

STATEMENT OF BASIS
Initial Title V Permit

Facility Name: CP Kelco

Title V App. Number: APCD2024-APP-008134

Title V Permit Number: APCD2025-TVP-00060

Facility ID: APCD1976-SITE-00116

Equipment Address: 2025 East Harbor Dr
San Diego, CA. 92113

Facility Contact: Edgardo Morales, Senior Environmental Manager

Contact Phone: (619) 595-5129

Permit Engineer: Liliana Jaime

Date: November 7, 2025

11/7/2025

Senior Engineer: X Allison Weller
Allison Weller
Senior Air Pollution Control Engineer
Signed by: aweller

1.0 Type of Action and Summary of Changes

This Statement of Basis reviews the application for an initial Title V permit for CP Kelco. The facility is subject to Title V permitting because of the District's redesignation to severe ozone nonattainment, whereby the facility was expected to be a new federal major stationary source for VOC and NO_x emissions. The facility had been operating under enforceable permit limits of below 50 tons per year of NO_x and 135 tons per year of VOC.

As part of the initial Title V process, the District has also made a preliminary decision to take the following actions, which are further discussed below:

- Add new applicable requirements to permits where necessary
- Enhance monitoring, reporting, and recordkeeping requirements
- Clarify permit conditions and their basis
- Correct and update emission unit descriptions
- Correct typographical errors.

2.0 History of Title V Application:

There was a previous application, APCD2001-APP-975950, for an initial Title V permit at this facility that submitted on 01/29/2001. The previous Title V permit was issued on 12/2/2002 and retired on 08/03/2005 because (1) the facility replaced the VOC control device at the main production plant in 2005 that reduced VOC PTE and (2) the EPA reclassified the District for ozone attainment from serious to basic in 2005, which increased the Title V thresholds above the emission levels for NO_x and VOC at this source.

This is a new initial Title V application for this facility because the District was redesignated to severe nonattainment for ozone. The facility received a Compliance Advisory on April 6, 2023, to inform them that they may be subject to the Title V Program again in accordance with the revised District Rule 1401, effective February 21, 2023. The equipment was already in operation and is required to obtain a new permit based on the District's redesignation to severe ozone nonattainment, with the facility expected to be a new federal major stationary source of NO_x and VOC emissions.

The District received the application for a new initial permit to operate on February 28, 2024, which is compliant with the requirement for a timely application submittal, at least 12 months, after the effective date of revised District Rule 1401 which was February 21, 2023. The application was deemed complete on May 1, 2024; hence, an application shield pursuant to Rule 1410 (a) is in effect for the facility until the District takes action on the initial application.

The following table summarizes active permits and relevant applications submitted under the District's local permitting program over the history of the facility that establishes or estimates emissions of criteria pollutants and precursor air contaminants. These emissions are used to estimate the facility's PTE. Permits that have been retired prior to the application submittal will not be included in this review.

Application Number	Affected Permit to Operate(s)	Description	Outcome
APCD1996-APP-50922	APCD2004-PTO-000480	Initial Application - Boiler	Approved
APCD1992-APP-20182	APCD2004-PTO-002185	Initial Application - R&D Pilot Plant #1	Approved
APCD1998-APP-72065	APCD2004-PTO-003129	Initial Application - Boiler	Approved
APCD1994-APP-40006	APCD2004-PTO-940006	Initial Application - Biogum pilot plant	Approved
APCD1995-APP-50320		Modification Application - To allow fermentation and larger dryer	Approved
APCD1996-APP-51060		Modification Application - Modify control Equipment - Scrubber	Approved
APCD1994-APP-40043	APCD2004-PTO-940043	Initial Application - Isopropyl Alcohol Storage Tank	Approved
APCD2004-APP-80627	APCD2005-PTO-001676	Initial Application - Dry side equipment	Approved
APCD1999-APP-73084	APCD2005-PTO-973084	Initial Application - Sifter	Approved
APCD1999-APP-73092	APCD2005-PTO-973092	Initial Application - Screen	Approved
APCD1999-APP-73094	APCD2005-PTO-973094	Initial Application - Sifter	Approved
APCD1999-APP-73095	APCD2005-PTO-973095	Initial Application - Sifter	Approved
APCD1999-APP-73096	APCD2005-PTO-973096	Initial Application - Sifter	Approved
APCD2000-APP-75096	APCD2005-PTO-975096	Initial Application - Screen	Approved
Legacy Application	APCD2006-PTO-004380	Initial Application - Automated Bulk Sodium Carbonate Transfer / Storage Systems	Approved
APCD1987-APP-70185	APCD2007-PTO-001516	Initial Application -Bio-Polymer Manufacturing Operation	Approved
APCD1991-APP-10407		Modification Application - Replace Screen	Approved
APCD1991-APP-10441		Modification Application - Add Blender	Approved
APCD1995-APP-50306		Modification Application - Upgrade Proj - Bundle B	Approved
APCD1996-APP-60106		Modification Application - Update Motor size	Approved
APCD1998-APP-71351		Modification Application - Specialty Biogum Plant	Approved

APCD1998-APP-72132		Modification Application - Biogum/Alginate Manufacturing Facility	Approved
APCD1998-APP-72563		Modification Application - Process Controls	Approved
PCD1999-APP-74337		Modification Application - Specialty Biogum Plant	Approved
APCD2000-APP-74928		Modification Application - New Biogum Separation Method	Approved
APCD2000-APP-75849		Modification Application - Expansion of Dust System and Bag and Add a Box Dumping Station	Approved
APCD2002-APP-77735		Modification Application - Consolidate Equipment	Approved
APCD2002-APP-78899		Modification Application - Add Process Pumps	Approved
APCD2003-APP-79839		Modification Application - Add Additional Pumps	Approved
APCD2003-APP-79998		Modification Application - Move Reagent Injection System	Approved
APCD2003-APP-80408		Modification Application - Add extruder to Line #3	Approved
APCD2004-APP-80591		Modification Application - Replace Seal Systems	Approved
APCD2004-APP-80886		Modification Application - Add Pumps	Approved
APCD2004-APP-82296		Modification Application - Move Equipment	Approved
APCD2005-APP-82705		Modification Application – Expand Capacity	Approved
APCD2005-APP-82817		Modification Application - Equipment Improvements	Approved
APCD2005-APP-82818		Modification Application - New Storage Vessel	Approved
APCD2005-APP-83061		Modification Application - Change in Process	Approved
APCD2006-APP-84170		Modification Application – Change Internal Dryers	Approved
APCD2006-APP-84182		Modification Application - Add Heat Exchange	Approved
APCD2006-APP-84540		Modification Application - Rotary Screen	Approved
APCD2007-APP-85634		Modification Application - Replace Piping and Valves	Approved
APCD2008-APP-86044		Modification Application - Replace Piping and Valves	Approved

