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SECTION 2.0 PROJECT DESCRIPTION

2.1 OVERVIEW OF PROPOSED GENERATING FACILITIES

LBGF will be a backup generating facility with a generation capacity of up to 99.8 MW to support the need for the LDC to provide uninterruptible power supply for its tenant's servers. The LBGF will consist of 44 diesel-fired backup generators arranged in a generation yard located on the south side of the LDC. Project elements will also include switchgear and distribution cabling to interconnect the generators to their respective portion of the buildings.

2.2 GENERATING FACILITY DESCRIPTION, CONSTRUCTION AND OPERATION

2.2.1 Site Description

The proposed LDC site encompasses approximately 15.45 acres and is located at 2825 Lafayette Street in Santa Clara, California, APN 224-04-093. The property is zoned Heavy Industrial. The site is currently developed with two two-story office buildings and associated paved parking and loading dock areas. The total area of the existing office buildings is approximately 326,000 square feet. The existing buildings consist of a mix of architectural styles and materials, including corrugated metal siding, wood, and stucco. The building facades are a mix of materials and architectural styles, including corrugated metal siding, wood and stucco. The project site encompasses a portion of 2805 Lafayette Street, APN 224-04-094, where a substation would be constructed as part of the LDC. There is an existing data center building at 2805 Lafayette Street that is separate from the proposed project.

The two-story office buildings at 2825 and 2845 Lafayette Street would be demolished. The address for the new building of the proposed project would be 2825 Lafayette Street. The main entrance to the 2845 Lafayette Street building is located on north side of the building facing Central Expressway, with a secondary entrance on the west side of the building facing Lafayette Street. The main entrance to the 2825 Lafayette Street building is located on east side of the building facing the railroad tracks, with a secondary entrance on the north side of the building facing Central Expressway.

A raised concrete loading dock is located on west side of the 2845 Lafayette Street building and on the south side of the 2825 Lafayette Street building. The load docks adjoin the paved driveways and paved parking arounds on the west and north side of the 2845 Lafayette Street building and on the north, east, and south side of the 2825 Lafayette Street building. The 2825 and 2845 Lafayette Street buildings share private drive lines and access to Lafayette Street.

Non-native trees and ornamental landscaping are located along the Lafayette Street frontage of the property, as well as the northern, western, and southern property boundaries. The project proposes to demolish the existing shrubs and groundcovers on the site, while protecting-in-place trees not in conflict with proposed utilities, grading, stormwater treatment facilities, and architectural improvements.

The property is bound to the North by Central Expressway, to the South by 2403 Walsh Avenue and a pair of buildings with different industrial uses, to the East by the Union Pacific Railroad (UPRR)

rail line, and to the West by Lafayette Street. The project area consists primarily of industrial land uses. Buildings in the area are similar in height and scale to the existing building on the project site. The Norman Y. Mineta San José International Airport is located approximately 0.3 miles east of the site.

2.2.2 General Site Arrangement and Layout

The 45 backup generators (44 for the data center suites, one for the PBB) will be located at the site in a generation yard adjacent to the south side of the LDC building. Figure 2-4.1 shows the general arrangement and site layout of the LBGF within the LDC site. The PBB generator will be solely connected to the administrative portion of the building located on the LDC building to the west side of the generation yard and at the northeast corner of the LDC.

Each backup generator is a fully independent package system with dedicated fuel tanks located on a skid below the generator. The generation yard will be electrically connected to the LDC building through combination of underground and above ground cable bus to a location within the building that houses electrical distribution equipment.

2.2.3 Generating Capacity

2.2.3.1 *Overview*

In order to determine the generating capacity of the LBGF, it is important to consider and incorporate the following critical and determinative facts.

1. The LBGF uses internal combustion engines and not turbines.
2. The LBGF internal combustion engines have a peak rating and a continuous rating.
3. The LBGF through software technology and electronic devices is controlled exclusively by the (LDC).
4. The LBGF has been designed with 11 systems with a 4-to-make-3 redundancy as described in Section 2.2.3.2
5. There is a total of 11 data center generators which are redundant.
6. The LBGF will only be operated for maintenance, testing and during emergency utility power outages.
7. The LBGF will only operate at a load equal to the demand by the LDC during an emergency utility outage.
8. The LBGF is only interconnected to the LDC and is not interconnected to the transmission or distribution grid.

2.2.3.2 *Generating Capacity and PUE*

Based on the methodology recently adopted by the Commission's Final Decisions Granting a SPPEs for the McLaren Backup Generating Facility and the Laurelwood Data Center, the maximum generating capacity of the LBGF is determined by the maximum of capacity of the load being served.

The design demand of the LDC, which the LBGF has been designed to reliably supply with redundant components during an emergency, is based on the maximum critical IT load and maximum mechanical cooling electrical load occurring during the hottest hour in the last 50 years. Such conditions are possible but extremely unlikely to ever occur. The LDC load on that worst-case day is 99.8 MW, based on 99.0 MW of load in the data center suites and 0.8 MW of load in the PBB.

As described in Section 2.2.4, there are eleven data center suites, each with four 3.0 MW (3,000 kW) generators serving each suite. Only three of the four generators are counted towards the overall capacity of the building, since the system is designed for one generator in each four-generator data center suites to be taken out of service at any moment in time (called '4-to-make-3').

Summary LBGF Calculation:

- 11 Data Center Suites x (3 Generators x 3.0 MW per Generator) = 99.0 MW
- 1 Admin/PBB System x 1 Generator x 1.0 MW per Generator x 0.8 Load Factor = 0.8 MW
- Total LBGF Load: 99.0 MW + 0.8 MW = 99.8 MW

It is important to understand that while the LDC will be designed to accommodate the full IT equipment load of the building, it is Digital Realty's experience that the customers that lease data center space from Digital Realty do not utilize the entire load identified in their lease. This typically results in Digital Realty data center demand loads between 50 and 60 percent. Therefore, a fully leased 99.8 MW data would only be expected to reach a demand load around 60 MW.

