMDG Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:
Not applicable

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES:

1.	Immediate (Acute) Health Effects:	NO
2.	Delayed (Chronic) Health Effects:	NO
3.	Fire Hazard:	NO
4.	Sudden Release of Pressure Hazard:	NO
5.	Reactivity Hazard:	NO

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:
All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

NEW JERSEY RTK CLASSIFICATION:
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Hydraulic oil)

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

HMIS RATINGS: Health: 0 Flammability: 1 Reactivity: 0
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: This revision updates the following sections of this Safety Data Sheet: 1 - 16
Revision Date: FEBRUARY 05, 2016

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
GHS - Globally Harmonized System	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on	OSHA - Occupational Safety and Health Administration

Cancer	
NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency
SCBA - Self-Contained Breathing Apparatus	

Prepared according to the 29 CFR 1910.1200 (2012) by Chevron Energy Technology Company, 6001 Bollinger Canyon Road San Ramon, CA 94583.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Safety Data Sheet

According to OSHA HCS 2012 (29 CFR 1910.1200)

Section 1: Identification

Product Identifier: **Transformer Oil**
SDS Number: **817806**
Intended Use: Insulating Oil
Uses Advised Against: All others
Emergency Health and Safety Number: CHEMTREC 800-424-9300 (24 Hours)
CANUTEC 613-996-6666
CHEMTREC Mexico 01-800-681-9531

Manufacturer:
Phillips 66 Lubricants
P.O. Box 4428
Houston, TX 77210

SDS Information:
Phone: 800-762-0942
Email: SDS@P66.com
URL: www.Phillips66.com

Customer Service:
U.S.: 1-800-822-6457 or International: +1-83-2486-3363
Technical Information: 1-877-445-9198

Section 2: Hazards Identification

Classified Hazards
H304 -- Aspiration Hazard -- Category 1

Other Hazards
None Known

Label Elements

DANGER

May be fatal if swallowed and enters airways

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; Do NOT induce vomiting; Dispose of contents/container to approved disposal facility

Section 3: Composition / Information on Ingredients

Chemical Name	CASRN	Concentration[1]
Distillates, petroleum, hydrotreated light naphthenic	64742-53-6	>99
Non-Hazardous Materials	VARIOUS	<1

[1] All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 4: First Aid Measures

Eye Contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Skin Contact: Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention.

Inhalation (Breathing): First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. Seek immediate medical attention.

Ingestion (Swallowing): Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Most important symptoms and effects, both acute and delayed: Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation. Accidental ingestion can result in minor irritation of the digestive tract, nausea and diarrhea. Dry skin and possible irritation with repeated or prolonged exposure.

Notes to Physician: Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Section 5: Fire-Fighting Measures

NFPA 704 Hazard Class

Health: 0 **Flammability:** 1 **Instability:** 0

0 (Minimal)
1 (Slight)
2 (Moderate)
3 (Serious)
4 (Severe)

Extinguishing Media: Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F / 100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Specific hazards arising from the chemical

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulfur, nitrogen or phosphorus may also be formed.

Special protective actions for firefighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

Methods and material for containment and cleaning up: Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

Section 7: Handling and Storage

Precautions for safe handling: Keep away from flames and hot surfaces. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8). Spills will produce very slippery surfaces. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes.

Conditions for safe storage: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

Section 8: Exposure Controls / Personal Protection

Chemical Name	ACGIH	OSHA	Other
Distillates, petroleum, hydrotreated light naphthenic	TWA: 5mg/m³ STEL: 10 mg/m³ as Oil Mist, if Generated	TWA: 5mg/m³ as Oil Mist, if Generated	---

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye/face protection is not normally required; however, good industrial hygiene practice suggests the use of eye protection that meets or exceeds ANSI Z.87.1 whenever working with chemicals.

Skin/Hand Protection: The use of skin protection is not normally required; however, good industrial hygiene practice suggests the use of gloves or other appropriate skin protection whenever working with chemicals. Suggested protective materials: Nitrile

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

Section 9: Physical and Chemical Properties

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance: Clear and bright
Physical Form: Liquid
Odor: Petroleum
Odor Threshold: No data
pH: Not applicable
Vapor Density (air=1): >1
Upper Explosive Limits (vol % in air): No data
Lower Explosive Limits (vol % in air): No data
Evaporation Rate (nBuAc=1): No data
Particle Size: N/A

Flash Point: > 221 °F / > 105 °C
Test Method: Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
Initial Boiling Point/Range: No data
Vapor Pressure: <1 mm Hg
Partition Coefficient (n-octanol/water) (Kow): No data
Melting/Freezing Point: No data
Auto-ignition Temperature: No data
Decomposition Temperature: No data
Specific Gravity (water=1): 0.888 @ 60ºF (15.6ºC)
Bulk Density: 7.4 lbs/gal

Percent Volatile: No data
Flammability (solid, gas): N/A
Viscosity: 2.3 cSt @ 100°C; 9.6 cSt @ 40°C
Solubility in Water: Insoluble

Section 10: Stability and Reactivity

Reactivity: Not chemically reactive.