APCD2008-APP-86345		Modification Application - Replace Dy Mixing Equipment	Approved
APCD2008-APP-86926		Modification Application - Allow Use of Equipment in Two Lines	Approved
APCD2010-APP-00967		Modification Application - Tank Conversion	Approved
APCD2010-APP-01094		Modification Application - Rotary Screen	Approved
APCD2011-APP-01551		Modification Application - Add manifold	Approved
APCD1997-APP-61743	APCD2009-PTO-000489	Initial Application - Stainless Steel Ribbon Blender	Approved
APCD1985-APP-50265	APCD2009-PTO-050265	Initial Application - Cogeneration Unit #1	Approved
APCD2015-APP-04119		Modification Application - CEMS Replacement	Approved
APCD2018-APP-05560		Modification Application - Engine Exchange	Approved
APCD2024-APP-08131		Modification Application – Engine Exchange	Open
APCD1985-APP-50679	APCD2009-PTO-850679	Initial Application - Cogeneration Unit #3	Approved
APCD2010-APP-01320		Modification Application - Turbine Replacement	Approved
APCD2011-APP-01509		Modification Application - Reactivation	Approved
APCD2015-APP-04119		Modification Application - CEMS Replacement	Approved
APCD1985-APP-50680	APCD2009-PTO-850680	Initial Application - Cogeneration Unit #2	Approved
APCD2014-APP-03433		Modification Application - Turbine Replacement	Approved
APCD2015-APP-04119		Modification Application - CEMS Replacement	Approved
APCD2022-APP-07297		Modification Application - Turbine Replacement	Open
APCD2023-APP-08000		Modification Application - Engine Exchange	Approved
APCD1991-APP-01285	APCD2009-PTO-901285	Initial Application - Milling system	Approved
APCD2017-APP-05125	APCD2019-PTO-003410	Initial Application - Screen	Approved
APCD2022-APP-07484	APCD2024-PTO-005043	Initial Application - Rental Boiler	Approved
APCD2023-APP-07999		Modification Application - Increase hours of use	Open

3.0 Facility Description

The CP Kelco U.S. Inc San Diego plant manufactures biogums. Biogums are a product of sugar fermentation with corn syrup is used as a feed stock. Fermentation-derived bio-polymer products are first filtered, mixed with IPA, cooled and then further processed. Permitted equipment at this site includes process equipment related to biogums manufacturing process, including fermentation tanks, wet and dry milling process lines, screens, dryers, and cyclones. The process is powered by onsite cogeneration units consisting of turbines and boilers. The site has various equipment as described by the following permits.

Equipment Type	Permit Number	Permit Description
Cogeneration Units	APCD2009-PTO-050265	Cogeneration Unit #1: One (1) Solar Mars 100 SoLoNOx turbine, S/N MG82615, natural gas fired, 105.76 MMbtu/hour (LHV) @ 59° F engine inlet temperature, 60% RH, 9.175 MW net power limited at the generator; with one (1) Coen low-NOx duct burner, 38 MMbtu/hour (lhv) fired on natural gas; Koch dual TFE lube oil mist control system; one Deltak type Delta 445-428e waste heat recovery boiler; and one CEMTEK continuous emission monitoring system (CEMS) with VIM Technologies CEMLink DAS data acquisition system. (940582 OWC) (950336 EAD 0597)(960257, 961209 GDS)(973018 AFS 060799)(975672 10/00) (974505 EAD 2/15/01)(982164 SJR 12/04)(982810 ALC 07/06)(chg turbine from 90S to 100 per RMA 02/08)(985946 ALC 03/09)
	APCD2009-PTO-850680	Cogeneration Unit # 2: One (1) Solar Mars 100S model T-15000S SoLoNOx turbine, natural gas fired, rated 103 million btu/hour @ 59 degrees f, 60% rh,(LHV) based on generator limited to 9.58 MW gross power at the generator; 10.3 MW net power output, S/N TUG06-14109; with one (1) Coen low-NOx duct burner, 38 million btu/hour fired on natural gas (LHV); one gas producer, S/N 1058M; one Koch dual TFE lube oil mist eliminator system; one Deltak type Delta 445-428E waste heat recovery boiler; and one CEMTEK continuous emission monitoring system (CEMS) with VIM Technologies CEMLink DAS data acquisition system. (978684 EAD 10/13/03)(981483/LKR ALC 02/04)(982164 SJR 12/04)(984758 ALC 02/07)(985946 ALC 03/09)
	APCD2009-PTO-850679	CURRENTLY ON INACTIVE STATUS: Cogeneration Unit # 3: One (1) Solar Mars 100S model T-15000S SoLoNOx turbine, natural gas fired, rated 103 million btu/hour @ 59 degrees f, 60% rh,(LHV) based on generator

		limited to 9.58 MW gross power at the generator; 10.3 MW net power output, S/N TBD; with one (1) Coen low-NOx duct burner, 38 million btu/hour fired on natural gas (LHV); one gas producer, S/N TBD; one Koch dual TFE lube oil mist eliminator system; one Deltak type Delta 445-428E waste heat recovery boiler; and one CEMTEK continuous emission monitoring system (CEMS) with VIM Technologies CEMLink DAS data acquisition system. (978683 EAD 10/13/03)(982164 SJR 12/04)(985946 ALC 03/09)
Boilers	APCD2004-PTO-000480	BOILER 8, CLEAVER BROOKS MODEL NO DL76 SERIAL NO WC1328, 72 MM BTU/HR, FIRED WITH NATURAL GAS OR DIESEL OIL, OXYGEN TRIM CONTROLLER, BURNER CONTROL. (982164/SJR) (12/04)
	APCD2004-PTO-003129	Boiler #9: Cleaver Brooks, model DL76, S/N WL 1459, fired with Natural Gas, 78 MMBtu/hour heat input rating; ultra low NOx burner, TODD COEN model D-RMB T1200IGX3256X, S/N 9132559; controlled by COEN FYR burner management and combustion control system including flue gas recirculation (FGR) and stack oxygen/air:fuel ratio trim system
	APCD2024-PTO-005043	Rental Boiler: Manufacturer: Nebraska, Model: NOS-2A/S-55, Equipped with a low-NOx burner: Manufacturer: TODD, Model: Variflame SV190 natural gas fired, Maximum rated heat input: 92.1 MMBtu/hr; controlled by an SCR system
Sodium Carbonate Transfer/Storage System	APCD2006-PTO-004380	AUTOMATED BULK SODIUM CARBONATE TRANSFER/STORAGE SYS, 10-TONS/HR CAP: FILTER COLLECTOR; 1 STORAGE SILOS WITH A BAGHOUSE; BBL STATION; 2 CYCLONES; 2 HOPPERS (984443 7/06)(975996/SJR)(01/03)
Screen/ Sifters/ Sieve	APCD2005-PTO-973084	SIFTER, KELCO S/N K07966. 973084AFS17AUG1999 975672 (10/00)(980627 ALC 02/05)
	APCD2005-	SIFTER, KELCO NO. 09493973096AFS02SEP1999