The data center industry utilizes a factor called the Power Utilization Efficiency Factor (PUE) to estimate the efficiency of its data centers. The PUE is calculated by dividing the total demand of the data center by the Critical IT load. The theoretical peak PUE for the Worst Day Calculation would be 1.50 (Total 99.0 MW demand of Building on Worst Case Day divided by 66.0 MW Total Critical IT Load). The annual PUE would be 1.42 (Total 93.8 MW demand of Building average conditions divided by 66.0 MW Design Critical IT Load). These PUE estimates are based on design assumptions and represent worst case.

As described above, the expected PUE is much lower because the Critical IT that is leased by clients is rarely fully utilized. Digital Realty's experience with operation of other data centers is that the actual PUE will be closer to 1.30.

2.2.4 Backup Electrical System Design

2.2.4.1 *Overview*

There will be eleven data center suites in the LDC. Each data center suite will be designed to handle 6.0 MW (megawatts) of IT equipment load. The total load of each data center suite will be 9.0 MW which includes the IT equipment load, mechanical equipment to cool the IT equipment load, lighting and data center monitoring equipment. The sum of the eleven data center suite will result in 66.0 MW of IT equipment load and 99.0 of total electrical load.

The load in each data center suite will be served by four electrical "capacity groups" with each electrical capacity group sized at 3.0 MW (3,000 kW) of total power. An electrical capacity group consists of one 3,000 kW generator, one 3,000 kW 12kV-480V medium voltage transformer, one 4,000 ampere 480 volt service switchboard and a 2,000 kW uninterruptible power supply (UPS) system.

The IT equipment will have dual cords that will take power from two different capacity groups. The dual cords are designed to evenly draw power from both cords when power is available on both cords, and automatically draw all of its power from a single cord when power becomes un-available on the other cord.

The data center suite will be designed to continue supporting all of the IT equipment load in the suite when one of the four capacity groups is either scheduled to be out-of-service for maintenance or becomes un-available due to equipment failure. Therefore, the 12.0 MW of total power installed for each data center suite effectively provides only 9.0 MW of total power.

The dual corded IT equipment load gets power from two different capacity groups. Six different cord configurations are used to evenly balance the loads between these pairs of capacity groups: A-B, A-C, A-D, B-C, B-D and C-D.

As an example of the electrical system design, when electrical capacity group A becomes un-available, the IT equipment connected to the A and B electrical capacity group will automatically shift its entire load to the B electrical capacity group. IT equipment connected between the A-C and A-D electrical capacity groups also performs a similar power transfer in the event of an A capacity group failure.

As part of the electrical design, the IT equipment load that started on electrical capacity group A is evenly transferred to the B capacity group (750 kW), C capacity group (750 kW) and D capacity group (750 kW). To allow for this power transfer, each electrical capacity group can only be loaded to 75 percent (2,250 kW of the 3,000 kW electrical capacity group capacity).

The electrical load on each electrical capacity group is monitored by the building automation system. When the any of the electrical capacity groups reach 67.5 percent loaded (based on 90 percent of the 75 percent maximum loading under normal operation), an alarm is activated in the engineering office. The operations staff will work with the tenants to ensure that the leased power levels are not exceeded.

The consequence of electrical capacity groups exceeding 75 percent loaded could lead to dropping IT equipment when coupled with a capacity group failure event. If all the capacity groups serving a data center suite (four capacity groups) are loaded over 75 percent and an electrical capacity group fails, the resulting load transferring to the three available capacity group would exceed the rating of the capacity groups and would lead to over-current protection devices tripping open due to the overload condition. Therefore, it is vital to the reliability of the data center to make sure that all capacity groups remain below 75 percent loaded.

2.2.4.2 *Utility-to-Generator Transfer Control Components and Logic*

In an outdoor rated switchboard located next to the Generator Alternator, there will be a Load Disconnect Breaker that is Normally Closed while the generator is both in and out of operation. From that load disconnect, 480V rated power cable bus, rated for the full ampacity output rating of the generator, will traverse from the generator to a Generator Switchboard, and then into the data center facility terminating on a dedicated Main Generator Input Breaker.

The generator switchboard includes a load bank breaker, allowing each generator to be individually connected to a load bank for periodic maintenance and testing. This breaker is an electrically operated breaker that is normally open when the generator is not in operation, and the Main Switchboard has not requested generator power.

This Generator Main Breaker is electrically interlocked with an adjacent Utility Transformer Main Breaker to allow only one of the Breakers to closed at any time. Upon the loss of utility power, the PLC transfer controller will send a start signal to the generator, followed by the Utility Breaker opening, followed by a confirmation that the generator has started leading to the Generator Main Breaker being closed.

Once the Generator Main Breaker is closed, the power created from the individual generator is then transmitted to the IT equipment (via a 2.0 MW (2,000 kW) uninterruptable power supply (UPS) system) and mechanical equipment designed to cool the IT equipment load served by the UPS. This load is the same load that the dedicated Utility Transformer was supplying power to prior to the utility interruption. Power from this individual generator cannot be transferred to any other load or system, or anywhere outside the facility.

The uninterruptible power supply (UPS) system includes back-up batteries sized for five minutes of battery back-up time. During the time between a transfer between utility and generator power, the UPS system continues to support the IT equipment load without interruption. During a utility-to-generator transfer, the duration of the power outage between the sources will typically be around 15 seconds; it takes around ten seconds to get the generator started and up to voltage. During a generator-to-utility transfer, the duration of the power outage between the sources will typically be around five seconds.

2.2.4.3 *Uninterruptible Power Supply (UPS) System Description*

The UPS System and Batteries are part of the LDC and are not part of the LBGF. However, the following description is provided to describe how the UPS system is intended to operate. The UPS will protect the load against surges, sags, under voltage, and voltage fluctuation. The UPS will have built-in protection against permanent damage to itself and the connected load for all predictable types of malfunctions. The load will be automatically transferred to the bypass line without interruption in the event of an internal UPS malfunction. The status of protective devices will be indicated on a LCD graphic display screen on the front of the UPS. The UPS will operate in the following modes:

- Normal - IGBT Rectifier converts AC input power to DC power for the inverter and for charging the batteries. The IGBT inverter supplies clean and stable AC power continuously

to the critical load. The UPS Inverter output shall be synchronized with the bypass AC source when the bypass source is within the AC input voltage and frequency specifications.