Chemical stability: Stable under normal ambient and anticipated conditions of use.

Possibility of hazardous reactions: Hazardous reactions not anticipated.

Conditions to avoid: Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.

Incompatible materials: Avoid contact with strong oxidizing agents and strong reducing agents.

Hazardous decomposition products: Not anticipated under normal conditions of use.

Section 11: Toxicological Information

Information on Toxicological Effects of Substance/Mixture

Substance / Mixture

Acute Toxicity	Hazard	Additional Information	LC50/LD50 Data
Inhalation	Unlikely to be harmful		>5 mg/L (mist, estimated)
Dermal	Unlikely to be harmful		> 2 g/kg (estimated)
Oral	Unlikely to be harmful		> 5 g/kg (estimated)

Aspiration Hazard: May be fatal if swallowed and enters airways.

Skin Corrosion/Irritation: Not expected to be irritating. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation: Not expected to be irritating.

Skin Sensitization: Not expected to be a skin sensitizer.

Respiratory Sensitization: No information available.

Specific Target Organ Toxicity (Single Exposure): Not expected to cause organ effects from single exposure.

Specific Target Organ Toxicity (Repeated Exposure): Not expected to cause organ effects from repeated exposure.

Carcinogenicity: Not expected to cause cancer.

Germ Cell Mutagenicity: Not expected to cause heritable genetic effects.

Reproductive Toxicity: Not expected to cause reproductive toxicity.

Information on Toxicological Effects of Components

Distillates, petroleum, hydrotreated light naphthenic

Carcinogenicity: This oil has been highly refined by a variety of processes to reduce aromatics and improve performance characteristics. It meets the IP-346 criteria of less than 3 percent PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

Section 12: Ecological Information

GHS Classification:
No classified hazards

Toxicity: All acute aquatic toxicity studies on samples of lubricant base oils show acute toxicity values greater than 100 mg/L for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions.

Persistence and Degradability: The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

Bioaccumulative Potential: Log Kow values measured for the hydrocarbon components of this material are greater than 5.3, and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

Mobility in Soil: Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material. In water, base oils will float and spread over the surface at a rate dependent upon viscosity. There will be significant removal of hydrocarbons from the water by sediment adsorption. In soil and sediment, hydrocarbon components will show low mobility with adsorption to sediments being the predominant physical process. The main fate process is expected to be slow biodegradation of the hydrocarbon constituents in soil and sediment.

Other adverse effects: None anticipated.

Section 13: Disposal Considerations

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste and is not believed to exhibit characteristics of hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.This material under most intended uses would become "Used Oil" due to contamination by physical or chemical impurities. Whenever possible, Recycle used oil in accordance with applicable federal and state or local regulations. Container contents should be completely used and containers should be emptied prior to discard.

Section 14: Transport Information

U.S. Department of Transportation (DOT)
Shipping Description: *Not regulated*
Note: *If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil)*

International Maritime Dangerous Goods (IMDG)
Shipping Description: *Not regulated*
Note: *U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 25.*

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)
UN/ID #: *Not regulated*
Note: *U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 24.*

	LTD. QTY	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	---	---	---
Max. Net Qty. Per Package:	---	---	---

Section 15: Regulatory Information

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):
This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)
Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Pressure Hazard: No

Reactive Hazard: No

CERCLA/SARA - Section 313 and 40 CFR 372:
This material does not contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372.

EPA (CERCLA) Reportable Quantity (in pounds):
This material does not contain any chemicals with CERCLA Reportable Quantities.

California Proposition 65:
This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

International Hazard Classification

Canada:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the Regulations.

WHMIS Hazard Class:
none

National Chemical Inventories
All components are either listed on the US TSCA Inventory, or are not regulated under TSCA.

All components are either on the DSL, or are exempt from DSL listing requirements.

U.S. Export Control Classification Number: EAR99

Section 16: Other Information

Date of Issue:	Previous Issue Date:	SDS Number:	Status:
13-Feb-2014	04-Nov-2011	817806	FINAL

Revised Sections or Basis for Revision:
Format change; Identified Hazards (Section 2); Precautionary Statement(s) (Section 2); Environmental hazards (Section 12)

Precautionary Statement(s):
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting
P501 - Dispose of contents/container to approved disposal facility

Guide to Abbreviations:
ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

Disclaimer of Expressed and implied Warranties:
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