	PTO-973096	(980200 10/03) (980627 ALC 02/05)
	APCD2005-PTO-973095	SIFTER, KELCO S/N K05986. 973095AFS17AUG1999 975672 (10/00)(973095 ALC 02/05)
	APCD2005-PTO-973094	SIFTER, KELCO S/N K04265. 973094AFS17AUG1999 975672 (10/00)(980627 ALC 02/05)
	APCD2005-PTO-973092	SCREEN, KELCO S/N K08969. 973092AFS17AUG1999 973092 (10/00)(980627 ALC 02/05)
	APCD2005-PTO-975096	SCREEN MANUFACTURED BY KELCO, MODEL KELCO, S/N K09744. 975096AFS25JUL2001 (975096 ALC 02/05)
	APCD2019-PTO-003410	Vibrating Screen/Sieve: Cleveland, Model HKC-30, 0.75 tons/hr capacity, S/N 17Z0831. To be used with equipment under permits APCD2005-PTO-001676, APCD2009-PTO-901285, and APCD2009-PTO-000489.
Milling Systems/Blenders	APCD2009-PTO-901285	Milling system, 330 lbs/hr cap: three (3) feed cyclones, two (2) SWECO screens two (2) model 3TH Mikropul Micromills; one (1) ribbon blender, one (1) enclosed mill, one (1) enclosed mill; two (2) baghouses; two (2) stray dust baghouses, one (1) shared with blending and packing station and one (1) shared with main vacuum system. Blending and packing station: three (3) rotary blenders Nos. 1, 2 and 3 with 100 cf, 200 cf and 200 cf capacity respectively; two (2) portable barrel hoists; one (1) stray dust baghouse shared with milling system; one bulk bag discharge vented to existing baghouse (bh2) located in Building J-10. (985550 EFH 987403 EFH)
	APCD2009-PTO-000489	BLDG. S-8, ONE 300 CU.FT. STAINLESS STEEL RIBBON BLENDER #13 (4000 LBS PER HOUR CAPACITY) MANUALLY LOADED WITH STRAY DUST HOOD AND DUCTING TO STRAY DUST BAGHOUSE SHARED WITH BLENDERS #10, #11, AND #12. BLENDER/PACKING SYSTEMS 250-LBS/HR CAP: THREE (3) BLENDERS; MAIN VACUUM SYSTEM, STRAY DUST BAGHOUSE. 985552 EFH
	APCD2005-PTO-001676	Dry side equipment consisting of the following: Four mill with feed hoppers; four milling cyclones; four fine cyclones; four Rotex screens; one blender feed screw conveyor; three ribbon blenders; one ribbon blender screw conveyor; five conical blenders; one centrifugal sifter; four

		mill baghouses (line 1, line 2, line 3, and line 4 baghouses) and fans; one transfer (vacuum receiver) baghouse and fan; one portable bagging station for blender no. 5; three receiving hoppers with fixed screens and baggers, Sweco, Model LX 48S156; and three conveyors; one mass flow hopper for bag and barrel station; one stray dust collection system, including mill room central vacuum system; three stray dust baghouses (a, b, and c) and fans; and one perlite system.
Bio-Polymer Manufacturing Operation	APCD2007-PTO-001516	Bio-Polymer Manufacturing Operation consisting of the following equipment: - three (3) TK mixers, Nos. 1, 2, and 3; - three (3) IPA filters; - three (3) press enclosures, Nos. 1, 2, and 3; - three (3) spent pumps and three (3) spent pots; - one (1) precipitation pump; - one (1) hydrocyclone; - one (1) inline grinder; - one (1) filter assembly; - three (3) product fans; - twelve (12) cyclones; - nine (9) dryers and nine (9) dryer fans; - five (5) fitzmills; - one (1) IPA booster pump; - three (3) rotary dewatering screens; - one (1) gellan platform (broth filtration system); - one (1) constant boiling mixture (CBM) day tank; and - six (6) baghouses; Distillation: three (3) distillation columns, Nos. 1, 2, and 3, rated at 200, 200, and 320 gpm, respectively; a fugitive VOC ventilation system as described in the most recent District-approved SRS O&M program; Solvent Recovery System (SRS): three (3) regenerative carbon adsorber beds, capable of operating at a combined maximum rate of 52,000 DSCFM, with each bed containing 28,000 lbs of carbon, and a pre-conditioning unit as described in the most recent District-approved SRS O&M program; and an onsite monitoring system as described in the most recent District-approved SRS O&M program.
R&D Pilot Plant #1 Continuous Processing System	APCD2004-PTO-002185	pilot plant continuous processing system consisting of: Mixers; Drying mill; Mechanical water/solvent reduction devices; GEA Westfalia cetrifuge; Flottweg feed pump; Flottweg solids tank; Grieves dryer; Oversize hopper;

		Portable hopper/conveyor system; Screen; 50 cubic foot blender; Conical blender; Product mill; Fitzmill; 4 cyclones; Stray dust baghouse; Dryer baghouse; Spent IPA pot; Slurry cooler; Filter assembly; 30 inch screen; a bag breaking station; and, fugitive VOC collection system and ducting vented to 6-ft diameter 12,000 cfm Duall water scrubber with 48-ft packed bed and mist eliminator.
IPA Storage Tank	APCD2004-PTO-940043	An isopropyl alcohol (IPA) storage tank, 200,000-GAL. capacity, vented to an Advanced Air Technologies Inc. water scrubber, 18-inch diameter, 250 SCFM capacity, consisting of two 8-foot wetted packed beds operated in series and a mist eliminator, with solvent laden air (SLA) duct work, instrumentation, and valving from the IPA storage tank.
Biogum Pilot Plant	APCD2004-PTO-940006	Biogum pilot plant consisting of: Fermentation tanks; Sharples model P3000 solid-bowl decanter; Union model HTD 60 homogenizer; Buflovak 42 dia. X 36 model ADDD double-drum dryer; 48" screen; drum dryer, 220 sq. ft.; Strong Scott model TJS-8 turbulizer; Rietz model RE-6-K5F418 extractor; 6,000 gallon process tank; Semiworks stacked disk centrifuge; Biogum mixing tank; Biogum reslurry tank; Biogum water powder mixer; and, a stray dust baghouse.

Insignificant units at this facility include:

- Stationary & portable internal combustion engines with less than or equal to 50 bhp output rating [Reg XIV, Appendix A, (d)(1)(iii)]
- Stationary gas turbines with a power rating of <0.3 megawatt (MW) or a maximum gross heat input rating of 1 million BTUs per hour [Reg XIV, Appendix A, (d)(1)(iv)]

- Fuel-burning equipment with a maximum gross heat input rate of <1 million Btu/hour when not part of a process, process line, line, equipment, article, machine or other contrivance for which a permit to operate is required by these Rules and Regulations [Reg XIV, Appendix A, (d)(4)(i)]
- Fuel burning equipment with a maximum gross heat input of <20 million Btu/hour, and fired exclusively with natural gas and/or liquefied petroleum gas [Reg XIV, Appendix A, (d)(4)(ii)]
- Steam boilers, process heaters, and steam generators with a maximum gross heat input <5 million Btu/hour [Reg XIV, Appendix A, (d)(4)(iii)]
- Dry batch mixers with less than or equal to 0.5 cubic yards rated working capacity [Reg XIV, Appendix A, (d)(27)]
- Batch mixers (wet) with less than or equal to 1 cubic yard capacity where no organic solvents, diluents or thinners are used. [Reg XIV, Appendix A, (d)(28)]
- Paper shredders and paper disintegrators that have a capacity of 600 pounds per hour or less and the associated conveying systems and baling equipment. [Reg XIV, Appendix A, (d)(41)]
- Stationary organic compound storage tanks with a capacity of less than or equal to 250 gallons [Reg XIV, Appendix A, (e)(1)]
- Fire extinguishing equipment, using halons with a charge of <50 lbs. of a Class I or Class 11 ozone depleting compound. [Reg XIV, Appendix A, (d)(31)]
- Equipment that is used to conduct research and develop new or improved processes/products and is operated by technically trained personnel under the supervision of a research director and is not used in the manufacture of products for sale or exchange for commercial profit. and all emissions are <15 lbs/day [Reg XIV, Appendix A, (d)(48)]
- Batch-type waste-solvent recovery stills with batch capacity of less than or equal to 7.5 gallons for onsite recovery provided the still is equipped with a safety device & VOC emissions are <5 lbs/day [Reg XIV, Appendix A, (i)(6)]
- Equipment used for washing or drying articles fabricated from metal, cloth, fabric or glass, provided that no organic solvent is employed in the process and that no oil or solid fuel is burned and none of the products being cleaned has residues of organic solvent and VOC emissions are <5 lbs/day [Reg XIV, Appendix A, (i)(8)]
- Any operation producing materials for use in cosmetic or pharmaceutical products and/or manufacturing cosmetic or pharmaceutical products by chemical processes, which emit <15 lbs/day of VOCs [Reg XIV, Appendix A, (o)(12)]
- Refrigeration units except those used as, or with, air pollution control equipment with a charge of <50 lbs of a Class I or II ozone depleting compound. [Reg XIV, Appendix A, (o)(18)]