- Loss of Main Power - When Main Power is lost, the battery option shall automatically back up the inverter so there is no interruption of AC power to the critical load.
- Return of Main Power or Generator Power - The system shall recover to the Normal Operating Mode and shall cause no disturbance to the critical load while simultaneously recharging the backup battery.
- Transfer to Bypass AC source - If the UPS becomes overloaded, or an internal fault is detected, the UPS controls shall automatically transfer the critical load from the inverter output to the bypass AC source without interruption. When the overload or internal warning condition is removed, after a preset "hold" period the UPS will automatically re-transfer the critical load from the bypass to the inverter output without interruption of power to the critical load.
- Maintenance Bypass - An optional manual make-before-break maintenance bypass panel may be provided to electrically isolate the UPS for maintenance or test without affecting load operation.

The UPS system batteries will have tab washers mounted on front terminal posts capable of accepting the wiring components of a battery monitoring system. Batteries will have an expected life of ten years. Each battery bank will provide a minimum of five minutes of backup at 100 percent rated inverter load of 1000kW, @ 77°F (25°C), 1.67 end volts per cell, beginning of life.

2.2.5 Generator System Description

Each of the 45 generators for the data center suites will be a Tier-~~4~~2 standby diesel fired generator equipped with the Miratch system which includes both Selective Catalytic Reduction (SCR) System and diesel particulate filters (DPF). The generators will be Cummins Model C3000 D6e and the PBB Generator will be a Cummins Model DQGAF.

The maximum peak generating capacity of Model C3000 D6e is 3.0 MW for standby applications (short duration operation). Under normal operation will all generators available for use, the maximum load on each generator is designed to be 2.25 MW. The N+1 redundancy of the generator system is designed for one-out-of-four data center suite generators to be taken out-of-service or unexpectedly fail at any given moment in time (called a '4-to-make-3' design).

The maximum peak generating capacity of Model DQFAD is 1.0 MW for standby applications (short duration operation). The load on the generator will be designed to remain below 0.8 MW. Specification sheets for each manufacturer and evidence of the steady state continuous ratings are provided in Appendix A.

Each individual generator will be provided with its own package system. Within that package, the prime mover and alternator will be automatically turned on and off by a utility-generator PLC transfer controller located in the 480-volt main switchboard located within the LDC. Each generator will be controlled by a separate, independent transfer controller. The generator will be turned on if the electrical utility power becomes unavailable and will be turned off after utility power has been

restored and the transfer controller has returned the utility to the active source of power serving the computer and mechanical loads within the LDC.

The generator package will integrate a dedicated fuel tank with a capacity of 6,400 gallons. The generators will be placed on a concrete slab. The generators including the enclosure and SCR equipment are approximately 13 feet wide, 50.5~~48.25~~ feet long and 30.2~~20.5~~ feet high. Each generator will have a stack height of approximately 70 feet. When placed on slab, they will be spaced approximately seven feet apart horizontally. The generator yard will be enclosed with 22 feet high precast concrete screen walls on the south and east ends.

2.2.6 Fuel System

The backup generators will use ultra-low sulfur diesel as fuel (<15 parts per million sulfur by weight).

Each of the 44 generator units serving the data center area will have a 6,400-gallon diesel fuel storage tank with high fuel level at 5,120 gallons. 4,872 gallons are required for 24-hour operation.

The 1.0 MW PBB generator would include a 3,000-gallon diesel fuel storage tank, with high fuel level at 2,400 gallons. 1,728 gallons are required for 24-hour operation.

The 44 x 3.0 MW generators and 1 x 1.0 MW generator would have a combined diesel fuel storage capacity of 284,600 gallons, with fuel tanks filled to high fuel level, total fuel to be onsite estimated at 227,680 gallons to provide 24 hours of emergency generation at full demand of the LDC.

2.2.7 Diesel Exhaust Fluid System

The SCR system will use Diesel Exhaust Fluid (DEF) which will be stored in 500 gallon capacity tanks per generator. A Safety Data Sheet for the DEF is contained in Appendix A. The estimated shelf life of the DEF is dependent on ambient temperature. For the Santa Clara area the shelf life of the DEF is approximately 12-18 months.

Based on the testing and maintenance schedule Digital Realty does not anticipate the need for replacement of degraded DEF. The replacement strategy is to have the supplier replenish the DEF supply by adding DEF from a bulk tanker to the tank inside the genset enclosure. In the unlikely event that DEF is degraded, the supplier will pump out the tank and haul the degraded DEF for proper disposal. The tank will be refilled with new DEF.

~~2.2.7~~ 2.2.8 Cooling System

Each generator will be air cooled independently as part of its integrated package and therefore there is no common cooling system for the LBGF.

~~2.2.8~~ 2.2.9 Water Supply and Use

The LBGF will not require any consumption of water.

~~2.2.9~~ 2.2.10 Waste Management

The LBGF will not create any waste materials other than minor amounts of solid waste created during construction and maintenance activities.

~~2.2.10~~ 2.2.11 Hazardous Materials Management

The LBGF will prepare a Spill Prevention, Control and Countermeasure Plan (SPCC) to address the storage, use and delivery of diesel fuel for the generators.

Each generator unit and its integrated fuel tanks have been designed with double walls. The interstitial space between the walls of each tanks is continuously monitored electronically for the existence of liquids. This monitoring system is electronically linked to an alarm system in the engineering office that alerts personnel if a leak is detected. Additionally, the standby generator units are housed within a self-sheltering enclosure that prevents the intrusion of storm water.