4.0 Title V Applicability

The Title V regulation applies to any stationary source that is a major stationary source as defined in Rule 1401. Rule 1401(c)(26) defines “major stationary source” as any stationary source which emits or has the potential to emit one or more air contaminants in amounts equal to or greater than the following emission rates: (i) 10 tons per year of any federal hazardous air pollutant (HAP), including fugitive emissions; (ii) 25 tons per year of any combination of federal HAPs, including fugitive emissions; or (iii) emission rates of a “Federal Major Stationary Source” as defined in Rule 20.1 New Source Review – General Provisions.

Rule 20.1(c)(30) defines “Federal Major Stationary Source” as a stationary source which has an aggregate potential to emit one or more air contaminants in amounts equal to or greater than any of the emission rates listed in Table 20.1-5b. These emission rates are: 25 tons per year for NOx and VOC, and 100 tons per year for PM2.5, PM10, SOx, and CO. Rule 20.1(d)(1)(ii) provides guidelines for determining aggregate potential to emit for a stationary source.

The District conducted a review of this facility’s PTE in Section 6.0. The facility was operating under an enforceable permit limit that capped their NOx emissions below 50 tons per year and had demonstrated potential VOC emissions below 50 tons per year. However, with San Diego County’s updated ozone attainment status, CP Kelco’s NOx limit and VOC PTE exceeded the corresponding federal major source threshold. Based on current emissions reporting, along with permit limits and emission calculations in the relevant applications mentioned in Section 2.0, CP Kelco is a federal major source of NOx and VOC and is therefore subject to Title V regulations. Additionally, potential and actual HAP emissions are below the thresholds based on relevant District application and emissions inventory data. Therefore, at the time of this evaluation, CP Kelco is determined to be a major source under Title V for NOx and VOC and a non-major source for HAPs.

5.0 Compliance History

This is an existing facility which has maintained generally good compliance over time. The facility has received 9 notices of violation over many years of operation. The most recently resolved NOV at the site was for a boiler related to APCD2024-PTO-005043 which exceeded the NOx exhaust emission limit during an annual source test in 2025. The facility has since corrected and retested the boiler and it is in compliance with all permit requirements.

Other NOVs the facility received were failures to conduct annual maintenance, ineligible PERP equipment usage, recordkeeping violations for VOC, visible particulate leaks and fugitive liquid leaks, and non-operational differential gauges. These issues have all been addressed expeditiously and the District expects that the source will continue to be able to comply with all requirements going forward.

6.0 Potential to Emit and Actual Emissions

The following table shows the actual and potential emissions for the facility that are used to establish the major source status for Title V. Emission calculations and assumptions are attached.

Title V Major Source Determination				
Tons per Year:				
Pollutant	Thresholds	Facility Actual Emissions*	Facility Capped Potential to Emit	Major Source
Highest Federal HAP	10	0.61	2.8	No
Sum of Federal HAPs	25	1.46	4.5	No
NOx	25	38.1	<50	Yes
VOC	25	11.1	<135	Yes
PM10	100	7.6	6.6	No
SOx	100	0.6	1.7	No

CO	100	6.7	<100	No
----	-----	-----	------	----

*Facility actual emissions are based on the site's 2023 emissions inventory.

Criteria pollutant potential to emit was calculated as part of the original application or was able to be determined from permit limits or technical data. These calculations are included in the supplemental documents. NOx PTE was determined to be approximately 140 tons per year; however, source has facility-wide limit of 50 TPY NOx. Additionally, source has existing facility-wide limit of 135 tons per year of VOC, however, actual emissions have been much lower than the permit limit which was verified back in 2005 when the first Title V permit at this facility (see Section 4.0) was retired. Therefore, based on this information, the facility is a major source for NOx and VOC.

*0.61 tons per year of formaldehyde from 2023 emissions inventory as highest Federal HAP. 1.46 tons per year is the sum of all toxic air contaminants (TACs) inventoried, with federal HAPs being a subset of all TACs.

7.0 40 CFR Part 64 CAM (Compliance Assurance Monitoring)

To be subject to CAM, an emission unit must have uncontrolled emissions above the major source threshold for a pollutant for which the facility is a major source. Additionally, the equipment must utilize a control device in order to meet an emission standard for that pollutant. Finally, if the equipment is subject to a section 111 or 112 requirement pursuant to the Clean Air Act (NSPS or NESHAP) or otherwise is subject to federally enforceable continuous monitoring requirements, CAM does not apply. These applicability criteria mean that the majority of the equipment at this facility is exempt from CAM requirements as follows:

Turbines: Each of the turbines, APCD2009-PTO-050265, APCD2009-PTO-850680, and APCD2009-PTO-850679, have an uncontrolled PTE of NOx in excess of the 25 TPY federal major source threshold. Therefore, Compliance Assurance Monitoring (CAM) under 40 CFR Part 64 was considered for these units. Pursuant to New Source Review (NSR) and District Rule 69.3.1, the turbines are required to operate and maintain CEMS to measure NOx and CO emissions, as well as monitoring VOC emissions through a District approved CO/VOC surrogate relationship. Monitoring and testing are required in the existing District permits and additional recordkeeping and reporting are required pursuant to District Rule 1421 for the new Title V permit.

40 CFR §64.2 (b)(vi) specifies that the requirements of Part 64 shall not apply to emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1. Both the District and Federal operating permits require the turbines to be equipped with Continuous Emissions Monitoring Systems (CEMS), which meets the definition for a continuous compliance determination method, as it is used to determine compliance with an emission limitation or standard on a continuous basis and provides the data in units of the standard or is correlated directly with the compliance limit. Therefore, these units are exempt from the requirements of 40 CFR 64, pursuant to §64.2 (b)(vi).

NG/Diesel Boilers: The two large boilers operated at this facility using natural gas or diesel are equipped with FGR and low-NOx burners. Emissions from these units, without FGR, do not have the potential to exceed major source thresholds. Additionally, the permit conditions define yearly NOx emissions for the facility, maximum NOx and CO concentrations from the flue exhaust, and

compliance is determined through the following records: specifications for fuel used, usage records for all fuel fired, and annual NO_x and CO emissions calculated from Emission Factors generated during Annual Source Testing. These units are subject to emission standards with monitoring that meet the equivalent of continuous monitoring and therefore are exempt from the requirements of 40 CFR 64.

NG Boiler: The rental boilers operated at this facility using only natural gas are equipped with FGR, low-NO_x burners, and selective catalytic reduction system. These units can only be used when all other Cogen and Boilers are not in operation. Emissions from these units, without FGR and SCR, do not have the potential to exceed major source thresholds. Additionally, the permit conditions define yearly NO_x emissions for the facility, maximum NO_x/CO/VOC/NH₃ concentrations from the units flue exhausts, and compliance is determined through the following records: specifications for fuel used, daily fuel usage records, and annual NO_x and CO emissions calculated from Emission Factors generated during Annual Source Testing. These units are subject to emission standards with monitoring that meet the equivalent of continuous monitoring and therefore are exempt from the requirements of 40 CFR 64.

Sodium Carbonate Transfer/Storage System: This equipment emits PM-10, but the uncontrolled emissions do not exceed major source thresholds and therefore is not subject to CAM.

Screen/ Sifters/ Sieve: This equipment emits PM-10, but the uncontrolled emissions do not exceed major source thresholds and therefore is not subject to CAM.

Milling Systems/Blenders: This equipment emits PM-10, but the uncontrolled emissions do not exceed major source thresholds and therefore is not subject to CAM.

Bio-Polymer Manufacturing Operation (PTO-001516): This equipment emits PM-10 and VOC emissions. The uncontrolled emissions of PM-10 do not exceed major source thresholds and therefore are not subject to CAM, however, uncontrolled VOC emissions do exceed major source thresholds and CAM for VOC is considered in this review. This operation is equipped with six (6) baghouses and a Solvent Recovery System (SDS) that consists of three regenerative carbon adsorbers that recover IPA (the source of VOC in the process) for recycling back into the bio-gum manufacturing process. Pursuant to New Source Review (NSR) and District Rule 67.10, the operation is required to operate and maintain monitoring devices on the baghouses and SRS. The baghouses are equipped with differential pressure gauges with readings taken weekly and the SRS is equipped with probes to measure the concentration of VOC in the carbon beds. Additionally, the permit conditions define yearly VOC emissions and compliance is determined through the following records: monthly bio-gum production records, hourly VOC concentration readings, weekly differential pressure readings, and weekly measurements of total exhaust flow rates. This operation is subject to emission standards with monitoring that meet the equivalent of continuous monitoring and therefore is exempt from the requirements of 40 CFR 64.

Pilot Plant Continuous Processing System (PTO-002185): This equipment emits PM-10 and VOC emissions. The uncontrolled emissions of PM-10 do not exceed major source thresholds and therefore are not subject to CAM, however, uncontrolled VOC emissions do exceed major source thresholds and CAM for VOC is considered in this review. This operation is equipped with two (2) baghouses and a fugitive VOC collection system that vents to a water scrubber with packed bed mist eliminator. Pursuant to New Source Review (NSR), the operation is required to operate

and maintain monitoring devices on the baghouses and water scrubber. The baghouses are equipped with differential pressure gauges with readings taken weekly and the scrubber is equipped with probes and flow meters to measure water recirculation rate, temperature, and pressure. Additionally, the permit conditions define yearly VOC emissions and compliance is determined through the following records: monthly bio-gum production records, hourly recirculation rate and pressure readings, daily temperature readings, and weekly differential pressure readings. This operation is subject to emission standards with monitoring that meet the equivalent of continuous monitoring and therefore is exempt from the requirements of 40 CFR 64.

R&D Biomass Pilot Plant (PTO-940006): This equipment emits PM-10 and VOC emissions. The uncontrolled emissions of PM-10 and VOC from this unit do not exceed major source thresholds, however, total potential VOC emissions from the facility do exceed major source thresholds so CAM for VOC is considered in this review. This operation is equipped with one (1) baghouse and no VOC controls. Pursuant to New Source Review (NSR), the operation is required to operate and maintain pressure gauges on the baghouse with readings taken weekly. Additionally, the permit conditions define daily and yearly VOC emissions and compliance is determined through the following records: daily and annual biomass processing records and weekly differential pressure readings. This operation is subject to emission standards with monitoring that meet the equivalent of continuous monitoring and therefore is exempt from the requirements of 40 CFR 64.

IPA Storage Tank (PTO-940043): This equipment emits VOC, but the uncontrolled emissions do not exceed major source thresholds and therefore is not subject to CAM.

8.0 Applicable Requirements

This section summarizes the major types of requirements for this facility. These types of requirements include facility-wide and permit specific applicable requirements. Additionally for each emission unit, the rule that results in the primary emission limitation is listed.

General Facility-Wide Applicable Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	10(a) 10(b)	Permits Required – (a) Authority to Construct Permits Required – (b) Permit to Operate
SDCAPCD Reg. II	12	Registered Equipment
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	20.2 – 20.4	New Source Review
SDCAPCD Reg. II	21	Permit Conditions
SDCAPCD Reg. II	24	Temporary Permit to Operate
SDCAPCD Reg. II	25	Appeals
SDCAPCD Reg. IV	60	Circumvention
SDAPCD Reg. IV	71	Abrasive Blasting
SDCAPCD Reg. V	98*	Breakdown Conditions: Emergency Variance
SDCAPCD Reg. VI	101	Burning Control
40 CFR Part 82	Subpart A	Production and Consumption Controls

40 CFR Part 82	Subpart B	Servicing of Motor Vehicle Air Conditioners
40 CFR Part 82	Subpart F	Recycling and Emissions Reducing

**Breakdowns/variances are not recognized by EPA and cannot grant relief from federal enforcement of requirements.*

Facility-Wide Prohibitory Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	19.2	Continuous Emission Monitoring Systems
SDCAPCD Reg. IV	50	Visible Emissions
SDCAPCD Reg. IV	51	Nuisance
SDCAPCD Reg. IV	52	Particulate Matter
SDCAPCD Reg. IV	53	Specific Air Contaminants
SDCAPCD Reg. IV	54	Dust and Fumes
SDCAPCD Reg. IV	62	Sulfur Content of Fuels
SDCAPCD Reg. IV	67.10	Kelp Processing and Bio-Polymer Manufacturing Operations
SDCAPCD Reg. IV	67.17	Open VOC Containers
SDCAPCD Reg. IV	68	Fuel-Burning Equipment-Oxides of Nitrogen
SDCAPCD Reg. IV	69.2	Industrial and Commercial Boilers, Process Heaters and Steam Generators
SDCAPCD Reg. IV	69.3.1	Stationary Gas Turbine Engines – BARCT
SDCAPCD Reg. X	40 CFR 60 Subpart A	NSPS General Provisions
SDCAPCD Reg. X	40 CFR 60 Subpart GG	NSPS - Stationary Gas Turbines
SDCAPCD Reg. XI	40 CFR 60 Subpart KKKK	NSPS - Stationary Combustion Turbines
SDCAPCD Reg. XII	1200*	Toxic Air Contaminants – New Source Review
40 CFR Part 61	Subpart M**	NESHAP – Asbestos
SDCAPCD Reg. XII	1206**	Asbestos Removal, Renovation, and Demolition
SDCAPCD Reg. XIV	1421	

**Not federally enforceable*

*** The District issued its own Asbestos Rule 1206 intended to be as stringent as Subpart M. The facility is subject to the most stringent requirements of either rule, which at the time of this report is ensured by compliance with Rule 1206.*

New Source Review Requirements

This facility had a Title V permit that was issued on 12/2/2002 and retired on 08/03/2005 because the EPA reclassified the District for ozone attainment from serious to basic in 2005, which increased the Title V thresholds above the emission levels for VOC and NOx at this source.

This is a new initial Title V application for this facility because the District was redesignated to severe nonattainment for ozone by the EPA, and the threshold for VOC and NOx was reduced to 25 ton/yr, therefore, this facility was required to obtain a new Title V permit.