Diesel fuel will be delivered on an as-needed basis in a compartmentalized tanker truck with maximum capacity of 8,500 gallons. The tanker truck parks on the access road to the south of the generator yard and extends the fuel fill hose through one of multiple hinged openings in the precast screen wall surrounding the generator equipment yard.

There are no loading/unloading racks or containment for re-fueling events; however, a spill catch basin is located at each fill port for the generators. To prevent a release from entering the storm drain system, storm drains will be temporarily blocked off by the truck driver and/or facility staff during fueling events. Rubber pads or similar devices will be kept in the generation yard to allow quick blockage of the storm sewer drains during fueling events.

To further minimize the potential for diesel fuel to come into contact with stormwater, to the extent feasible, fueling operations will be scheduled at times when storm events are improbable.

Warning signs and/or wheel chocks will be used in the loading and/or unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed transfer lines. An emergency pump shut-off will be utilized if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures will be posted at the loading and unloading areas.

To meet the Tier 4 emission standards, DEF, which contains urea is used to enable the SCR system to achieve NOx emission reduction. The DEF is required to be stored and managed appropriately. The DEF does not trigger the CalARP Program and therefore neither an offsite consequence analysis nor Risk Management Plan are required. However, proper management and storage include the DEF tank for each generator set will have secondary containment and filling the tank will be performed by the DEF supplier and follow best management practices similar to the use of diesel fuel refilling.

~~2.2.11~~ 2.2.12 LBGF Project Construction

Construction activities for the LDC are expected to begin in January 2022~~November 2020~~ and are discussed in more detail in Section 2.3.4. Since the site preparation activities for the LDC will include the ground preparation and grading of the entire LDC site, the only construction activities for the LBGF would involve construction the generation yard. This will include construction of concrete slabs, fencing, installation of underground and above ground conduit and electrical cabling to interconnect to the LDC Building switchgear, construction of the racking system to support the second level of generators, and placement and securing the generators.

The generators themselves will be assembled offsite and delivered to site by truck. Each generator will be placed within the generation yard by a crane.

Construction of the generation yard and placement of the generators is expected to take six months and is included in the overall construction schedule for the LDC described in section 2.3.4. Construction personnel for the LBGF are estimated to range from ten to 15 workers including one crane operator.

~~2.2.12~~ 2.2.13 LBGF Facility Operation

The backup generators will be run for short periods for testing and maintenance purposes and otherwise will not operate unless there is a disturbance or interruption of the utility supply. BAAQMD's Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). Please see Section 4.3 for a complete description of the testing and maintenance frequencies and loading proposed for the LBGF.

2.3 LAFAYETTE DATA CENTER FACILITIES DESCRIPTION

2.3.1 Overview

As described in Section 1.2.2 and 1.3, the Commission SPPE's determination is limited to solely to the LBGF. However, in order for the Commission to inform the decision-makers of the potential environmental effects of the LBGF, in combination with the LDC, the applicant has included a complete description of the LDC.

There are currently two legal parcels within the project site, the northern 13.04-acre parcel located at 2825 and 2845 Lafayette Street and the southern 9.72-acre parcel located at 2805 Lafayette Street. A lot line adjustment is proposed for this project to create an expanded 15.45-acre parcel at 2825 Lafayette Street and a smaller 7.31-acre parcel at 2805 Lafayette Street.

The existing 13.04-acre site, located at 2825 and 2845 Lafayette Street, is currently developed with two two-story office buildings and associated paved parking and loading areas. The two buildings are 164,000 square feet and 162,400 square feet respectively.

The LDC will include demolition of the existing improvements on the 13.04-acre site to construct a three-story 576,120 square foot data center building, utility substation, generator equipment yard (the

LBGF), surface parking and landscaping. The data center building will house computer servers for private clients in a secure and environmentally controlled structure and would be designed to provide 66 megawatts (MW) of power to information technology (Critical IT) equipment. A site plan of the proposed development is shown on Figure 2.3-1.

The data center building will consist of two main components: a three-level power base building (PBB) component and a three-level data center suite component. The PBB will be located on the Lafayette Street side of the building and on Central Expressway side of the building towards the east side of the site. The PBB components will include support facilities such as the building lobby, restrooms, conference rooms, landlord office space, customer office space, loading dock and storage.

The data center suite components will consist of three levels of data center space. Level 1 and Level 2 will contain four data center suites and corresponding electrical/UPS rooms. Level 3 will contain three data center suites and corresponding electrical/UPS rooms. A portion of the building along the east side of the site will be reduce to a two-story building due to its proximity to the north end of the Norman Y. Mineta San José International Airport runway.

The elevation of the PBB roof would correspond with the elevation of the floor slab of the third data hall level. The project would also construct a new 100 MVA (mega volt-ampere) electrical substation along Lafayette Street (the western side of the site). SVP will have direct access to the site from Lafayette Street. The three-bay substation (three 50 MVA 60 kV-12kV step-down transformers) will be designed to allow one of the three transformers to be taken out of service, effectively providing 100 MVA of total power (a 3-to-make-2 design)[1].

Transformers have an all-weather asphalt surface underlain by an aggregate base. A concrete masonry unit screen wall, 13 feet in height, would surround the substation. The substation will be capable of delivering electricity to the LDC from Silicon Valley Power but will not allow any electricity generated from the LBGF to be delivered to the transmission grid.

2.3.2 Building Heights and Setbacks

The data center building will be approximately 65 feet in height to the top of parapet to top of the Level 1 slab plus an addition seven feet in elevation change to the top of the Fire Department access road.

The mechanical equipment screen on the roof the building will extend to a height of 73 feet in height from the top of the Level 1 slab plus an addition seven feet in elevation change to the top of the Fire Department access road.

The building would also include an elevator penthouse that will extend to a height of 82 feet in height from the top of the Level 1 slab plus an addition seven feet in elevation change to the top of the Fire Department access road.