This is not a PSD facility. SDAPCD is aware that at one point (over 20 years ago), a PSD permit may have been issued to CP Kelco by US EPA, likely due to deficiencies with SDAPCDs PSD program at the time. While SDAPCD does not have an approved PSD program at this time, the potential to emit for the facility is significantly less than applicable federal PSD thresholds, and for this reason SDAPCD does not consider there to be any current PSD requirements for this facility, other than those that may have been integrated into the current operating permits, specifically those referenced below as “alternative BACT”.

This permit includes a number of emission units that included specific BACT determinations, notably the boilers and cogeneration gas turbines, requirements of which are discussed below.

The gas turbines and boilers were also historically evaluated under an “alternative BACT” determination which imposed a combined NOx limit for all five emission units that reduced maximum facility emissions over time because of the complicated status of SDAPCDs NSR rule approval at the time. Unfortunately, specific analysis related to this limit and why rules at the time supported this concept have been lost due to staff retirements and historical procedures which did not include as rigorous documentation and file retention as those in place today. Nevertheless, each unit currently is permitted with specific NOx concentration limits in addition to the shared annual limit and SDAPCD does not intend to remove any of these limits as they serve to limit emissions from the facility. Not that for the purposes of this table, the concentrations are shown in abbreviated nomenclature for ease of visibility, but specific permit conditions include details such as the oxygen correction factors.

SDAPCD Permit No.	Permit Limit	Source and Explanation
APCD2004-PTO-000480	30 ppm NOx (gas) 225 ppm NOx (diesel) 50 tpy NOx (shared) 400 ppm CO 00 tpy CO (shared)	Specific documentation for when each limit was imposed on this boiler does not exist. However, based on the age of the boiler, the imposed concentration-based limits for NOx and CO are reasonable for a boiler of this size (72 MMBtu/hr) where controls would likely not have been cost effective. It has not been modified since construction, so still operates with these limits. It is also included within the grouping of units subject to the “alternative BACT” emission limits (denoted as “shared” in the adjacent column) which also limit emissions. It also complies with BACT requirements for SOx, PM and VOC by only burning pipeline quality natural gas during normal operation (allowance for oil during gas curtailments only)
APCD2004-	9 ppm NOx (gas)	This boiler has similar permit conditions to the

PTO-003129	50 tpy NOx (shared) 300 ppm CO 100 tpy CO (shared)	other boiler described above, except that it was modified through application APCD2012-APP-002248 which reconstructed the boiler and subjected it to local NSR, including the determination of a 9 ppm NOx limitation and 300 ppm CO limitation. It is also still subject to the shared NOx/CO annual limits because all subject units have not yet been modified to comply with BACT individually. It also complies with or ensures emissions are below applicability thresholds for BACT requirements for SOx, PM and VOC by only burning pipeline quality natural gas
APCD2024-PTO-005043	5 ppm NOx (gas) 30 ppm NOx (start) 2.5 tpy NOx (annual) 50 tpy NOx (shared) 50 ppm CO 100 tpy CO (shared) 10 ppm VOC	This is a rental boiler which is only permitted to operate when another boiler or turbine is shutdown. It is subject to the most stringent emission limits compared to other boilers as a much newer unit and is also equipped with controls. It is also subject to various operational limits related to startup/shutdown due to the need for SCR catalyst to warm up (note that these conditions also ensure that standards based on rules which do not have startup/shutdown exemption apply at all times, for example the 30 ppm NOx limit of Rule 69.2). It also complies with or ensures emissions are below applicability thresholds for BACT requirements for SOx and PM by only burning pipeline quality natural gas.
APCD2009-PTO-050265	28.6 ppm NOx (hourly) 15.0 ppm NOx (annual-no DB) 16.8 ppm NOx (annual-DB) 50 tpy NOx (shared) 100 tpy CO (shared)	This is a gas turbine cogeneration unit. It is subject to multiple NOx emission limits imposed through various BACT determinations. Specifically, it has concentration based limits for different operating scenarios – one that is a short term limit (noted as hourly) which is primarily intended to cover applicability of District Rule 69.3.1 and operating scenarios which are not startups/shutdowns, but where the turbine is undergoing transitory periods/load shifting causing emission variations. However, during the majority of operation and as an annual average it is subject to lower emission limits of 15.0 and 16.8 ppmv NOx depending on whether the duct burner (DB) is not in operation or in operation. These limits were primarily established based on the lowest achievable emission levels without installation

		of controls and as limits taken to avoid requirement to install controls (SCR) based on cost effectiveness. The turbine has been subject to multiple applications for replacement/modification over time, but these modifications were only required due to periodic overhauls and replacement of the combustion turbine/components that were not considered exempt routine maintenance and therefore subject to NSR review. It also complies with or ensures emissions are below applicability thresholds for BACT requirements for VOC, SOx and PM by only burning pipeline quality natural gas.
APCD2009-PTO-850680	29.5 ppm NOx (hourly) 17.5 ppm NOx (annual-no DB) 19.0 ppm NOx (annual-DB) 50 tpy NOx (shared) 100 tpy CO (shared)	This gas turbine is subject to very similar emission limits and concepts as the above turbine, except the specific concentrations are slightly different because it was not required to take lower limits as part of a BACT determination associated with a replacement (as part of a cost effectiveness analysis to demonstrate that controls are not cost effective)
APCD2009-PTO-850679	TBD	This gas turbine is currently non-operational. However, once operational will be subject to the same emission limits as the other turbines and before activation the appropriate Title V modification application will be processed.

Note that the above are not new determinations, but based on applications which have already been approved according to the appropriate provisions.

Permit Specific Applicable Requirements

SDAPCD Permit No.	Permit Description	Applicable Rules
APCD2009-PTO-050265, APCD2009-PTO-850680, APCD2009-PTO-850679	Cogeneration Units	SDCAPCD Reg. II Rule 19.2 SDCAPCD Reg. II Rule 20.2 SDCAPCD Reg. II Rule 20.3 SDCAPCD Reg. II Rule 21 SDCAPCD Reg. IV Rule 50 SDCAPCD Reg. IV Rule 53 SDCAPCD Reg. IV Rule 69.3.1 SDCAPCD Reg. XII Rule 1200* 40 CFR 60

		40 CFR 60 Subpart GG 40 CFR 60 Subpart KKKK
APCD2004-PTO-000480, APCD2004-PTO-003129, APCD2024-PTO-005043	Boilers	SDCAPCD Reg. II Rule 10 SDCAPCD Reg. II Rule 20.1 SDCAPCD Reg. II Rule 20.2 SDCAPCD Reg. II Rule 20.3 SDCAPCD Reg. IV Rule 50 SDCAPCD Reg. IV Rule 51 SDCAPCD Reg. IV Rule 62 SDCAPCD Reg. IV Rule 69.2 SDCAPCD Reg. XII Rule 1200* 40 CFR 60 Subpart Dc
APCD2006-PTO-004380	Sodium Carbonate Transfer/Storage System	SDCAPCD Reg. IV Rule 51 SDCAPCD Reg. IV Rule 54 SDCAPCD Reg. XIV Rule 1421
APCD2005-PTO-973084, APCD2005-PTO-973096, APCD2005-PTO-973095, APCD2005-PTO-973094, APCD2005-PTO-973092, APCD2005-PTO-975096, APCD2019-PTO-003410	Screen/ Sifters/ Sieve	SDCAPCD Reg. IV Rule 51 SDCAPCD Reg. XIV Rule 142i
APCD2009-PTO-901285, APCD2009-PTO-000489, APCD2005-PTO-001676	Milling Systems/Blenders	SDCAPCD Reg. II Rule 10 SDCAPCD Reg. II Rule 20.3 SDCAPCD Reg. IV Rule 50 SDCAPCD Reg. IV Rule 51 SDCAPCD Reg. IV Rule 67.1 SDCAPCD Reg. V Rule 98* SDCAPCD Reg. XIV Rule 1421
APCD2007-PTO-001516	Bio-Polymer Manufacturing Operation	SDCAPCD Reg. II Rule 20.3 SDCAPCD Reg. II Rule 21 SDCAPCD Reg. IV Rule 50 SDCAPCD Reg. IV Rule 67.10 SDCAPCD Reg. XIV Rule 1421
APCD2004-PTO-002185	R&D Pilot Plant #1 Continuous Processing System	SDCAPCD Reg. II Rule 10 SDCAPCD Reg. II Rule 20.3 SDCAPCD Reg. IV Rule 51 SDCAPCD Reg. IV Rule 67.10 SDCAPCD Reg. V Rule 98* SDCAPCD Reg. XIV Rule 1421
APCD2004-PTO-940043	IPA Storage Tank	SDCAPCD Reg. II Rule 10 SDCAPCD Reg. II Rule 21 SDCAPCD Reg. IV Rule 67.10 SDCAPCD Reg. V Rule 98 SDCAPCD Reg. XIV Rule 1421
APCD2004-PTO-940006	Biogum Pilot Plant	SDCAPCD Reg. II Rule 10 SDCAPCD Reg. II Rule 20.3

		SDCAPCD Reg. II Rule 21 SDCAPCD Reg. IV Rule 51 SDCAPCD Reg. V Rule 98
--	--	--

**Indicated rules are not federally enforceable*

Emission Limitations and Applicable Requirements by Equipment Type

This section outlines the source of the primary emission limitation for each pollutant and type of emission unit.

Natural Gas-Fired Stationary Cogeneration Gas Turbines	
Pollutant	Primary Limiting Regulations**
NOx	Rule 20.3, Rule 69.3, Rule 69.3.1, 40 CFR 60 Subpart GG or KKKK
SO2	Rule 20.3, Rule 53, 40 CFR 60 Subpart GG or KKKK
VOC	Rule 20.3
CO	Rule 20.3
PM10	Rule 20.3, Rule 53
Toxic Pollutants/HAP	Rule 1200*

Boilers (Natural Gas/Diesel)	
Pollutant	Primary Limiting Regulations
NOx	Rule 69.2, Rule 20.2/20.3
SO2	Rule 53, Rule 62
VOC	Rule 20.2/20.3
CO	Rule 69.2, Rule 20.2/20.3
PM10	Rule 20.3, Rule 53
Toxic Pollutants/HAP	Rule 1200*

Screens/Sifters/Sieves	
Pollutant	Primary Limiting Regulations
NOx	NA (does not emit)
SO2	NA (does not emit)
VOC	NA (does not emit)
CO	NA (does not emit)
PM10	Rule 50, Rule 20.2/20.3
Toxic Pollutants/HAP	NA (does not emit)

Milling Systems/Blenders	
Pollutant	Primary Limiting Regulations
NOx	NA (does not emit)
SO2	NA (does not emit)
VOC	NA (does not emit)

CO	NA (does not emit)
PM10	Rule 50, Rule 20.2/20.3
Toxic Pollutants/HAP	NA (does not emit)

Bio-Polymer Manufacturing	
Pollutant	Primary Limiting Regulations
NOx	NA (does not emit)
SO2	NA (does not emit)
VOC	Rule 20.2/20.3, Rule 67.10, Rule 21
CO	NA (does not emit)
PM10	Rule 20.2/20.3
Toxic Pollutants/HAP	Rule 1200*

R&D Biomass Pilot Plant	
Pollutant	Primary Limiting Regulations
NOx	NA (does not emit)
SO2	NA (does not emit)
VOC	Rule 20.2/20.3, Rule 21
CO	NA (does not emit)
PM10	Rule 21
Toxic Pollutants/HAP	Rule 1200*

Bio-gum Pilot Plant	
Pollutant	Primary Limiting Regulations
NOx	NA (does not emit)
SO2	NA (does not emit)
VOC	Rule 20.2/20.3, Rule 67.10, Rule 1421
CO	NA (does not emit)
PM10	Rule 1421
Toxic Pollutants/HAP	Rule 1200*

IPA Storage Tank	
Pollutant	Primary Limiting Regulations
NOx	NA (does not emit)
SO2	NA (does not emit)
VOC	Rule 20.2/20.3, Rule 21
CO	NA (does not emit)
PM10	NA (does not emit)
Toxic Pollutants/HAP	Rule 1200*

**Indicates rules which are not federally enforceable.*

***Certain rules, as specified in permit conditions, impose different limits during differing operating scenarios (e.g. the NSPS KKKK NOx limits or Rule 69.3.1 limits are less stringent than BACT limits, but because the BACT limits do not apply during startups/shutdowns, these rules specify the most stringent limits at these times)*

Basis of Facility-wide Requirements and Permit Conditions

Rules 10(a)/10(b) – These rules require that the facility operator obtain an Authority Construct and/or modified Permit to Operate prior to installing, modifying or operating equipment which emits air contaminants.

Rule 11 – This rule contains a list of exemptions for emissions sources which would otherwise be subject to Rule 10 – Permits Required.

Rule 19 – Specifies that facilities must provide proper access to District personnel to verify requirements and conduct any required testing.

Rule 19.2 – This rule applies to any unit that is required to install and operate a continuous emission monitoring system (CEMS) by request of the District, the Environmental Protection Agency (EPA) or California Air Resources Board (CARB) and required that a quality assurance / quality control program be in effect at the facility. QA/QC program shall include a written protocol that describes in detail, complete, step-by-step procedures and operations.

20.1-20.4 – These are the District's New Source Review (NSR) rules. 20.1 contains general requirements and definitions and is primarily used to define calculation methodologies, 20.2 contains requirements for non-major sources, 20.3 for major sources, and 20.4 for portable sources. The individual operating permits and any required authority to construct for each emission unit will specify any detailed or specific requirements (e.g. BACT standards, AQIA imposed requirements, offsets, etc.).

Rule 21 (and 1421) – This rule allows the District to impose permit conditions to ensure enforceability of requirements. Rule 1421 mirrors rule 21 but applies specifically to Title V facilities and contains additional requirements related to ensuring continuous compliance with requirements, and forms the basis of some conditions added to the operating permits as part of the Title V initial application.

Rule 50 – Visible emission requirements that apply to all source of emissions.

Rule 51 – Public nuisance prohibition.

Rule 52 – Generally applicable particulate matter standard. Some sources may instead comply with Rule 53 (certain combustion sources).

Rule 53 – Specific Air Contaminants: This rule is very similar to Rule 52, except applies to certain combustion sources and includes limits on emissions of sulfur compounds in addition to

particulate matter.

Rule 54 – Refers to dust or fumes at the source.

Rule 62 – Sulfur Content of Fuels: This rule applies to all combustion sources, except sewage treatment plant digester gases and gases emitted from solid waste disposal landfill sites, and limits emissions of sulfur compounds by setting maximum concentration limits.

Rule 67.10 - Applicable to any kelp processing or bio-polymer manufacturing line, or associated pilot plant facility, where volatile organic compounds (VOC's) are used as reactants, solvers or extractants or used to separate or purify the products of kelp processing or bio-polymer manufacturing line operations.