[1] The relationship between MVA and MW is MVA = MW x power factor. A typical factor for a data center is around 0.95. Power factor is a function of the loads, not the utility substation. At 0.95 power factor, a 100 MVA substation can provide 95 MW of power. Therefore, the SVP utility substation will limit the LDC to below 100 MW of total load.

The building will be located in the center of the site and will be set back at a minimum of 15 feet from the front yard to the west (Lafayette Street), a minimum of 15 feet from side yard to the north (Central Expressway), a minimum of 0 feet from the side yard to the south (adjacent to a non-residential zone) and a minimum of 50 feet from the rear yard to the east (adjacent to a non-residential zone; railroad tracks).

2.3.3 Site Access and Parking

The overall project site has two driveways on Lafayette Street, one that serves the existing 2805 building and one that serves the existing 2825 and 2845 Lafayette Street. No changes are proposed to the location of the existing driveways.

A new driveway will be constructed on Lafayette between the two existing driveways to provide access to the new SVP utility substation.

The project would provide 77 parking spaces for the 2805 building and would provide 190 spaces for the 2825 building. Parking is spaced throughout the project site with a heavy concentration of parking at the northwest and southeast corners of the property.

2.3.4 Site Grading, Excavation, and Construction

The existing building at 2805 Lafayette Street would remain, while the existing improvements on the 2825 and 2845 Lafayette Street site would be demolished to allow for construction of the new LDC building.

Demolition and construction activities are estimated to last approximately 24 months to the initial occupancy of the building. Construction activities are estimated to last an additional 60 months indoors to bring the building to full occupancy.

Roughly 4,000 cubic yards of soil and undocumented fill would be removed from the site to be replaced by 34,000 cubic yards of fill to be imported to the site.

2.3.5 Landscaping

The LDC proposes to remove 375 (mostly parking lot) trees on-site, due to transmission line clearance requirements mandated by Silicon Valley Power (SVP), and various conflicts with proposed civil and architectural improvements. The City of Santa Clara's landscape ordinance mandates a 2:1 replacement with 24-inch box size trees, or 1:1 replacement with 36-in box size trees. The LDC proposes to mitigate for the loss of all 375 trees through a combination of 24-inch box size and 36-inch box size.

New landscaping consisting of trees, large and medium shrubs, and groundcovers will be installed along the property boundaries, building perimeters, stormwater treatment facilities, and landscape beds distributed throughout the parking facilities. Trees would be planted five feet away from new or existing water mains or utility lines.

A site plan of the proposed landscaping is shown in Figure 2.3-2.

2.3.6 Stormwater Controls

The LDC proposes to construct stormwater treatment areas consisting of bioretention areas and at-grade flow-through planter boxes totaling approximately 25,000 square feet. The stormwater treatment areas would be located around the perimeter of the site and adjacent to paved parking areas.

In the existing condition, stormwater discharges the site into the public system at three locations; the southwest corner of the 2805 Lafayette Street property, the northwest corner of the 2825 Lafayette Street property and the northeast corner of the 2825 property. The proposed project will connect to these three existing outfall points and is not proposing any new connections to the public storm drain system.

The San Francisco Bay Regional Water Quality Control Board (RWQCB) has issued a Municipal Regional Stormwater NPDES Permit (MRP) to regulate stormwater discharges from municipalities and local agencies. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). Examples of C.3 LID measures include bioretention areas, flow-through planters, and subsurface infiltration systems.

Downspouts for the roof drainage will discharge directly into bioretention areas or flow-through planters located adjacent to the building. In some cases, roof drainage will be piped under sidewalks and discharged to the pavement surface where stormwater will then surface flow to at-grade bioretention planters located along the perimeter of the site.

Flow-through planters and bioretention planters will include perforated underdrains and overflow structures that connect to the on-site storm drains system which eventually discharges to the public storm system in Lafayette Street and Central Expressway.

2.3.7 Facilities Utilities

As part of the construction of the new building, domestic water, fire water, sanitary sewer, fiber, and natural gas connections will be made from the City infrastructure systems located along Lafayette Street and Central Expressway as shown on Figure 2.3-1.

2.3.8 SVP Electrical Distribution Facilities

SVP will construct a new distribution substation to support the LDC. The substation will be ultimately owned and operated by SVP as part of its distribution network. The proposed new substation will be interposed on SVP's South Loop between the 115kV receiving station and an adjacent 60kV substation. The South Loop terminal ends are comprised of 115kV receiving stations (#1 and #2) which are connected to the greater SVP Bulk Electric System (BES). Each 115kV receiving station steps the voltage down to SVP's service territory transmission voltage of 60kV.

Reliability is maintained such that, if there is a fault along any section of the Loop, electric service is still supplied from the receiving stations from either end.

The new conductor that interconnects the new substation to the BES will be an ACCR type, size 715 double bundle with a carrying capacity of 310 MVA. SVP's general practice is to use tubular steel transmission poles for the two dead end structures. While SVP has not yet designed the 60 kV transmission lines that interconnect the new substation, SVP has estimated that one transmission line will come in to the site from the north and one from the south, both routes paralleling the future Lafayette Street lines. There may be up to two new transmission poles.

2.4 MITIGATION INCORPORATED INTO PROJECT DESIGN

2.4.1 Air Quality

PD AQ-1: To ensure that fugitive dust impacts are less than significant, the project will implement the BAAQMD's recommended BMPs during the construction phase. These BMPs are incorporated into the design of the project and will include:

- All exposed surfaces (soil piles, graded areas, and unpaved access roads) shall be watered at least two times per day.
- All haul trucks transporting material offsite shall be covered.
- All track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
- All vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks shall be paved as soon as possible. Building pads shall be completed as soon as possible after grading unless seeding or soil binders are used.
- Equipment idling times shall be minimized to 5 minutes per the Air Toxics Control Measure (ATCM). Idling time signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Information on who to contact, contact phone number, and how to initiate complaints about fugitive dust problems will be posted at the site.

2.4.2 Biological Resources

PD BIO-1: The project will incorporate the following measures to reduce impacts to nesting birds.

- If removal of the trees on-site would take place between January and September, a pre-construction survey for nesting raptors shall be conducted by a qualified ornithologist to identify active nesting raptor nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys shall be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys shall be conducted no more than 30 days prior to the initiation of these activities. The surveying ornithologist shall

inspect all trees in and immediately adjacent to the construction area to be disturbed by these activities, and the ornithologist shall, in consultation with the State of California, Department of Fish and Wildlife (CDFW), designate a construction-free buffer zone (typically 250 feet) around the nest until the end of the nesting activity.

- The applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Planning and Inspection prior to the issuance of a tree removal permit by the City Arborist.

2.4.3 Cultural Resources

PD CUL-1: The project proposes to implement the following measures to ensure the project's impacts to archaeological resources are less than significant:

- A Secretary of the Interior-qualified archaeologist and a Native American cultural resources monitor shall be on site to monitor grading of native soil once all pavement is removed from the project site. The project applicant shall submit the name and qualifications of the selected archaeologist and Native American Monitor to the Director of Planning and Inspection prior to the issuance of a grading permit. Preference in selecting Native American monitors shall be given to Native Americans with:

    - Traditional ties to the area being monitored.
    - Knowledge of local historic and prehistoric Native American village sites.
    - Knowledge and understanding of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
    - Ability to effectively communicate the requirements of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
    - Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.
    - Ability to travel to project sites within traditional tribal territory.
    - Knowledge and understanding of Title 14, California Code of Regulations, Section 15064.5.
    - Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding CEQA mitigation provisions.
    - Ability to read a topographical map and be able to locate site and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory.
    - Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.

- After removal of pavement and prior to grading, the archaeologist shall conduct a pedestrian survey over the exposed soils to determine if any surface archaeological manifestations are present. The archaeologist will monitor full-time all grading and ground disturbing activities in native soils associated with construction of the proposed project. If the archaeologist and Native American monitor believe that a reduction in monitoring activities is prudent, then a letter report detailing the rationale for making such a reduction and summarizing the

monitoring results shall be provided to the Director of Planning and Inspection. Department of Recreation 523 forms shall be submitted along with the report for any cultural resources encountered over 50 years old.

- In the event that prehistoric or historic resources are encountered during on-site construction activities, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning and Inspection shall be notified, and a Secretary of the Interior-qualified archaeologist shall examine the find and record the site, including field notes, measurements, and photography for a Department of Parks and Recreation 523 Primary Record form. The archaeologist shall make a recommendation regarding eligibility for the California Register of Historical Resources, data recovery, curation, or other appropriate mitigation. Ground disturbance within the 50-foot radius can resume once these steps are taken and the Director of Planning and Inspection has concurred with the recommendations. Within 30 days of the completion of construction or cultural resources monitoring, whichever comes first, a report of findings documenting any cultural resource finds, recommendations, data recovery efforts, and other pertinent information gleaned during cultural resources monitoring shall then be submitted to the Director of Planning and Inspection. Once finalized, this report shall be submitted to the Northwest Information Center at Sonoma State University.

- Prior to and for the duration of ground disturbance, the project owner shall provide Worker Environmental Awareness Program training to all existing and any new employees. This training should include: a discussion of applicable laws and penalties under the laws; samples or visual aids of artifacts that could be encountered in the project vicinity, including what those artifacts may look like partially buried, or wholly buried and freshly exposed; and instructions to halt work in the vicinity of any potential cultural resources discovery, and notify the city-approved archaeologist and Native American cultural resources monitor.

PD CUL-2: The project proposes to implement the following measure to ensure the project's impacts to human remains are less than significant:

- In the event that human remains are discovered during on-site construction activities, all activity within a 50-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission. All actions taken under this mitigation measure shall comply with Health and Human Safety Code § 7050.5(b).

2.4.4 Geology and Soils

PD GEO-1: In order to ensure the project design conforms to the requirements of a final geotechnical engineering investigation and California and local building standards and codes, the following is proposed as mitigation incorporated into the project. Incorporation will ensure seismic hazards are reduced to less than significant levels.

- To avoid or minimize potential damage from seismic shaking, the project would be built using standard engineering and seismic safety design techniques. Building redevelopment design and construction at the site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a report to the City. The report shall be reviewed and approved by the City of Santa Clara's Building Division as part of the building permit review and issuance process. The building shall meet the requirements of applicable Building and Fire Codes, including the 2016 California Building Code, as adopted or updated by the City. The project shall be designed to withstand potential geologic hazards identified on the site and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

PD GEO-2: The project proposes to implement the following measures to as best management practices to ensure impacts to paleontological resources are less than significant.

- Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in teaching non- specialists, to ensure they can recognize fossil materials and shall follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who shall evaluate its significance.

- If a fossil is found and determined by the qualified paleontologist to be significant and avoidance is not feasible, the paleontologist shall notify the Director of Planning and Inspection and develop and implement an excavation and salvage plan in accordance with Society of Vertebrate Paleontology standards. Construction work in these areas shall be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall then be deposited in a scientific institution with paleontological collections. A final Paleontological Mitigation Plan Report shall be prepared that outlines the results of the mitigation program. The Director of Planning and Inspection shall be responsible for ensuring that the paleontologist's recommendations regarding treatment and reporting are implemented.

2.4.5 Hazards

PD HAZ-1: The project will implement the following measures to would reduce potentially significant soil and or groundwater impacts to construction workers to a less than significant level.

- Prior to the issuance of grading permits, shallow soil samples shall be taken in areas where soil disturbance is anticipated to determine if contaminated soils with concentrations above established construction/trench worker thresholds may be present due to historical agricultural use and from historical leaks and spills. The soil sampling plan must be reviewed and approved by the Santa Clara Fire Department Fire Prevention and Hazardous Materials

Division prior to initiation of work. Once the soil sampling analysis is complete, a report of the findings will be provided to the Santa Clara Fire Department Fire Prevention and Hazardous Materials Division and other applicable City staff for review.