Rule 69.2 – This rule applies to the boilers > 5 MMBtu/hr. This rule specifies emission standards for NO_x and CO from the boilers, and associated monitoring, recordkeeping and maintenance/tuning requirements which are specified in the permits.

Rule 69.3/69.3.1 – Applies to the gas turbine engines and specifies NO_x emission limitations based on the size, efficiency, age, and use of the engines. The rule also contains associated monitoring, recordkeeping and testing requirements. These requirements are all specified in permit conditions.

Rule 98 - Defines emergency breakdown requirements which can grant temporary relief from applicable requirements during breakdowns. However, this rule is not federally enforceable and does not grant relief from any applicable requirement of the Title V permit.

Rule 1200 – Outlines requirements for the District's toxics new source review program, which requires new equipment and modifications to equipment to be evaluated for increases in air toxics emissions, and if necessary the requirement to conduct a health risk assessment and demonstrate that the projects meets certain limitations on increases in incremental health impacts. This rule is not federally enforceable. Any emission unit requirements issued under this rule will be specified in the individual operating permits in Appendix A.

NSPS/NESHAP General Provisions – Includes any portions of applicable requirements which apply generally to the facility (definitions, test methods, etc.). Any applicable requirements for specified emission units are stated in the permit specific applicable requirements in Appendix A.

40 CFR 60 Subpart Dc – This rule applies to steam generating units greater than 10 MMBtu/hr and less than 100 MMBtu/hr and includes PM and SO₂ standards for units firing with various fuels, such as coal, distillate, and/or wood, as well as various compliance pathways to demonstrate adherence to the standards, including performance testing and fuel certification, along with emission monitoring

requirements. Reporting and recordkeeping requirements involve reports on emission rates, as applicable, as well as fuel certification information, as applicable. Units firing natural gas only are required to maintain records of all fuel combusted, with one compliance option involving tracking fuel consumption facility wide.

40 CFR 60 Subpart GG applies to the combustion turbines and sets standards for NO_x and SO₂. These are not utility gas turbines, so the correct emission limits are described in the table below (note that there are errors in the formula provided by CP Kelco in the streamlining analysis, so these limits should be used instead). The turbines are also subject to associated monitoring and recordkeeping requirements, which are complied with using a CEMS system operated according the requirements of Part 60 Appendix B & F (the turbines are not subject to the Acid Rain program and part 75 because they do not produce power for sale or distribution to the electric grid). These standards apply at all times, including startup and shutdown. It also requires that gases discharged from stationary combustion turbines do not contain SO₂ in excess of 0.015 percent by volume at 15% O₂ and on a dry basis or that fuel sulfur content does not exceed 0.8 percent by weight. Maximum grain loading of 0.75 gr/100 dscf results in SO₂ emissions much less than this level, so requirements of NSPS GG are met through use of PUC quality natural gas with sulfur monitoring performed by the utility and data available upon request.

GG Nox Limit	PTO-050265	PTO-850680
Heat Input (MMBtu/hr LHV)	105.76	103
kJ/hr	1.12E+08	1.09E+08
Max rating (MW)	9.175	9.58
Y	12.16	11.34
NO _x Limit (ppmvd @15% O ₂)	177.60 (rounds to 180 ppm)	190.41 (rounds to 190 ppm)

Application Information	From APP-008131	From APP-008000
Heat Input (MMBtu/hr LHV)	105.76	103
Max Rating (MW)	9.175	9.58

40 CFR 60 Subpart KKKK – While the gas turbines were originally constructed before the applicability date, one of the turbines (PTO-050265), is subject to only the SO₂ emission standards of this rule because one of the previous modification increased the emissions of these pollutants, subjecting it to the new standards (per communication with EPA staff at the time, because emissions of NO_x did not increase, the turbine remains subject to the NO_x standards and other requirements of GG). Sulfur dioxide requirements are complied with by combusting only pipeline quality natural gas and sulfur content data provided by the utility is used to ensure compliance. All applicable requirements are specified in the Title V permit.

9.0 Monitoring, Record-Keeping, and Reporting

Permit enforceability is dependent largely on sufficient monitoring, record-keeping, and reporting (MRR), all of which must be effectively tied to the emissions limits and other requirements under applicable regulations. The District permits that are incorporated into the Title V permit in Appendix A contain substantial monitoring, record-keeping, and reporting requirements. The body of the Title V permit contains additional MRR pursuant to District Regulation XIV (Title V) to further strengthen the permit. Below is a discussion of the more notable MRR.

10.0 Permit Shields

Pursuant to District Rule 1410(p) and 40CFR §70.6(f), a Title V permit may include a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the permit issuance date. CP Kelco did request a permit shield. However, SDAPCD evaluated the requests and determined that granting of permit shields would not provide any advantage to the facility operator, and therefore the time required to evaluate the requests would not be well spent.

11.0 Streamlining

CP Kelco did request Multiple Applicable Requirements Streamlining. SDAPCD reviewed the requests and compared to their existing permits and presents the following streamlining analysis. This analysis primarily is intended to confirm the streamlining performed as part of CP Kelco's existing permits as reviewed under the local/NSR program, and only involves combining multiple applicable requirements into a single condition where the requirements are very similar and are either only include combining identical requirements, or requirements where one standard is clearly more stringent than another, incorporating the concepts of EPA White Paper 2 for streamlining and the concept of requirements which are "simple and/or of a familiar type" and complex analysis is not necessary to explain that these requirements can be combined without resulting in a less stringent requirement than the applicable standard. SDAPCD has for a number of years and multiple Title V renewal cycles implemented these same concepts for multiple utility power plant permits with no objection from EPA, demonstrating that they fit this concept.

SDAPCD's responses to each proposed streamlining proposal is attached to this report, and more details of the precise requests submitted by the applicant are described in the application.

12.0 Updates to the Title V Permit Incorporated into this Action

In 2020, SDAPCD replaced Rule 69.4 with Rule 69.4.1, expanding coverage to all stationary reciprocating engines 50 bhp and above, including many previously exempt units. The update introduced stricter NO_x limits requiring some engines to install retrofit controls. Most non-emergency gas engines must undergo quarterly portable analyzer testing by certified operators, with a 20-day correction period for exceedances, while larger engines must use continuous emissions monitoring and annual testing. Additionally, the facilities must keep detailed maintenance and emission records. With these updates, the following permits were modified to align with the changes:

Cogeneration Engines: APCD2010-PTO-000542, -000543, -000544, -000545
Emergency Engine: APCD2008-PTO-982044

13.0 Permit Process-Public Notification and Notice to EPA and Affected States

Before issuing the final permit, The District will provide the opportunity for review by EPA and affected states and a public notice period. Notice will be provided to the EPA electronically through the EPS and will be sent electronically to affected states and tribes. The public notice and associated documents will be provided on our website and contains information on how to petition EPA for review of a proposed action.

If no comments or objections are received, the District intends to promptly issue the Title V permit after conclusion of the review period. If comments are received the District will review and respond to the comments as necessary. If comments identify issues which require modification to the permit, revisions will be made and the permit either issued if the changes do not require re-review by EPA or the public or will be re-noticed if changes are made which do require review.

14.0 Recommendations

The facility is expected to comply with all applicable requirements including those cited in the current District permit as well as those under District Rule 1401 and 40 CFR Part 70. Therefore, the recommendation of this report is for the subject Initial Title V permit to be issued following public notice, EPA review, and response to any comments.

15.0 Attachments

The following are attached:

- Application Package
- Draft Permit
- Public Notice
- Emission Calculations