- Documentation of the results of the soil sampling shall be submitted to and reviewed by the City of Santa Clara Director of Planning and Inspection prior to the issuance of a grading permit. Any soil with concentrations above applicable Environmental Screening Levels or hazardous waste limits would be characterized, removed, and disposed of off-site at an appropriate landfill according to all state and federal requirements.

- A Site Management Plan (SMP) will be prepared to establish management practices for handling impacted groundwater and/or soil material that may be encountered during site development and soil-disturbing activities. Components of the SMP will include: 1) a detailed discussion of the site background; 2) a summary of the analytical results; 3) preparation of a Health and Safety Plan by an industrial hygienist; 4) protocols for conducting earthwork activities in areas where impacted soil and/or groundwater are present or suspected; 5) worker training requirements, health and safety measures and soil handing procedures shall be described; 6) protocols shall be prepared to characterize/profile soil suspected of being contaminated so that appropriate mitigation, disposal or reuse alternatives, if necessary, can be implemented; 7) notification procedures if previously undiscovered significantly impacted soil or groundwater is encountered during construction; 8) notification procedures if previously unidentified hazardous materials, hazardous waste, underground storage tanks are encountered during construction; 9) on-site soil reuse guidelines; 9) sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility; 10) soil stockpiling protocols; and 11) protocols to manage groundwater that may be encountered during trenching and/or subsurface excavation activities. Prior to issuance of grading permits, a copy of the SMP must be approved by the Santa Clara County Environmental Health Department, and the Santa Clara Fire Department Fire Prevention and Hazardous Materials Division.

- If contaminated soils are found in concentrations above risk-based thresholds pursuant to the terms of the SMP, remedial actions and/or mitigation measures will be taken to reduce concentrations of contaminants to levels deemed appropriate by the selected regulatory oversight agency for ongoing site uses. Any contaminated soils found in concentrations above thresholds to be determined in coordination with regulatory agencies shall be either 1) managed or treated in place, if deemed appropriate by the oversight agency or 2) removed and disposed of at an appropriate disposal facility according to California Hazardous Waste Regulations and applicable local, state, and federal laws.

2.4.6 Hydrology and Water Quality

PD HYD-1: The LDC will incorporate the following into the design and these measures should be treated as mitigation incorporated into the project. The following will reduce construction-related water quality impacts:

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.

- Earthmoving or other dust-producing activities shall be suspended during periods of high winds.
- All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered.
- All trucks hauling soil, sand, and other loose materials shall be required to cover all trucks or maintain at least two feet of freeboard.
- All paved access roads, parking areas, and staging areas adjacent to the construction sites shall be swept daily (with water sweepers).
- Vegetation in disturbed areas shall be replanted as quickly as possible.
- All unpaved entrances to the site shall be filled with rock to knock mud from truck tires prior to entering City streets. A tire wash system may also be employed at the request of the City.

Safety Data Sheet

1. Product Identifier and Company Identification

Product name : **Urea Solution – High Purity 32.5%**
HBCC SDS number : CU02460M0
Synonym : Urea Solution; Urea liquor; Diesel Exhaust Fluid (DEF),
Product use and Restrictions : Refer to label or call

Manufacturer Contact Address :

Corporate Headquarters
Hill Brothers Chemical Company
1675 North Main Street
Orange, California 92867
714-998-8800
800-821-7234

Corporate Safety & Compliance
Hill Brothers Chemical Company
7121 West Bell Road, Suite 250
Glendale, Arizona 85308
623-535-9955 - Office
623-535-9944 - Fax

Emergency telephone Number (Chemtrec) : 800-424-9300
Website : http://hillbrothers.com

2. Hazard Identification

Classification : None
Signal Word : None
Pictogram(s) : None
Hazard Statements : None

Precautionary Statements

Response : None
Prevention : None
Storage : None
Disposal : None

3. Composition / Information on Ingredients

CAS Number	Ingredient Name	Weight %
57-13-6	Urea	31-33%
7732-18-5	Water	67-69%
7664-41-7	Ammonia	≤0.15%

4. First Aid Measures

Summary of First Aid Measures

Ingestion : Do not induce vomiting. Get medical attention immediately.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin : Remove contaminated clothing. Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Eyes : Immediately flush with large amounts of water, including under the eyelids. If pain or irritation persists seek medical attention. Speed and thoroughness in rinsing eyes are important to avoid permanent injury.

Medical Conditions

Effects of Acute and Delayed Exposure

Inhalation : May cause respiratory irritation.
Skin Contact : May cause skin irritation.
Eye Contact : May cause eye irritation.
Ingestion : Do not induce vomiting. Get medical attention immediately.
Chronic Symptoms : None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed : If exposed and feeling unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Extinguishing : Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: Do not use heavy water stream. Use of Heavy water stream of water may spread fire.

Special Exposure Hazards : Fire Hazard: Not combustible but may decompose at high temperatures.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions will not occur under normal conditions.

Special Protective : Do not enter fire area without proper protective equipment, including Respiratory protection.

Fire Fighting Procedures : Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present. Firefighting Instructions: Use water spray or fog for cooling exposed containers.

NFPA Rating : Health - 1
Flammability - 0
Instability - 0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

6. Accidental Release Measures

Personal Precautions : Equip Cleanup crew with proper protection.

Emergency Procedures : Ventilate area.

Methods of Containment And Clean-Up : Contain any spills to prevent migration and entry into sewers or streams. Clean up spills immediately and dispose of safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities as appropriate after a spill.
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

7. Handling and Storage

Safe Handling : Store in compliance with all Federal, State, and local regulations. Store in a well-ventilated area, away from incompatible materials or sources of heat and ignition. Empty containers may contain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flames, sparks or other sources of ignition; they may evolve noxious fumes.

Storage : Store in compliance with all Federal, State, and local regulations.

Work/Hygienic Practices : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits :

Chemical Name: Urea Solution – High Purity 32.5%				
Exposure Limits (TWAs) in Air				
CAS Number	Chemical	ACGIH TLV	OSHA PEL	STEL
57-13-6	Urea	N/A	N/A	N/A
7664-41-7	Ammonia	25	50	35

Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available but not required.

Protective Equipment : Safety glasses, gloves and general work clothing are recommended. Where Ventilation is insufficient, wear respiratory protection. Wearing of appropriate protective clothing and gloves is suggested if epidermal sensitivity develops. Wear chemically resistant protectives gloves.

Eye Protection : Safety glasses.

Respiratory : Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

9. Physical and Chemical Properties

Appearance: Colorless liquid	**Odor:** slight ammonia odor
Odor Threshold: Not available	**pH:** 7.5-10
Melting Point/Freezing Point: 11.5F	**Initial Boiling Point/Range:** 219°F
Flash Point: Not applicable	**Evaporation Rate (BuAc=1):** Not available
Flammability: Not applicable	**Lower/Upper Explosive Limit:** Not applicable
Vapor Pressure (mmHg): Not available	**Vapor Density (Air=1):** Not available
Specific Gravity @ 20°C: 1.09cc (9.1 lb/gal	**Solubility in Water:** 100%
Heat of Solution in H_2O: Not available	**Heat Capacity at 25° C (77° F):** Not available
Decomposition Temperature:135°C (275°F) Urea	**Density at 25° C (77° F):** 9.1 Lbs./Gal
% Volatiles: Not available	**Loose Bulk Density:** Not available
Molecular Weight: 60.07 (100% Urea)	**VOC:** Not available

10. Stability and Reactivity

Reactivity : Hazardous reactions will not occur under normal conditions.

Chemical Stability : Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions or Polymerizations : Hazardous polymerization will not occur.

Conditions to Avoid : Avoid exposing containers to heat or flame. Keep separated from incompatible materials.

Incompatible Materials : Nitric acid. Gallium. Perchlorates. Strong oxidizers. Caustic products. Alkalis.

Hazardous Decomposition Products : Ammonia. Nitrogen oxides.

11. Toxicological Information

Acute and Chronic Effects : Not classified

Routes of Exposure

- **Inhalation** : Yes
- **Ingestion** : Yes
- **Skin** : Yes
- **Eyes** : Yes

Symptoms related to Physical, Chemical & Toxicological Characteristics : Not classified

Numerical Measures of Toxicity (Urea) : LD50 Oral Rat = 8471 mg/kg

Numerical Measures of Toxicity (Ammonia) : LD50 Inhalation Rat = 5.1 mg/l (exposure time 1 h)
LD50 Inhalation Rat = 2000 ppm/4h (exposure time 4 h)

Chronic Toxicity : None expected under normal conditions of use.

Carcinogenicity :

Product Name: Urea Solution – High Purity 32.5%					
ACGIH	**IARC**	**EPA**	**NIOSH**	**NTP**	**OSHA**
-	-	-	-	-	-

TARGET ORGANS : N/A

12. Ecological Information

Ecotoxicity :

Urea
LC50 Fish 1 = 16200 -18300 mg/l (exposure time 96 h – Species: Poecilia reticulata)
EC50 Daphnia 1 = 3910 mg/l (exposure time 48 h – Species: Daphnia magna [static]

Ammonia
LC50 Fish 1 = 0.44 mg/l (exposure time 96 h – Species: Cyprinus carpio)
EC50 Daphnia 1 = 25.4 mg/l (exposure 48 h – Species: Daphnia magna)
LC50 Fish 2 = 0.26 - 4.6 mg/l (exposure 96 h – Species: Lepomis macrochirus)

Persistence and Degradability : Not available

Bioaccumulative Potential :

Product / Ingredient	Log $_{Pow}$	BCF	Potential
Urea	-1.59 (at 25°C)	<10	-

Mobility in Soil : Not available

13. Disposal Considerations

Dispose of waste material in accordance with all local, regional, national, and international regulations.
Additional Information: Spilled chemical can be used as fertilizer.

14. Transport Information

This product is not regulated for transport as a hazardous material, substance or dangerous good.

15. Regulatory Information

SARA 302 Extremely Hazardous Substances (EHS) : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) under Section 302 of EPCRA.

SARA 304 Extremely Hazardous Substances (EHS) Release Notification : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) which, if released to the environment in quantities at or above the substance's Reportable Quantity (RQ), would require reporting to the SERC and LEPC under Section 304 of EPCRA.

SARA 311/312 Hazards :

SARA 311/312 Hazards				
Acute	Chronic	Flammability	Pressure	Reactivity
No	No	No	No	No

SARA 313 Reportable Chemicals : No chemical in this product is subject to annual emissions, transfers, or waste management reporting under the Community-Right-to-Know provisions of EPCRA Section 313, also known as the Toxic Release Inventory (TRI) Report or Form R.

CERCLA Hazardous Substances : No chemical in this product is listed as a CERCLA hazardous substance subject to the National Response Center (NRC) release reporting requirements.

Clean Air Act (CAA) Section 112(r) Air Pollutants : No chemical in this product is listed as an air pollutant under the U.S. Clean Air Act, Section 112(r) (40 CFR 61).

California Prop 65 Chemicals : This product does not contain any chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

Hazard Label Warning : This product does not require hazard label warnings.

TSCA (Toxic Substances Control Act) : All chemical substances in this product are listed on the U.S. TSCA Inventory List.

ACRONYMS:

CAS # – Chemical Abstract Services Registry Number
CFR – Code of Federal Regulations
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
EPCRA – Emergency Planning and Community Right-to-Know Act
LEPC – Local Emergency Planning Committee
SERC – State Emergency Response Commission

16. Other Information

Revision date :
Supersedes :
First Issue : 09/28/2017
Section(s) changed since last revision : First Issue SDS

IMPORTANT! Read this SDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This SDS has been prepared in accordance with the Globally Harmonized System of Chemical and Labeling of Chemicals (GHS) Fifth Edition and the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The SDS information is based on sources believed to be reliable. Available data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control; **Hill Brothers Chemical Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy