

February 16, 2024
2025 East Harbor Drive
San Diego, CA 92113-2123
(619) 595-5180

Mr. Nick Horres, PE
Senior Air Pollution Control Engineer
San Diego County Air Pollution Control District
10124 Old Grove Road
San Diego, CA 92131

Subject: Initial Application for Title V Permit

Dear Mr. Horres:

CP Kelco is pleased to submit to the San Diego Air Pollution Control District (SDAPCD) the enclosed initial Title V Permit application for its facility located at 2025 East Harbor Dr, San Diego, CA92113. The application processing check for the amount of \$16,553 is enclosed with the application package.

This application package includes all the required forms, as specified on SDAPCD website regarding Title V Permits ([Title V Permits \(sdapcd.org\)](https://sdapcd.org)). CP Kelco has reviewed the forms and deemed them to be correct and relevant to this initial application.

If you have any questions, please feel free to contact Edgardo Morales at (619) 595-5129 or via email at Edgardo.Morales@cpkelco.com.

Sincerely,



Edgardo Morales

Senior Environmental Manager

**SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT
APPLICATION FEE ESTIMATE**

Applicant Site ID/EIF ID:	APCD1976-SITE-00116	Reason for Submittal:	Title V - Initial Permit
Equipment Type:	Initial Title V permit		
Applicant DBA:	CP Kelco	Existing Site?	Yes
Affected Permit Number:	N/A	Estimate Date:	2/13/2024
Equipment Description: (See footnote 8)	Boilers, cogen gas turbines, biogum pilot plants, IPA storage tank, etc. See application for complete list.		

ACTIVITY	FEE CLASSIFICATION	QUANTITY	UNIT COST	SUBTOTAL	TRUST (APCD USE)
Initial Evaluation Fee					
Base Engineering Evaluation	T&M Engineering Services	60.0	\$274.00	\$16,440.00	TIV
	Fixed Fee				EFX
Additional Evaluation and Processing Fees (Rule 40(d)(5))					
New Source Review	T&M Engineering Services				NSR
	T&M Monitoring Services				AQI
Toxics New Source Review (Health Risk Assessment)	HRA Base Estimate (Engineering & Monitoring Services)				TNS
NESHAPS/ATCM/NSPS	T&M Engineering Services				HAP
CEQA	T&M Engineering Services				CEQ
Source Testing	Fixed Fee/T&M Monitoring Services				STF
Miscellaneous Fees					
Processing Fee (Rule 40(d)(1)(ii))		1.0	\$113	\$113.00	EFX
Annual Operating Fee (Rule 40(e)(2)(ii))				\$0.00	REN
Emissions Fee (Rule 40(e)(2)(iv))				\$0.00	EMF
Split Payment Fee					

NOTES:

ESTIMATE TOTAL: \$16,553.00

- (1) This document must be submitted with your application forms and is subject to review by District staff for accuracy.
- (2) The fees contained in this estimate are based on APCD Rule 40. Final fee may be more or less than this estimate (see Rule 40(d)(1)(iii)).
- (3) Emissions determined to be greater than 5 tons per year will be charged a emission fee on a ton per year basis. (see Rule 40 (e)(2)(iv)(A))
- (4) Fees paid by credit card will be assessed a 2.19% processing fee (see Rule 40(c)(5))
- (5) Federal government payments made through DFAS: Please reference the above list Site ID Record number in your DFAS submittal.
- (6) This estimate is valid only for applications received by the District by June 30, 2024

Internal Use Only	
APP ID: APCD	-APP/CER-
SITE ID: APCD	-SITE-

GENERAL PERMIT OR REGISTRATION APPLICATION FORM



San Diego County
Air Pollution
Control District

Submittal of this application does not grant permission to construct or to operate equipment except as specified in Rule 24(c).

REASON FOR SUBMITTAL OF APPLICATION:

- | | | |
|--|--|--|
| ☐ New Installation | ☐ Existing Unpermitted Equipment or Rule 11 Change | ☐ Modification of Existing Permitted Equipment |
| ☐ Amendment to Existing Authority to Construct or Application | ☐ Change of Equipment Location | ☐ Change of Equipment Ownership (please provide proof of ownership) |
| ☐ Change of Permit Conditions | ☐ Change Permit to Operate Status to Inactive | ☐ Banking Emissions |
| ☐ Registration of Portable Equipment | ☒ Other (Specify) Application for initial Title V permit | |

List affected APP/PTO Record ID(s): _____

APPLICANT INFORMATION

Name of Business (DBA) CP Kelco U.S. Inc

Does this organization own or operate any other APCD permitted equipment at this or any other adjacent locations? ☒ Yes ☐ No

If yes, list assigned Site Record IDs listed on your Permits APCD1976-SITE-00116

Name of Legal Owner (if different from DBA) _____

Equipment Owner

Authority to Construct Mailing Address

Name: CP Kelco U.S. Inc	Name: Same as equipment owner
Mailing Address: 2025 East Harbor Dr	Mailing Address:
City: San Diego State: CA Zip: 92113	City: State: Zip:
Phone: (619) 595-5129	Phone: ()
E-Mail Address: Edgardo.Morales@cpkelco.com	E-Mail Address:

Permit To Operate Mailing Address

Invoice Mailing Address

Name: Same as equipment owner	Name: Same as equipment owner
Mailing Address:	Mailing Address:
City: State: Zip:	City: State: Zip:
Phone: ()	Phone: ()
E-Mail Address:	E-Mail Address:

EQUIPMENT/PROCESS INFORMATION: Type of Equipment: ☐ Stationary ☐ Portable, *if portable please enter below the equipment storage address.* If portable, will operation exceed 12 consecutive months at the same location ☐ Yes ☐ No

Equipment Location Address 2025 East Harbor Dr City San Diego State: CA

Parcel No. _____ Zip 92113 Phone (619) 595-5129 E-mail: Edgardo.Morales@cpkelco.com

Site Contact Edgardo Morales Phone (619) 595-5129

General Description of Equipment/Process Initial Title V Operating Permit application for CP Kelco

Application Submitted by ☒ Owner ☐ Operator ☐ Contractor ☐ Consultant Affiliation _____

EXPEDITED APPLICATION PROCESSING: ☐ I hereby request Expedited Application Processing and understand that:

a) Expedited processing will incur additional fees and permits will not be issued until the additional fees are paid in full (see Rule 40(d)(8)(iv) for details) b) Expedited processing is contingent on the availability of qualified staff c) Once engineering review has begun this request cannot be cancelled d) Expedited processing does not guarantee action by any specific date nor does it guarantee permit approval.

☐ **This application contains trade secret or confidential information (see reverse for instructions)**

I hereby certify that all information provided on this application is true and correct.

Print Name Edgardo Morales Date 2-13-2024
Phone (619) 595-5129 Company CP Kelco
E-mail Address Edgardo.Morales@cpkelco.com

Internal Use Only

Date	Staff Initials:	Am't Rec'd \$	Fee Schedule
RNP:	EMF:	NBF:	TA:

GEN_APP_Form_Rev Date: Aug. 2017

10124 Old Grove Rd. - San Diego - California 92131-1649 - (858) 586-2600
www.sdapcd.org

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A1)

Company Name CP Kelco U.S. Inc.	District Use Only NEDS # SITE ID #
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I. FACILITY IDENTIFICATION

- Facility Name (if different than company name): Not Applicable
- Four digit SIC Code: 2099 - Food Preparations, Not Elsewhere Classified
- Parent Company (if different than Company Name): Not Applicable
- Mailing Address: 2025 East Harbor Dr.
City San Diego State CA Zip 92113
- Street Address or Source Location: 2025 East Harbor Dr.
City San Diego State CA Zip 92113
- UTM Coordinates: East 486388.88 (m); North 3617657.26 (m)
- Source Located within 50 miles of a state line: ☒ Yes ☐ No (All sources are within 50 miles)
- Source Located within 1000 feet of a school: ☐ Yes ☒ No
- Type of Organization: ☒ Corporation ☐ Sole Ownership ☐ Government
☐ Partnership ☐ Utility Company
- Legal Owner's Name: J.M. Huber Corporation
- Owner's Agent name (if any): N/A
- Responsible Official: Marco Verduzco, Plant Manager
- Plant Site Manager/Contact: Edgardo Morales Phone #: 619-595-5129 FAX #:
- Application Contact: Edgardo Morales
- Type of Facility: Nature-based hydrocolloid production plant
- General description of processes/products: CP Kelco is a biogum manufacturer with several permitted emission units such as boilers, screeners/sifters, cogen-gas turbines, biogum pilot plant, IPA storage tank, Sodium Carbonate Transfer/Storage System, non-food blender and packaging, as well as milling and blending equipment.
- Is a Federal Risk Management Plan (RMP) pursuant to Section 112(r) required? ☐ Yes ☒ No
(If application is submitted after RMP due date, attach verification that plan is registered with the appropriate agency.)

II. TYPE OF PERMIT ACTION (check)	CURRENT PERMIT (permit number)	EXPIRATION (date)
☒ Initial Title V Application	N/A	N/A
☐ Permit Renewal		
☐ Significant Permit Modification		
☐ Minor Permit Modification		
☐ Administrative Amendment		

III. DESCRIPTION OF PERMIT ACTION

- Does the permit action requested involve:
☐ Acid Rain Source ☐ Temporary Source ☐ Voluntary Emissions Caps
☐ Acid Rain Source ☐ Alternative Operating Scenarios ☒ Abatement Devices
☒ CEMs ☒ Permit Shield
☐ Outdated SIP Requirement Streamlining ☒ Multiple Applicable Requirement Streamlining
☐ Source Subject to MACT Requirements [Section 112]
☒ Source Subject to Enhanced Monitoring (40CFR64) [Compliance Assurance Monitoring]
- Is source operating under a Compliance Schedule? ☐ Yes ☒ No ☐ Proposed
- Is source operating under a Variance ☐ Yes ☒ No (If Yes, please attach variance information)
- For permit modification, provide a general description of the proposed permit modification:
Not applicable

IV. SUPPLEMENTAL ATTACHMENTS*: Cover Letter, 1401-N-1; 1401-O-1; CAM Plan Applicability Analysis
Pilot Plant CAM Plan

* Means all attachments to the complete application.

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A2)

Company Name	District Use Only
CP Kelco U.S. Inc.	NEDS # _____ SITE ID # _____

I. MAJOR SOURCE APPLICABILITY

Check appropriate pollutant(s) for which you are a Major Source under Title V. Applicability is based on potential to emit. If more space is necessary, use additional forms. Please type or print legibly.

POLLUTANT	MAJOR SOURCE THRESHOLD TOTAL EMISSIONS, TPY	(check if appropriate)
VOC	25	☒
PM ₁₀	100	☐
SO ₂	100	☐
NO _x	25	☒
CO	100	☐
ODC	100	☐
LEAD COMPOUNDS	10	☐
HAZARDOUS AIR POLLUTANTS		
SINGLE HAP	10	☐
		☐
		☐
COMBINATION HAP	25	☐
		☐
		☐
		☐

Attach all necessary calculations to this form as applicable. NOTE: Calculations are only needed if no Emission Inventory is on file with the District



Signature of Responsible Official
Marco Verduzco
Print Name of Responsible Official
Plant Manager
Title of Responsible Official

Inventory Year 2022
2/13/2024
Date
(619) 595-5191
Telephone No. of Responsible Official

II. EMISSIONS CALCULATIONS ATTACHED (as needed)

☐ Yes ☒ No

DISTRICT USE ONLY

Date Application Received: _____ Application # _____
Application Filing Fee: _____ District Received Stamp: _____
Receipt #: _____ Fee Code: _____

San Diego County Air Pollution Control District
10124 Old Grove Rd., San Diego, CA 92131
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

Company Name <u>CP Kelco U.S. Inc.</u> Facility Address: <u>2025 East Harbor Dr. San Diego, CA 92113</u>	District Use Only NEDS # _____ SITE ID # _____
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LIST OF EQUIPMENT – INSIGNIFICANT ACTIVITIES

Place a check mark in the appropriate box for equipment that is considered an insignificant activity based on throughput or equipment capacity.

Exemptions based on Size (Capacity)

<u>(Condensed Language of Rule)</u>	<u>Appendix A Citation</u>
☒ Stationary & portable internal combustion engines with ≤ 50 bhp output rating	(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	(d)(1)(iv)
☐ Water cooling towers & ponds with a capacity $< 10,000$ gal/min not used for evaporative cooling of process water or not used for evaporative cooling of water, contaminated water or industrial waste water from barometric jets or from barometric condensers.	(d)(2)
☒ 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	(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	(d)(4)(ii)
☒ Steam boilers, process heaters, and steam generators with a maximum gross heat input of < 5 million Btu/hour	(d)(4)(iii)
☐ Crucible-type or pot-type furnaces with a brimful capacity of < 450 in ³ of any molten metal	(d)(12)
☐ Crucible, pot or induction furnaces with a capacity of ≤ 2500 in ³ , in which no sweating or distilling is conducted and from which only non-ferrous metals except yellow brass, are poured or non-ferrous metals are held in a molten state	(d)(13)
☒ Dry batch mixers with ≤ 0.5 cubic yards rated working capacity	(d)(27)
☒ Batch mixers (wet) with ≤ 1 cubic yard capacity where no organic solvents, diluents or thinners are used.	(d)(28)
☐ Roofing kettles (used to heat asphalt) with a capacity of ≤ 85 gallons	(d)(33)
☐ Abrasive blasting equipment with a manufacturer's-rated sand capacity of < 100 lbs or < 1 ft ³	(d)(34)
☒ Paper shredders and paper disintegrators that have a capacity of 600 pounds per hour or less, and the associated conveying systems and baling equipment.	(d)(41)
☐ Ovens having an internal volume of ≤ 27 ft ³ in which organic solvents or materials containing organic solvents are charged	(d)(59)
☐ Cold solvent cleaning tanks, vapor degreasers, and paint stripping tanks with a liquid surface area of ≤ 1.0 ft ²	(d)(61)(i)
☐ Cold solvent cleaning tanks, vapor degreasers, and paint stripping tanks which have a maximum capacity of ≤ 1 gallon	(d)(61)(ii)

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

Continued - Exemptions based on Size (Capacity)

<u>(Condensed Language of Rule)</u>	<u>Appendix A Citation</u>
☒ Stationary organic compound storage tanks with a capacity of ≤ 250 gallons	(e)(1)
☐ Liquid surface coating application operations using hand-held brushes for application of a primer coating from containers of $\leq$ eight (8) ounces in size, to fasteners to be installed on aerospace parts	(h)(5)
☐ Liquid surface coating application operations using air brushes with a coating capacity of ≤ 2 ounces for the application of a stencil coating	(h)(6)
☐ Metal inspection tanks that: a) do not utilize a suspension of magnetic or fluorescent dye particles in volatile organic solvent, and b) have a liquid surface area $< 5 \text{ ft}^2$ and c) are not equipped with spray type flow or a means of solvent agitation	(o)(5)
☐ Bakery ovens used for baking yeast leavened products where the combined rated heat input capacity is < 2 million Btu/hr	(o)(37)

Exemptions based on Production Rates (Emission Limits)

☐ Printing or graphic arts presses located at a stationary source which emits a total of < 15 lbs/day of VOC's subject to Rule 67.16, on each day of operation	(d)(7)
☐ Solder levelers, hydrosqueegees, wave solder machines, and drag solder machines which use < 10 lbs/day of any material containing VOCs	(d)(23)
☒ Fire extinguishing equipment, using halons with a charge of < 50 lbs. of a Class I or Class II ozone depleting compound.	(d)(31)
☐ Coffee roasting equipment with a manufacturer's rating of ≤ 15 lbs/hr	(d)(45)
Equipment used to manufacture bio-agricultural products for exclusive use in field testing required to obtain FDA, EPA, USDA and /or Cal-EPA approval, provided the uncontrolled emissions of VOCs from all such operations < 5 ton/yr.	(d)(49)(iii)
☐ Oil quenching tanks which use < 20 gal/yr of make-up oil	(d)(56)
☒ 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.	(d)(48)
☐ Powder coating operations, except metalizing gun operations, where surface preparation or cleaning solvent usage is < 0.5 gal/day	(d)(62)
☐ Equipment used to transfer fuel to & from amphibious ships for maintenance purposes, provided total annual transfers $< 60,000$ gal/yr.	(f)(2)
☐ Stationary storage tanks (excluding tanks subject to Rule 61.9) used exclusively for the storage of liquid organic solvents used as dissolvers, viscosity reducers, reactants, extractants, cleaning agents or thinners provided that emissions < 15 lbs/day.	(e)(3)
☐ Liquid surface coating or adhesive application operations (portable or stationary) where not more than 20 gallons per year of material containing organic compounds are applied	(h)(1)
☐ Liquid surface coating application operations exclusively using materials with a VOC content of $< 20 \text{ g/L}$ where < 30 gal/day of such materials are applied.	(h)(2)
☐ Foam manufacturing or application operations which emit < 5 lbs/day of VOCs	(i)(1)
☐ Reinforced plastic fabrication operations using resins such as epoxy and/or polyester which emit < 5 lbs/day of VOCs	(i)(2)
☐ Plastics manufacturing or fabrication operations which emit < 5 lbs/day of VOCs	(i)(3)
☐ Cold solvent degreasers used for educational purpose and which emit < 5 lbs/day of VOCs	(i)(4)

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

- | | | |
|-------------------------------------|---|-------------|
| ☐ | Golf grip application stations which exclusively use liquid materials with an initial boiling point of 450°F (232°C), or greater and which emit < 5 lbs/day of VOCs. | (i)(5) |
| ☒ | Batch-type waste-solvent recovery stills with batch capacity of ≤ 7.5 gallons for onsite recovery provided the still is equipped with a safety device & VOC emissions are < 5 lbs/day | (i)(6) |
| ☐ | Peptide and DNA synthesis operations which emit < 5 lbs/day of VOCs | (i)(7) |
| ☒ | 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 | (i)(8) |
| ☐ | Hot wire cutting of expanded polystyrene foam which emit < 5 lbs/day of VOCs. | (i)(9) |
| ☐ | Any coating and/or ink manufacturing operations located at a stationary source, which emit < 15 lbs/day of VOCs. | (o)(9) |
| ☒ | 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 | (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. | (o)(18) |
| ☐ | Atmospheric organic gas sterilizer cabinets where ethylene oxide emissions are < 5 lbs/yr | (o)(28) |
| ☐ | Aerosol can puncturing/crushing operations which vents all emissions through a properly operated/maintained carbon canister, provided < 500 cans/day are processed. | (o)(29)(ii) |
| ☐ | Solvent wipe cleaning operations using a container applicator that minimizes emissions to the air where the uncontrolled emissions of VOCs < 5 ton/yr, or the total purchase of solvents < 1,500 gal/yr, or the total purchase of solvents containing a single HAP < 350 gal/yr. | (o)(32) |
| ☐ | Equipment approved for use by the EPA for recovering and/or recycling CFCs provided such equipment is charged with < 50 lbs. of a Class I or II ozone depleting compound. | (o)(33) |
| ☒ | Stationary IC engines rated at ≤ 200 bhp installed and operated before November 15, 2000, which operate < 200 hr/yr. | (o)(34)(ii) |

San Diego County Air Pollution Control District
10124 OLD GROVE ROAD, SAN DIEGO, CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1)

Company Name <u>CP Kelco U.S. Inc.</u>	District Use Only NEDS # _____ SITE ID # _____
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APPLICABLE REQUIREMENTS: Applicable requirements which apply to an entire facility are listed first. The applicant should check appropriate boxes on the form and attach emission unit specific permit number lists where necessary. Where streamlining is employed, note on this form. If information does not fit in the space allotted, attach documentation and reference it on this form. **Type or print legibly.**

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters			Future Effective Date
Facility Applicable Requirement Description																	
10(a)	Permits Required - (a) Authority to Construct			X													
10(b)	Permits Required - (b) Permit to Operate			X													
19	Provision of Sampling & Testing Facilities			X													
19.2	Continuous Emission Monitoring Requirements			X													
19.3	Emission Information			X													
NSR	New Source Review			X													
PSD	Prevention of Significant Deterioration			X													
21	Permit Conditions			X													
50	Visible Emissions			X													

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen – Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters			Future Effective Date
51	Nuisance			X													
60	Circumvention			X													
67.0.1	Architectural Coatings	(g)		X													
67.17	Storage of Materials Containing VOC	(c)		X													
71	Abrasive Blasting			X													
98	Breakdown Conditions: Emergency Variance (not in the SIP)			X													
101	Burning Control			X													
131	Stationary Source Curtailment Plan																
132	Traffic Abatement Plan																
Equipment Specific Applicable Requirement Description																	
50	Visible Emissions				X	X	X	X	X	X	X	X	X	X			
51	Nuisance				X	X	X	X	X	X	X	X	X	X			
52	Particulate Matter	Method 5			X	X	X	X		X		X		X			
53	Specific Contaminants	Method 5							X		X						
53.1	Scavenger Plants																
54	Dust and Fumes	Method 5			X	X	X			X				X			
55	Fugitive Dust Control																
58	Incinerator Burning																
59	Control of Waste Disposal – Site Emissions	(e)	(e) & (f)														

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen – Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters			Future Effective Date
59.1	Municipal Solid Waste Landfills																
60	Circumvention																
61.0	Definitions Pertaining to the Storage and Handling of Organic Compounds																
61.1	Receiving & Storing VOCs at Bulk Plants & Terminals	(d)	(c)(7)														
61.2	Transfer of VOCs into Mobil Transport Tanks	(c)(10)															
61.3	Transfer of VOCs into Stationary Storage Tanks		(c)(2)(iii)														
61.3.1	Transfer of Gasoline into Stationary Underground Storage Tanks																
61.4	Transfer of VOCs into Vehicle Fuel Tanks																
61.4.1	Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicle Fuel Tanks																
61.5	Visible Emissions Standards for Vapor Control Systems		VE														
61.7	Spillage & Leakage of VOCs																
61.8	Certification Requirements for Vapor Control Equip.																
62	Sulfur Content of Fuels								X		X						

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
64	Reduction of Animal Matter															
66	Organic Solvents (Rule rescinded 8/4/2010)	(p)	(o)													
66.1	Misc. Surface Coating Operations & other Processes Emitting VOC (not in SIP)	(h)	(f)													
67.1	Alternative Emission Control Plans (AECPL)	(c)	(d)													
67.2	Dry Cleaning - Petroleum Solvent	(f)	(e)													
67.3	Metal Parts Coating	(g)	(f)													
67.4	Can & Coil Coating	(g)	(f)													
67.5	Paper, Film and Fabric Coating	(f)	(e)													
67.6	Solvent Cleaning Operation (Rule rescinded 5/23/2007)	(f)														
67.6.1	Cold Solvent Cleaning and Stripping Operations	(g)	(f)													
67.6.2	Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicle Fuel Tanks															
67.7	Cutback & Emulsified Asphalt	(f)	(e)													
67.9	Aerospace Coating Operations	(g)	(f)													
67.10	Kelp Processing and Bio-Polymer Mfg.	(f)	(e)		X	X	X						X			
67.11	Wood Products Coating															
67.12.1	Polyester Resin Operations	(g)	(f)													

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
67.15	Pharmaceutical & Cosmetic Manufacturing	(c)														
67.16	Graphic Arts Operations	(g)	(f)													
67.17	Open VOC Containers	(c)														
67.18	Marine Coating Operations	(g)	(f)													
67.19	Coating and Printing Inks Mfg. Operations	(g)	(f)													
67.20.1	Motor Vehicle & Mobile Equipment Coating Operations															
67.21	Adhesive Material Application Operations															
67.22	Expandable Polystyrene Foam Products Manufacturing Operations (not in SIP)															
67.24	Bakery Ovens	(f)	(e)													
68	Fuel Burning Equipment - NO _x								X		X					
69	Electrical Generating Steam Boilers, Replacement Units and New Units															
69.2	Industrial and Commercial Boilers, Process Heaters and Steam Generators	(f)	(e) & (g)						X							
69.2.1	Small Boilers, Process Heaters and Steam Generators															
69.2.2	Medium Boilers, Process Heaters, and Steam Generators (09/09/2021)															

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters			Future Effective Date
69.3.1	Stationary Gas Turbine Engines - BARCT (not in SIP)	(f)	(e) & (g)								X						
69.4.1	Stationary Internal Combustion Engines - BARCT (not in SIP)	(f)	(e)														
69.5.1	Natural Gas-Fired Water Heater																
69.6	Natural Gas Fired Fan-Type Central Furnaces																
70	Orchard Heaters																
71	Abrasive Blasting																
20.1	NSR - General Provisions			X													
20.2	NSR - Non-major Stationary Sources																
20.3	NSR - Major Stationary Sources and Prevention of Significant Deterioration (PSD) Stationary Sources			X													
20.4	NSR - Portable Emission Units																
20.5	Power Plants (SIP Version 7/5/79)																
20.6	Standards for Permit to Operate Air Quality Analysis																
SUBPART	Regulation X - Standards of Performance for New Stationary Sources (NSPS)	Rule #	Rule #														
A	General Provisions		260.7 260.13														

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
D	Standards of Performance for Fossil-Fuel Fired Steam Generators	260.46	260.45													
Da	Standards of Performance for Electric Utility Steam Generating Units Constructed After September 18, 1978		260.47a 260.48a 260.49a													
Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating	260.45b 260.46b	260.47b 260.48b 260.49b													
E	Standards of Performance for Incinerators	260.54	260.53													
I	Standards of Performance for Asphalt Concrete Plants	260.93														
K	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after June 11, 1973 and Prior to May 19, 1978		260.113													
Ka	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after May 18, 1978	260.113a	260.115a													
Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	260.113b	260.115b 260.116b										X			

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
L	Standards of Performance for Secondary Lead Smelters	260.123														
M	Standards of Performance for Secondary Brass and Bronze Ingot Production Plants	260.133														
O	Standards of Performance for Sewage Treatment Plants	260.154	260.153													
DD	Standards of Performance for Grain Elevators	260.303														
EE	Standards of Performance for Surface Coating Metal Furniture	260.313 260.316	260.314 260.315													
GG	Standards of Performance for Stationary Gas Turbines	260.335	260.334								X					
QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	260.433 260.435	260.434													
RR	Standards of Performance for the Pressure Sensitive Tape and Label Surface Coating Operations	260.444 260.446	260.445 260.447													
SS	Standard of Performance for the Industrial Surface Coating Large Appliances	260.453 260.456	260.454 260.455													
TT	Standards of Performance for Metal Coil Surface Coating	260.463 260.466	260.464 260.465													
BBB	Standards of Performance for the Rubber Tire Manufacturing Industry	260.543 260.547	260.544 260.545 260.546													

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing	260.583	260.584 260.585													
JJJ	Standards of Performance for Petroleum Dry Cleaners															
SUBPART	New Source Performance Standards (40 CFR 60)															
Cb, F	Portland Cement Plants															
Dc	Small Industrial -Commercial -Institutional Steam Generators >10 but <100 MM Btu.															
Ea	Municipal Waste Combustors															
G	Nitric Acid Plants															
H & Cb	Sulfuric Acid Plants															
N	Oxygen Process Furnaces															
Na	Oxygen Process Steelmaking Facilities															
P	Primary Copper Smelters															
Q	Primary Zinc Smelters															
R	Primary Lead Smelters															
S	Primary Aluminum Reduction Plants															
T & U	Phosphate Fertilizer Industry															
V, W, X	Phosphate Fertilizer Industry															
Y	Coal Prepa ration Plants															

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters	Future Effective Date
Z	Ferroalloy Production Facilities														
AA, AAa	Steel Plants														
BB	Kraft Pulp Mills														
CC	Glass Manufacturing Plants														
HH	Lime Manufacturing Plants														
KK	Lead-Acid Battery Manufacturing Plants														
LL	Metallic Mineral Processing Plants														
MM	Automobile and Light-Duty Truck Surface Coating Operations														
NN	Phosphate Rock Plants														
PP	Ammonium Sulfate Manufacture														
UU	Asphalt Processing and Asphalt Roofing Manufacture														
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.														
WW	Beverage Can Surface Coating Industry														
XX	Bulk Gasoline Terminals														
AAA	New Residential Wood Heaters														
DDD	VOC Emissions from the Polymer Mfg. Ind.														

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen – Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters	Future Effective Date
GGG	Equipment Leaks of VOC in Petroleum Refineries														
HHH	Synthetic Fiber Production Facilities														
KKK, LLL	Onshore Natural Gas Processing: VOC Equipment Leaks and SO ₂ Emissions														
NNN	VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations														
OOO	Standard of Performance for Nonmetallic Mineral Processing Plants														
PPP	Wool Fiberglass Insulation Mfg. Plants														
QQQ	VOC Emissions from Petroleum Refinery Wastewater Systems														
RRR	VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes														
SSS	Magnetic Tape Coating Facilities														
TTT	Industrial Surface Coating Surface, Surface Coating of Plastic Parts for Business Machines														
UUU	Calciners and Dryers in Mineral Industries														

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen ~ Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
VVV	Polymeric Coating of Supportin Substances Facilities															
WWW	Standards of Performance for Municipal Solid Waste Facilities															
IIII	Stationary Compression Ignition Internal Combustion Engines NSPS															
JJJJ	Stationary Spark Ignition Internal Combustion Engines NSPS															
KKKK	Stationary Combustion Turbines															
SUBPART	REGULATION XI - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS)															
A	General Provisions															
C, D	Beryllium Extraction Plants; Ceramic Plants, Foundries, Incinerators, Propellant Plants, and Machine Shops that Process Beryllium Containing Material; and Rocket Motor Firing Test Sites															
E	Mercury Ore Processing; Manufacturing Processes Using Mercury Chloralkali Cells; and Sludge Incinerators.															

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
F	Ethylene Dichloride Mfg. Via Oxygen, HCl and Ethylene; Vinyl Chloride Mfg.; and Polyvinyl Chloride Mfg.															
M	Asbestos Mills; Roadway Surfacing with Asbestos Tailings; Manufacture of Products Containing Asbestos; Demolition; Renovation; and Spraying and Disposal of Asbestos Waste															
B, Q, R T, W	Underground Uranium Mines; Dept. of Energy Facilities; Phosphorus Fertilizer Plants; & Facilities Processing or Disposing of Uranium Ore & Tailings															
H, I, K	Dept. of Energy; Nuclear Regulatory Commission Licensed Facilities; Other Federal Facilities; and Elemental Phosphorus Plants. (Radionuclide)															
J, L, Y, BB, FF	Fugitive Process, Storage, and Transfer Equipment Leaks; Coke By-Product Recovery Plants; Benzene Storage Vessels; Benzene Transfer Operations; and Benzene Waste Operations.															

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen - Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters			Future Effective Date
N, O, P	Glass Manufacturer; Primary Copper Smelter; Arsenic Trioxide and Metallic Arsenic Production Facilities.																
V	Pumps, Compressors, Pressure Relief Devices, Connections, Valves, Lines, Flanges, Product Accumulator Vessels, etc. in VHAP Service																
SUBPART	MACT Standards (40 CFR 63)																
A	General Provisions																
F, G, H, I	Amendment: Reopening, Averaging Issue																
L	Coke Ovens																
N	Chromium Electroplating and Anodizing	63.344	63.346, 63.347														
O	Ethylene Oxide Sterilizers																
Q	Industrial Process Cooling Towers																
R	Gasoline Distribution Facilities																
T	Halogenated Solvent Cleaning Degreasing																
X	Secondary Lead Smelters																
Y	Marine Tank Loading/Unloading																
CC	Petroleum Refineries																
DD	Off-Site Waste and Recovery Operations																

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen – Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters			Future Effective Date
EE	Magnetic Tape																
GG	Aerospace (Coatings)																
II	Shipbuilding for Ship Repair (Surface Coating)																
JJ	Wood Furniture Industry (Coatings)																
KK	Printing and Publishing																
AAAA	Municipal Solid Waste Landfills																
DDDDD	Industrial, Commercial and Institutional Boilers and Process Heaters																
MMMM	Surface Coating of Miscellaneous Metal Parts and Products																
PPPP	Surface Coating of Plastic Parts																
ZZZZ	Reciprocating Internal Combustion Engines																
YYYY	Stationary Combustion Turbines																
40 CFR Part 64 Compliance Assurance Monitoring					X												
40 CFR Part 68 RMP																	
Title IV - Acid Rain (40 CFR 72)																	
Title VI-Ozone Depleting Compounds (40 CFR 82)																	
A	Production and Consumption Controls			X													
B	Servicing of Motor Vehicle Air Conditioners			X													

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Biogum Pilot Plant	Bio-Polymer Manufacturing, Dry Side	Bio-Polymer Manufacturing, Wet Side	Blending System	Boilers > 50 MMBtu	Bulk Sodium Carbonate Transfer/Storage System	Cogen – Gas Turbines	Milling and Blending Systems	Organic Liquid Storage Tank	Screens/Sifters		Future Effective Date
F	Servicing of Other Air Conditioners			X												
California Requirements Under 17 CCR Including Airborne Toxic Control Measures (ATCM)																
§93102	Hexavalent Chromium from Chrome Plating and Chromic Acid Anodizing Operations (equivalency under CAA given at 40 CFR 63.99)															
§93109	Perchloroethylene from Dry Cleaning Operations (equivalency under CAA given at 40 CFR 63.99)															
17 CCR 93115	Stationary Compression Ignition Engines															
17 CCR 93116	Diesel Particulate Matter from Portable Engines Rated ≥50 Horsepower															
§§95460 – 95476 and Appx I	Methane Emissions from Municipal Solid Waste Landfills															

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
LIST OF PERMITS BY EQUIPMENT CATEGORY (FORM 1401-H2)

Company Name <u>CP Kelco U.S. Inc</u>	District Use Only NEDS # _____ SITE ID # _____
Facility Address: <u>2025 East Harbor Dr, San Diego, CA 92113</u>	

PERMITTED EMISSION UNITS BY EQUIPMENT CATEGORY

In the emission unit (equipment) category order entered on Form 1401-H1, Applicable Requirements Summary Checklist, list emission units by permit number for the specific emission unit (equipment) category. Under the column labeled status place an "O" if operational, "N" if non-operational, or "S" if the equipment is new and currently operating under a startup authorization. **If more space is required, use additional forms. Please type or print legibly.**

Emission Unit Category	Application/ Permit No.	Status of Emission Unit
Biogum Pilot Plant	940006	O
Bio-Polymer Manufacturing, Dry Side	002185	O
Bio-Polymer Manufacturing, Wet Side	001516	O
Blending System	000489	O
Boilers > 50 MMBtu	003129/000480	O
Boilers > 50 MMBtu - Rental	007484 - ATC	O
Bulk Sodium Carbonate Transfer/Storage	004380	O
Cogen - Gas Turbines	850679	N
Cogen - Gas Turbines	50265	O
Cogen - Gas Turbines	850680	O
Milling and Blending Ssystem	001676 - SA 6710	O
Milling and Blending System	901285	O
Organic Liquid Storage Tank	940043	O
Screens/Sifters	003410	O
Screens/Sifters	973084	O
Screens/Sifters	973092	O
Screens/Sifters	973094	O
Screens/Sifters	973095	O
Screens/Sifters	973096, 975096	O

San Diego County Air Pollution Control District
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TITLE V APPLICATION
Certification Statement (FORM 1401-I)

Company Name	District Use Only
CP Kelco U.S. Inc.	NEDS # _____
Facility Address: 2025 East Harbor Dr. San Diego, CA 92113	SITE ID # _____

Under penalty of perjury, identify the following: (Read each statement carefully and check each box for confirmation.)

Applicable Not
 Applicable



Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will continue to comply with the applicable requirement with which the source is in compliance. The applicable requirement(s) with which the source(s) is/are not in compliance is/are identified in Form 1401-L, Schedule of Compliance.



Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will comply with the future-effective applicable requirement(s) on a timely basis.



Based on information and belief formed after reasonable inquiry, the source(s) identified in the Schedule of Compliance application form that is/are not in compliance with the applicable requirement(s), will comply in accordance with the attached compliance plan schedule.



Based on information and belief formed after reasonable inquiry, information on application forms, referenced documents, all accompanying reports, and other required certifications are true, accurate, and complete.



All fees required by Regulation III, Rule 40 have been paid.

Signature of Responsible Official

Marco Verduzco
Print Name of Responsible Official

Plant Manager
Title of Responsible Official

Date

2/13/2024
(619) 595-5191
Telephone No. of Responsible Official

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
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TITLE V APPLICATION
Compliance Certification Schedule (FORM 1401-K)

Company Name <u>CP Kelco U.S. Inc.</u> Facility Address: <u>2025 East Harbor Dr, San Diego, CA 92113</u>	District Use Only NEDS # _____ SITE ID # _____
--	--

In numerical order, list all sources that have federally enforceable requirements for compliance certification on a more frequent basis than once per year. **If more space is required, use additional forms. Please type or print legibly.**

Permit No.	Emission Unit Name	Applicable Requirements	Frequency
None	None	None	Not Appl.

San Diego County Air Pollution Control District
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TITLE V APPLICATION
Schedule of Compliance (FORM 1401-L)

Company Name <u>CP Kelco U.S. Inc.</u>	District Use Only NEDS # _____ SITE ID # _____
Facility Address: <u>2025 East Harbor Dr, San Diego, CA 92113</u>	

SOURCES NOT IN COMPLIANCE

In numerical order, list all emission units by permit number that do not comply with a federally enforceable requirement. Describe how the source will achieve compliance. Propose a schedule to correct the deficiencies, and include a schedule for progress reports. Reports must be submitted at least every six months. If the source is operating under a judicial consent decree or administrative order, the Schedule of Compliance must be at least as stringent. **If more space is required, use additional forms. Please type or print legibly.**

[illegible]

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
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TITLE V APPLICATION
Abatement Devices (FORM 1401-M)

Company Name <u>CP Kelco U.S. Inc.</u> Facility Address: <u>2025 East Harbor Dr, San Diego, CA 92113</u>	District Use Only NEDS # _____ SITE ID # _____
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LIST OF ABATEMENT DEVICES

In numerical order, list all abatement devices, the abatement device, name or description, and the emission unit or operation abated. If more space is required, use additional forms. Please type or print legibly.

Permit No(s)	Abatement Device Name or Description	Emission Unit(s) or Operation(s) Abated
000480	Flue Gas Recirculation System	Boilers > 50 MMBtu
000489	Stray dust baghouses	Ribbon Blender #13
001516	Six baghouse; 12 cyclone; one hydrocyclone; three regenerative carbon adsorber beds	Bio-Polymer Manufacturing, Wet Side
01676 (SA 6710)	4 milling cyclones; 4 fine cyclones; 4 mill Baghouses; 1 transfer baghouse; stray dust collector	Milling and Blending System
002185	4 cyclones, stray dust baghouse; dryer baghouse IPA scrubber	Bio-Polymer Manufacturing, Dry Side
003129	Flue Gas Recirculation System	Boilers > 50 MMBtu
003410	4 milling cyclones; 4 fine cyclones; 4 mill Baghouses; 1 transfer baghouse; stray dust collector	Vibrating Screen/Sieve (Portable Equipment)
004380	Filter collector; one baghouse; two cyclones	Bulk Sodium Carbonate Transfer/Storage Syst
901285	3 cyclones; 2 baghouses; 2 stray dust baghouses; 1 stray dust baghouse shared with milling system; 1 baghouse	Milling and Blending System
940006	One stray dust Baghouse	Biomass Pilot Plant
940043	Scrubber	IPA Storage Tank
973094, 973095	Depend on process, either connect to abatement devices under PTO901285 or PTO001676	Sifter
973096, 973084	Depend on process, either connect to abatement devices under PTO901285 or PTO001676	Sifter
975096/973092	Depend on process, either connect to abatement devices under PTO901285 or PTO001676	Screen
ATC 007484	Selective Catalytic Reduction (SCR)	Boilers > 50 MMBtu - Rental

San Diego County Air Pollution Control District
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TITLE V APPLICATION
Alternative Operating Scenario (FORM 1401-N)

Company Name <u>CP Kelco U.S. Inc.</u> Facility Address: <u>2025 East Harbor Dr, San Diego, CA 92113</u>	District Use Only NEDS # _____ SITE ID # _____
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SCENARIO WITH EMISSION CHANGES

Give a title, a brief description, and an emission change. Attach calculations and detailed descriptions of each scenario to this form, using one form for each scenario. **Please type or print legibly.**

Operating Scenario # COGEN -2

TITLE	Operation of Contractor equipment during Cogen Shut down
DESCRIPTION	See 1401-N-1_CP Kelco_Supplement
EMISSION CHANGE	See 1401-N-1_CP Kelco_Supplement

Attach all necessary calculations, detailed descriptions, and proposed terms and conditions to this form.

1401-N-1 SUPPLEMENT
Alternative Operating Scenario

Operating Scenario #: COGEN-2

Title

Operation of Contractor equipment during Cogen Shut down

Description

CP Kelco currently operates two gas turbines (with a third gas turbine as inactive) to satisfy site electrical demands with surplus electricity being sent to the grid. These turbines are equipped with heat recovery boilers to capture heat from the turbine exhaust to provide plant steam. In addition, CP Kelco operates two boilers to provide supplemental plant steam.

Occasionally, the gas turbines and/or boilers in the Cogen facility may be shut down during emergencies or maintenance. During these times, however, both the steam demands and site electrical demands must be satisfied. In addition, plant air requirements must be satisfied. This may require large electric generators, boilers, or compressors to be brought on site while the turbines are down. Accordingly, CP Kelco would like the ability to bring on site one or a combination of the following fuel burning units.

- 1) Compressors > 50 HP
- 2) Generators > 50 HP
- 3) Portable Boilers < 50 MM Btu/hr

New Applicable Regulations Triggered

Rule 69.4.1 - Stationary Reciprocating Internal Combustion Engines

The proposed units would be operating when the cogen is shutdown. The emissions from these units would be less than the Cogen operation, thus, the net emissions change from the substitution would be negative. Therefore, the following conditions are proposed to limit operation of portable compressors or generators to periods during which a portion of the cogen is shutdown.

Proposed Conditions:

Operation of emergency compressors or generators, or, emergency generators, and boilers may occur during shutdown of Cogen operation to maintain plant electrical, steam, and air demands subject to the following conditions:

- 1) Emergency compressors or generators > 50 HP shall comply with Rule 69.4.1
- 2) Boilers > 5 MM Btu/hr shall comply with Rule 69.2.
- 3) Pursuant to Rule 11(d)(20), this equipment must be registered as portable equipment in accordance with either the SDAPCD registration program, or CARB registration program.
- 4) Standards:

1401-N-1 SUPPLEMENT
Alternative Operating Scenario

- a. Total hourly NO_x mass emission rate from the portable compressors or generators or boilers shall be less than or equal to the permitted maximum hourly NO_x mass emission rate of the Cogen operation that is being temporarily removed from service. The permitted hourly NO_x emission rate of the Cogen operation that is being temporarily removed from service is to be calculated as follows:

$$\text{NO}_x \text{ emissions (lb/hr)} = (\text{Turbine EF}) \times \sum (\text{Turbine Fuel Usage}) + (\text{Boiler EF}) \times \sum (\text{Boiler Fuel usage})$$

Where:

Turbine EFEmission Factor for each turbine shall be calculated based on the most recent District approved tests (lb/MMScf)
Turbine Fuel Usage.....Usage of fuel during each hour (MMScf/hr)
Boiler EF.....Boiler NO_x emission Factor (lb/MMscf)
Boiler Fuel UsageUsage of fuel during each hour (MMScf/hr)

- b. Emissions for compressors/generators and boilers will be based upon the following equation:

$$\text{NO}_x \text{ emissions (lb/hr)} = (\text{Engine EF}) \sum (\text{Engine HP}) \times (\text{Operating Hours}) + (\text{Boiler EF}) \sum (\text{Boiler Fuel Usage})$$

Where:

Engine EFEmission Factor for each generator or compressor (lb/hp-hr)
Engine HPRated Engine Horsepower (HP)
Operating Hours.....Engine Operating Hours
Boiler EF.....Boiler NO_x emission Factor (lb/MMscf)
Boiler Fuel UsageUsage of fuel during each hour (MMScf/hr)

Emission factors will be based on the following AP-42 or SDAPCD emission factors:

Compressor/Generators....0.031 lb/hp-hr¹
Boilers.....100 lb/MM scf²

- c. Emissions for determining compliance with annual NO_x emission cap limits shall include emissions from the temporary equipment.

4) Recordkeeping/Monitoring: The permittee shall keep records of the hours of operation for each temporary compressor or generator used and hourly fuel usage for each temporary boiler. Permittee shall maintain records of the turbine downtime. The permittee shall calculate NO_x emissions for each unit and sum for the downtime.

¹ Table 3.3-1. EMISSION FACTORS FOR UNCONTROLLED GASOLINE AND DIESEL INDUSTRIAL ENGINES of <https://www.epa.gov/sites/default/files/2020-10/documents/c03s03.pdf>

² <https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/combustion--gas-fuels/APCD-Boiler-Natural-Gas-Fired-0.3-100-MMBTU-No-Controls.pdf>

San Diego County Air Pollution Control District
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TITLE V APPLICATION
Multiple Applicable Requirements Streamlining (FORM 1401-O)

Company Name	District Use Only
CP Kelco U.S. Inc. Facility Address: 2025 East Harbor Dr, San Diego, CA 92113	NEDS # _____ SITE ID # _____

MULTIPLE APPLICABLE REQUIREMENTS STREAMLINING

If more space is required, use additional forms. Please type or print legibly.

Application No(s) Permit No(s)	Multiple Applicable Requirements	Streamlined Requirements	Attachment Number
APCD2009-PTO-050265 (COGEN #1)	NOx Emissions Standards: 1. NSPS Subpart GG 2. Rule 69.3.1 3. APCD Permit 4. PSD Permit	Most stringent limits are the APCD permit limit of 28.6 ppmv @ 15% O ₂ for turbine operation only or turbine and duct burner on natural gas.	1401-O-1 CP Kelco Supplement
APCD2009-PTO-850680 (COGEN #2) & APCD2009-PTO-850679 (COGEN #3)	NOx Emissions Standards: 1. NSPS Subpart GG 2. Rule 69.3.1 3. APCD Permit 4. PSD Permit	Most stringent limits are the APCD permit limit of 17.5 ppmv @ 15% O ₂ for turbine operation only, the APCD permit limit of 19.0 ppmv @ 15% O ₂ for turbine and duct burner on natural gas, and the APCD permit limit of 29.5 ppmv @ 15% O ₂ for turbine only on natural gas or turbine and duct burner on natural gas.	Same as above
APCD2009-PTO-050265 (COGEN #1) & APCD2009-PTO-850680 (COGEN #2) & APCD2009-PTO-850679 (COGEN #3) APCD2004-PTO-000480 (Boiler #8) APCD2004-PTO-000480 (Boiler #9)	CO Emission Standards: 1. APCD Permit	Most stringent limit is the APCD permit limit of 100 tons per twelve consecutive months.	Same as above
Same as above	SO ₂ Emissions Standards: 1. NSPS (Subpart GG) 2. Rule 53	NSPS requirements are based on a 15% oxygen content and Rule 53 does not specify exhaust oxygen concentration. Both standards are on a dry basis. At oxygen concentrations between 19.13% and 20.9%, the Rule 53 standard may be stricter. However, the existing gas turbines operate at approximately 15% O ₂ , and SO ₂	Same as above

Application No(s) Permit No(s)	Multiple Applicable Requirements	Streamlined Requirements	Attachment Number
		based on a mass balance is well below the 0.015% NSPS standard. Accordingly, the NSPS standard would serve as the most stringent requirement	
Same as above	Opacity/Visibility Standard 1. Rule 50 2. APCD Permit	Rule 50 and APCD Permits are equivalent, therefore permit conditions remain.	Same as above
Same as above	Work Practices: 1. NSPS (Subpart GG) 2. PSD Permit 3. APCD Permit	APCD permit conditions either duplicate or are stricter than either NSPS or PSD work practices. Therefore, these will serve as applicable requirements.	Same as above
Same as above	Monitoring Requirements 1. NSPS Subpart GG 2. Rule 69.3.1 3. PSD Permit 4. APCD Permits	See Attachment, Pages 5-6, and 12	Same as above
Same as above	Test Method Requirements 1. NSPS Subpart GG 2. Rule 69.3.1 3. APCD Permits	See Attachment, Pages 6-7, and 12	Same as above
Same as above	Recordkeeping: 1. NSPS (Subpart GG) 2. Rule 69.3.1 3. PSD Permit APCD Permits	See Attachment, Pages 8-10, and 13	Same as above
Same as above	Reporting Requirements: 1. NSPS (Subpart GG) 2. Rule 69.3.1 3. Rule 98 4. PSD Permit 5. APCD Permits 6. 40 CFR App. F 7. 40 CFR 60.7	See Attachment, Pages 11, and 13	Same as above

FORM 1401-O-1

Streamlining of Multiple Applicable Requirements

CP Kelco Gas Turbines

The following is a streamlining analysis performed with guidance from SDAPCD Instructions on Title V Multiple Applicable Streamlining:

NO_x Emission Standards

Unit #1

NSPS Subpart GG

$$\begin{aligned}\text{Estimated Natural Gas Peak Load} &= (105.76 + 38.0) \text{ MMBtu/hr} \\ &= 143.76 \text{ MMBtu/hr} \\ &= \frac{143.76 \text{ MMBtu/hr}}{8700 \text{ kW}} \cdot \frac{1054.2 \text{ MM J}}{\text{J/MMBtu}} \cdot \frac{1000 \text{ kJ}}{\text{MM J}} \cdot \frac{\text{kW}}{1000 \text{ w}} \\ &= 17.4 \frac{\text{kJ}}{\text{w-hr}}\end{aligned}$$

Nitrogen Content = 0.6 mol % (From SDG&E)

$$\text{wt}\% = \frac{0.6 \text{ mol N}}{100 \text{ mol NG}} \cdot \frac{14 \text{ lb}}{\text{mol}} \cdot \frac{\text{mol}}{16 \text{ lb}} \cdot 100 = 0.52\% \text{ (wt) Nitrogen}$$

$$\begin{aligned}\text{Standard (a)(1)} &= 0.0075 \left(\frac{14.4}{17.4} \right) + 0.005 \quad (\text{NSPS formula}) \\ &= 0.0112\% @ 15\% \text{ O}_2 \\ &= \underline{112 \text{ ppmv}} @ 15\% \text{ O}_2\end{aligned}$$

Rule 69.3.1

NO_x Limit: = 42 ppmv @ 15%, combined-cycle units, following the first 120 consecutive minutes of an extended startup

APCD Permit

NO_x Limit: = 28.6 ppmv @ 15%, Turbine Only On Natural Gas or Turbine and Duct Burner On Natural Gas

PSD Permit

NO_x Emission Limits (NO₂)

Turbine	20.1 lbs/hr	0.24 lb./MM Btu
Duct Burner	3.1 lbs/hr	0.1 lb./MM Btu
Total	70 lbs/hr	---

Discussion: Most stringent limits are the APCD permit limit of 28.6 ppmv @ 15% O₂ for turbine operation only or turbine and duct burner on natural gas.

FORM 1401-O-1

Streamlining of Multiple Applicable Requirements

Units #2 and #3

NSPS Subpart GG

$$\begin{aligned}\text{Estimated Natural Gas Peak Load} &= (103 + 38.0) \text{ MMBtu/hr} \\ &= 141.0 \text{ MMBtu/hr} \\ &= \frac{141.0 \text{ MMBtu/hr}}{8700 \text{ kW}} \cdot \frac{1054.2 \text{ MM}}{\text{J/MMBtu}} \cdot \frac{1000 \text{ kJ}}{\text{MM J}} \cdot \frac{\text{kW}}{1000 \text{ w}} \\ &= 17.1 \frac{\text{kJ}}{\text{w-hr}}\end{aligned}$$

$$\text{Nitrogen Content} = 0.6 \text{ mol } \% \text{ (From SDG\&E)}$$

$$\text{wt}\% = \frac{0.6 \text{ mol N}}{100 \text{ mol NG}} \cdot \frac{14 \text{ lb}}{\text{mol}} \cdot \frac{\text{mol}}{16 \text{ lb}} \cdot 100 = 0.52\% \text{ (wt) Nitrogen}$$

$$\begin{aligned}\text{Standard (a)(1)} &= 0.0075 \left(\frac{14.4}{17.1} \right) + 0.005 \text{ (NSPS formula)} \\ &= 0.0113\% @ 15\% \text{ O}_2 \\ &= \underline{113 \text{ ppmv}} @ 15\% \text{ O}_2\end{aligned}$$

Rule 69.3.1

$$\text{NO}_x \text{ Limit: } = 42 \text{ ppmv } @ 15\%, \text{ combined-cycle units, following the first 120 consecutive minutes of an extended startup}$$

APCD Permits

$$\begin{aligned}\text{NO}_x \text{ Limit: } &= 17.5 \text{ ppmv } @ 15\%, \text{ Turbine Only On Natural Gas} \\ &= 19.0 \text{ ppmv } @ 15\%, \text{ Turbine and Duct Burner On Natural Gas} \\ &= 29.5 \text{ ppmv } @ 15\%, \text{ Turbine Only On Natural Gas or Turbine and Duct Burner On Natural Gas} \\ &= \text{Annual Mass Emissions Cap}\end{aligned}$$

PSD Permit

NO_x Emission Limits (NO₂)

	<u>Maximum Limits</u>	<u>Average Limits</u>
Turbine	20.1 lb./hr	0.24 lb./MM Btu
Duct Burner	3.1 lb./hr	0.1 lb./MM Btu
Total	70 lb./hr	---

Discussion: Most stringent limits are the APCD permit limit of 17.5 ppmv @ 15% O₂ for turbine operation only, the APCD permit limit of 19.0 ppmv @ 15% O₂ for turbine and duct burner on natural gas, and the APCD permit limit of 29.5 ppmv @ 15% O₂ for turbine only on natural gas or turbine and duct burner on natural gas.

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Streamlining of Multiple Applicable Requirements

CO Emission Standards

All Units Plus Boilers

NSPS Subpart GG

No requirement

Rule 69.3.1

No requirement

APCD Permits

CO annual mass emissions cap of 100 tons

PSD Permit

No requirement

Discussion: Most stringent limit is the APCD permit limit of 100 tons per twelve consecutive months.

SO₂ Emissions Standards

NSPS (Subpart GG)	0.015% @ 15% O ₂ , dry
Rule 53	0.05%, dry
PSD Permit	None
APCD Permit	None

Discussion: NSPS requirements are based on a 15% oxygen content and Rule 53 does not specify exhaust oxygen concentration. Both standards are on a dry basis. At oxygen concentrations between 19.13% and 20.9%, the Rule 53 standard may be stricter. However, the existing gas turbines operate at approximately 15% O₂, and SO₂ based on a mass balance is well below the 0.015% NSPS standard. Accordingly, the NSPS standard would serve as the most stringent requirement.

Opacity/Visibility Standard

NSPS (subpart GG)	No requirements
Rule 50	Ringelmann <1 or Opacity <20% (3 minutes)
PSD Permit	No requirements
APCD Permit Conditions	Lube oil vent <20% opacity

Discussion: Rule 50 and APCD Permits are equivalent, therefore permit conditions remain.

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Streamlining of Multiple Applicable Requirements

Work Practices

NSPS (Subpart GG) Rules 53 and 69.3.1 PSD Permit	Fuel sulfur <0.8% wt. None a) Maintain in good working order b) Operate water injection c) Liquid fuel can be used during curtailments d) Total liquid fuel usage <375,600,000 gal/yr. (based on 0.0015% sulfur)
APCD Permits	a) Emission Unit shall be fired on Public Utility Commission (PUC) quality natural gas only b) The sulfur content of any liquid fuel burned shall not exceed 0.25% by weight. c) The Sulfur content of any fuel burned shall not exceed 0.5% by weight. d) The Flue Gas Recirculation System shall be in operation in accordance with the manufacturer's instructions when the boiler is producing steam. e) The Gas Turbine shall not operate in the Full Exhaust Bypass Mode for greater than 40 hours per calendar year excluding Gas Turbine startup and shutdown periods f) Certify, calibrate, maintain, and operate CEM g) Boiler #8 (APCD2004-PTO-003129) shall be fired with diesel fuel only during a natural gas supply curtailment period, or during an unforeseen disruption or interruption in the supply of natural gas to the unit. The total cumulative time of diesel fuel use for these purposes shall not exceed 168 hours per calendar year. The total time that diesel fuel is used for maintenance and checkout purposes shall not exceed 3.0 hours per day and 48 hours per calendar year.

Discussion: APCD permit conditions either duplicate or are stricter than either NSPS or PSD work practices. Therefore, these will serve as applicable requirements.

Monitoring Requirements

NSPS Subpart GG	Monitoring per 40 CFR 60.334 a) Fuel consumption b) Fuel sulfur content c) Nitrogen content
Rule 69.3.1:	Continuous Monitoring Of Operational Characteristics Of The Unit and Of Any NOx Emissions Reduction Systems (Possible Parameters Suggested): a) fuel flow rate b) Exhaust gas temperature c) Stack O2 % b) NOx concentration
Rule 53:	None

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Streamlining of Multiple Applicable Requirements

PSD Permit

Monitor:

- a) Natural Gas and Liquid Fuel flow rate
- b) Water injection rate (no longer applicable with dry control technology)
- c) NO_x emissions per 40 CFR 60
- d) CO emissions per 40 CFR 60
- e) Stack volumetric flow rates per 40 CFR 52 App. E
- f) Annual source test for NO₂ and CO

APCD Permits

- a) Non-resettable totalizing meters for each fuel line
- b) Records of fuel usage
- c) Times and duration of all startups, shutdowns, fuel changes and purpose of fuel switches or change to or from combined usage
- d) Source testing at least once per permit year before the permit to operate renewal date for NO_x and CO
- e) Daily liquid fuel usage with fuel switch
- f) Monitor stack volumetric flow rate per (40 CFR 52 App E)
- g) Monitor annual CO and NO_x mass emissions
- h) Monitor stack gas NO_x content, CO content, and oxygen content.

Discussion: NSPS, District rules, PSD permit and APCD permits each contain monitoring requirements. Per EPA White Paper No. 2 guidance, the following is a summary of the monitoring requirements associated with the most stringent emission requirements:

Requirement	Frequency	Requirement In
Source test (CO, NO _x)	Annual	APCD Permits
Fuel consumption	Continuous	APCD Permits
Water consumption	Continuous ¹	PSD Permit / Rule 69.3.1
NO _x Concentration	Continuous	APCD Permits
CO Concentration	Continuous	APCD Permits
O ₂ Concentration	Continuous	APCD Permits
CO Annual Emissions	Rolling aggregate for a 12-month period	APCD Permits
NO _x Annual Emissions	Any consecutive 365 day period ²	APCD Permits
Stack Volumetric Flow Rate	Continuous ³	APCD Permits

- Notes: 1) Provision no longer applicable since wet control technology has been replaced with dry control technology.
- 2) Requirement for 365-day rolling average becomes effective on January 1, 2009.
- 3) Volumetric flow rate is based on operation hours per non-resettable totaling meters and the fuel usages.

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Streamlining of Multiple Applicable Requirements

Test Method Requirements

The following is a list of the test methods required by each of the applicable requirements:

Reference	Emission Test Methods					Parameter Test Methods	
	NO _x	O ₂	CO	SO ₂	Flow	S	N
NSPS Subpart GG	M20/ M7E/ ASTM D6522-00	M20/ M3/M3A/ ASTM D6522-00	ASTM D6522-00	---	---	(1)	(2)
Rule 69.3.1	M7E/ M100	M3A	---	---	---	---	---
Rule 53	---	---	---	NE	---	NE	---
PSD Permit	M20	M20	M10	---	App.E	NE	NE
APCD Permits	M100	M100	M100	---	(3)	ASTM D-3246	NE

M10 - EPA Method 10

M20 - EPA Method 20

M3 - EPA Method 3

M3A - EPA Method 3A

M7E - EPA Method 7E

M100 - APCD Method 100

App. E - 40 CFR 52 Appendix E

NE - Required in Rule or permit, but test method not established.

(1) ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 ([§ 60.335\(b\)\(10\)](#)) for gaseous fuels.

(2) Subpart GG has no specific requirement but requires method w/ 5% accuracy ([§ 60.335\(b\)\(9\)](#)).

(3) The APCD permits require the monitoring of data to ensure CP Kelco complies with the CO limitations in the permits. CP Kelco satisfies this requirement by maintaining records of fuel flow by continuous monitor, by conversion of the exhaust flow via USEPA Method 19, and by annual verification of this accuracy by comparison to 40 CFR Part 60 reference methods during annual source testing conducted under the direction of the APCD.

Discussion:

EPA Method 20, EPA Method 7E, and ASTM D6522-00 are equivalent to each other per NSPS Subpart GG. SDCAPCD Method 100 incorporates EPA Method 20 and has been determined by EPA to be as stringent. Therefore, for NO_x ppmv and %O₂, Method 100 will be used. For CO (ppmv), Method 100 will be used, since Method 100 is an alternative method to appropriate EPA reference methods. Fuel sulfur content will be determined from the fuel producer. Since the APCD NO_x requirements are more stringent than NSPS requirements and CP Kelco currently operates a CEM, measuring fuel nitrogen content as required by NSPS provides no more stringent control than the measurement of NO_x by the CEM. Therefore, CP Kelco proposes that requirements for monitoring NO_x emissions subsume the fuel nitrogen content requirements.

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Streamlining of Multiple Applicable Requirements

While the PSD permit contains a requirement for the measurement of exhaust flow under 40 CFR 52, Appendix E, that requirement relates to the NOX limitation in the PSD permit. Because NOX limitations in the PSD permit were subsumed by more stringent limitations in other permits, there is no basis for requiring Appendix E to measure exhaust flow. In contrast, the APCD permits require monitoring and test methods by which compliance with the CO emission limitation in those permits can be verified, and the APCD permits are the source of the CO limitation to be carried into the final Title V permit. Accordingly, the monitoring and test method requirements of the APCD permits (see comment 3 above) as to the exhaust gas flow should be selected as those requirements are the only gas flow requirements applicable to the streamlined emission limitations. Even if Appendix E was deemed to have some applicability, USEPA's White Paper No. 2 states that the monitoring recordkeeping and reporting requirements associated with the streamlined emission limitations are presumed appropriate. Moreover, given the annual verification of the accuracy of the use of fuel flow data as converted by Method 19 to measure exhaust gas flow (see comment 3 above), the APCD permit terms will assure compliance with the streamlined CO emission limitation to the extent as would the requirements of Appendix E.

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Streamlining of Multiple Applicable Requirements

Recordkeeping

Identified Existing Requirements:

Reference	Records	Frequency	Retention
NSPS (Subpart GG)	Fuel use	Continuous	Not Specified
	Fuel sulfur and nitrogen content	Each Delivery	Not Specified
	Ratio of water or steam to fuel	Continuous	Not Specified
	Hourly NOx emission	Hourly	Not Specified
Rules 50, 53	None	N/A	N/A
Rule 69.3.1	NOx	Continuous	2 Years
	Fuel flow rate, exhaust gas temperature, stack-gas oxygen content, operational parameters defining an extended startup	Continuous	2 Years
	Type of unit, records of dates and times of operation, times of all startups, shutdowns, periods of operation at low load, fuel changes and records of the type and quantity of each fuel used during each calendar day and calendar year	As Events Occur	2 Years
	Records of all source tests required.	At Least Once Annually	2 Years
PSD Permit	Fuel use	Continuous	2 Years
	Water use		
	NOx and CO concentrations, stack volumetric flow	Continuous	2 Years
	CMS adjustments and maintenance	As Events Occur	2 Years
	Performance tests	As Events Occur	2 Years
APCD Permits	Records of fuel usage indicating actual times and duration of all startups, shutdowns, fuel changes and purpose of fuel switches or change to or from combined usage	As Events Occur	3 Years
	CEM Measurements, Adjustments, Calibration Checks, and Maintenance	As Events Occur	3 Years

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Streamlining of Multiple Applicable Requirements

Reference	Records	Frequency	Retention
	Performance and QA Testing Measurements	As Events Occur	3 Years
	Fuel flow rates, stack gas NOx content, stack gas CO content, stack gas oxygen content, pounds per hour NOx and pounds per hour CO.	One-Hour Averages	3 Years
	Sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas	Quarterly	3 Years
	CO emissions from the Cogen systems	Monthly; Daily (if rolling aggregate for a 12-month period reaches a value of 75 tons or greater)	3 Years
	Fuel use, hours of operation, EPA engine family and maximum rated brake-horsepower as needed for each diesel engine owned by contractor and operated at this stationary source	As Events Occur	3 Years
	Dates, times and Gas Turbine run hours during Full Exhaust Bypass operation	As Events Occur	3 Years
	Records documenting load levels and CEMS records of NOx emissions levels for each period of operation at low load excluded from any compliance determination	As Events Occur	3 Years
	Times when CO concentration exceeds the analyzer range of 50 PPMV and emissions during these times, calculated pursuant to this condition	As Events Occur	3 Years
40 CFR App. F	Calibration gas audits	Quarterly	2 Years
	RATA Results	Annual	2 Years
	Calibration Drift	Daily	2 Years
40 CFR 60.7	Startups, shutdowns, malfunctions, inoperative CMS, and excess emissions	As Events Occur	2 Years

Notes: 1) Provision is no longer applicable since wet control technology has been replaced with dry control technology.

FORM 1401-O-1**Streamlining of Multiple Applicable Requirements****Streamlined Recordkeeping Requirements:**

Records	Frequency	Retention	Basis
Records of fuel usage indicating actual times and duration of all startups, shutdowns, fuel changes and purpose of fuel switches or change to or from combined usage	As Events Occur	2 Years	Incorporates 40 CFR 60.7, APCD Permit, NSPS, PSD Permit, and Rule 69.3.1 requirements. Retention based on federal requirements.
CEM Measurements, Adjustments, Calibration Checks, and Maintenance	As Events Occur	2 Years	Incorporates 40 CFR 60.7, 40 CFR App. F, APCD Permit, and PSD Permit requirements. Retention based on federal requirements.
Performance and QA Testing Measurements	As Events Occur	2 Years	Incorporates 40 CFR App. F, APCD Permit, and PSD Permit requirements. Retention based on federal requirements.
Fuel flow rates, stack gas NO _x content, stack gas CO content, stack gas oxygen content, pounds per hour NO _x , pounds per hour CO, and excess emissions.	One-Hour Averages	2 Years	Incorporates 40 CFR 60.7, APCD Permit, PSD Permit, Rule 69.3, and Rule 69.3.1 requirements. Retention based on federal requirements.

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Streamlining of Multiple Applicable Requirements

Reporting Requirements

Identified Existing Requirements:

Reference	Report	Frequency	Retention
NSPS (Subpart GG)	None beyond 40 CFR 60	N/A	N/A
Rules 50, 53	None	N/A	N/A
Rule 69.3.1	Source test report None beyond 40 CFR 60	Annually	2 Years
Rule 98	Breakdown (Malfunction) Report	2-Hour call-in to SDCAPCD, 15-day follow-up report	NS
PSD Permit	Malfunction Report	48-Hour call-in to SDCAPCD, 15-day follow-up report	NS
APCD Permit	Source test report None beyond 40 CFR 60	Annually	3 Years
	Violation (of any Emission Standard) report	Within 96 hours after such occurrence	3 Years
	Excess Emissions and Monitoring Systems Performance Reports and Summary Report	Quarterly	3 Years
40 CFR App. F	RAA and RATA results	Annual	2 Years
40 CFR 60.7	Excess Emission and Monitoring Report	Quarterly	2 Years

Streamlined Reporting Requirements:

Report	Frequency	Retention	Basis
Breakdown (Malfunction) Report	2-Hour call-in to SDCAPCD, 15-day follow-up report	NS	Subsumes PSD Requirements and Rule 98
RAA and RATA Results	Annually	2 Years	Incorporates 40 CFR App. F., APCD Permits, and Rule 69.3.1 requirements. Retention based on federal requirements.
Excess Emission and Monitoring Report	Quarterly	2 Years	Incorporates 40 CFR 60.7 and 40 CFR App. F. requirements.

FORM 1401-O-1**Streamlining of Multiple Applicable Requirements****CP Kelco Gas Turbine Operation Final Streamlined Applicable Requirements**

Based on the above streamlining, the following are the proposed finalized streamlined requirements of emission standards, monitoring, test methods, recordkeeping, and reporting. This initial analysis is provided as a guide to determine final permit requirements and may undergo further refinement before incorporation into the final permit.

Emission Standards/Monitoring Requirements/Test Methods

Compound	Standard	Monitoring	Test Method
NO _x	Unit #1: 28.6 ppmv @ 15% O ₂ for turbine operation only or turbine and duct burner on natural gas and; Units #2 and #3: 17.5 ppmv @ 15% O ₂ for turbine operation only, 19.5 ppmv @ 15% O ₂ for turbine and duct burner on natural gas, and 29.5 ppmv @ 15% O ₂ for turbine only on natural gas or turbine and duct burner on natural gas All Units and Boilers: Annual emissions cap	Hourly Average and Annual Source Test	CEM and APCD Method 100
CO	CO limit of 100 tons per twelve consecutive months	Hourly Average	CEM With CEM Performance Audited By Annual Source Tests
SO ₂	SO ₂ emission standard 0.015% @ 15% O ₂	None	N/A
Opacity	<20% opacity	None	N/A
Fuel Sulfur	<0.0015% sulfur	Sampling By APCD or Samples Provided To APCD	ASTMD-3246

Additional Monitoring

Requirement	Frequency	Basis
Fuel consumption	Continuous	APCD Permits
CO Concentration	Hourly Average	APCD Permits
O ₂ Concentration	Hourly Average	APCD Permits

FORM 1401-O-1

Streamlining of Multiple Applicable Requirements

Work Practices

- APCD Permits
- a) Emission Unit shall be fired on Public Utility Commission (PUC) quality natural gas only
 - b) The sulfur content of any liquid fuel burned shall not exceed 0.25% by weight.
 - c) The Sulfur content of any fuel burned shall not exceed 0.5% by weight.
 - d) The Flue Gas Recirculation System shall be in operation in accordance with the manufacturer's instructions when the boiler is producing steam.
 - e) The Gas Turbine shall not operate in the Full Exhaust Bypass Mode for greater than 40 hours per calendar year excluding Gas Turbine startup and shutdown periods
 - f) Certify, calibrate, maintain, and operate CEM
 - g) Boilers shall be fired with diesel fuel only during a natural gas supply curtailment period, or during an unforeseen disruption or interruption in the supply of natural gas to the unit. The total cumulative time of diesel fuel use for these purposes shall not exceed 168 hours per calendar year. The total time that diesel fuel is used for maintenance and checkout purposes shall not exceed 3.0 hours per day and 48 hours per calendar year.

Recordkeeping Requirements

Records	Frequency	Retention
Records of fuel usage indicating actual times and duration of all startups, shutdowns, fuel changes and purpose of fuel switches or change to or from combined usage	As Events Occur	2 Years
CEM Measurements, Adjustments, Calibration Checks, and Maintenance	As Events Occur	2 Years
Performance and QA Testing Measurements	As Events Occur	2 Years
Fuel flow rates, stack gas NO _x content, stack gas CO content, stack gas oxygen content, pounds per hour NO _x , pounds per hour CO, and excess emissions.	One-Hour Averages	2 Years

Reporting Requirements

Report	Frequency	Retention
Breakdown (Malfunction) Report	2-Hour call-in to SDCAPCD, 15-day follow-up report	NS
RAA and RATA Results	Annually	2 Years
Excess Emission and Monitoring Report	Quarterly	2 Years

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Permit Shield (FORM 1401-Q)

Company Name <u>CP Kelco U.S. Inc.</u> Facility Address: <u>2025 East Harbor Drive, San Diego, CA 92113-2123</u>	District Use Only NEDS # _____ SITE ID # _____
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REQUEST FOR PERMIT SHIELD

If more space is required, use additional forms. Please type or print legibly.

Application No(s) Permit No(s)	Requirements to be Shielded	Basis	Attachment Number
Combustion Units: POs: 000480, 003129, 050265, 850680, 850679	SDCAPCD Rule 62	Applicant has performed streamlining of fuel sulfur content requirement of 0.0015% Since complying with permit conditions constitutes compliance with Rule 62.	1401-O-1_CP Kelco_Supplement
Boilers: POs: 000480 and 003129	40 CFR Part 60 Subpart Dc- NSPS for Small, Industrial/Commercial/Institutional Steam Generators > 10 MMBTU/HR, but < 100 MMBTU/HR	CP Kelco boilers do not meet the date requirement (i.e., construction, modification, or reconstruction after June 9, 1989).	N/A
Combustion Units: 000480,003129, 050265, 850679, 850680	All applicable requirements of NSPS Subpart GG, Rules 50, 53, 69.3.1, and 98 for which streamlined permit conditions were developed.	Compliance with permit conditions constitutes compliance with regulations	1401-O-1_CP Kelco_Supplement
Facility-wide	PSD Permit (NSR 4-4-10; SD 81-01)	Compliance with permit conditions constitutes compliance with regulations	1401-O-1_CP Kelco Supplement
PTO's 050265, 850679; and 850680	All applicable requirements which have been subsumed in CP Kelco's streamlining proposal pursuant to USEPA's White Paper Number 2 for Improved Implementation of The Part 70 Operating Permits Program, dated 3/5/96	Streamline Multiple Applicable Requirements	1401-O_CP Kelco_Streamlining_ Attachment A
Not Applicable	Compliance Certification requirements under Regulation XIV for "portable equipment" registered under SDAPCD Rule 12.1	Contractor responsible for compliance	
No Applicable	Terms and conditions of ATC permits issued to CP Kelco which have been amended or modified by subsequently issued PTOs, TAs, or SAs	Streamlining overlapping permit terms	
Not Applicable	Terms and conditions of SDAPCD ATC, PTO, SA, or TA permits issued to CP Kelco which are legal requirements that are not applicable requirements under SDAPCD Rule 1401(c)(9).	Compliance with permit terms constitutes compliance with regulations	
Not Applicable	Rules in the SIP, which are no longer local rules. Outdated SIP rules for which replacements have been adopted by SDAPCD and which are pending approval before USEPA.	Streamlining multiple applicable requirements: streamlining rules no longer applicable	Form 1401-P, attached hereto

**Compliance Assurance Monitoring
Applicability Analysis**

Compliance Assurance Monitoring Applicability Analysis

Permit Number	Emission Unit	Pollutant Controlled	Control Device	Subject to Emission Standard?	Applicable Emission Standard	Throughput or emissions limit	Uncontrolled Emissions, ton/yr	CAM applicability Threshold, ton/yr	Subject to CAM?	Notes
480	Boiler, 72 MM BTU/HR. Natural Gas or Diesel fired	NOx	Flue Gas Recirculation	Yes	30 PPMV corrected to 3% O ₂ - Natural Gas 225 PPMV corrected to 3% O ₂ - Diesel		23.19	25	No	Used SDAPCD EF of 100 lb/MMSCF for uncontrolled boilers. Converted to lb/MMBTU by using a HHV of 1020 as specified in the APCD methodology: B16 - BOILER, NATURAL GAS FIRED, 0.3 - 100 MMBTU/HR, UNCONTROLLED https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/combustion-gas-fuels/APCD-Boiler-Natural-Gas-Fired-0.3-100-MMBTU-No-Controls.pdf Adjusted the NOx EF by 25% since the unit is equipped with an oxygen trim controller. (reference: https://p2infohouse.org/ref01/text/00174j.htm)
489	Ribbon Blender #13	PM	Stray dust baghouses	Yes	0.1 gr/scf (Rule 52) Rule 54 Emission Standards	250 lb/hr Cap based on equipment description	0.04	100	No	250 lb/hr Cap equals to 1095 tons of materials processed per year, assuming continuous operation. In the absence of an emission factor or Engineering Evaluation for this unit, used an EF of 0.07 lb PM10 per ton of materials processed, from SDAPCD S09 - SCREENING OPERATION, FINES MATERIAL, DRY, UNCONTROLLED, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY
1516	Bio-polymer Manufacturing Process	PM	Baghouses/Cyclones/hydro cyclones	Yes	0.1 gr/scf (Rule 52) Rule 54 Emission Standards	15,000 tons of biogum per year (Condition #1)	0.53	100	No	Used an EF of 0.07 lb PM10 per ton of materials processed, from SDAPCD S09 - SCREENING OPERATION, FINES MATERIAL, DRY, UNCONTROLLED, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY
1516	Bio-polymer Manufacturing Process	VOC	Solvent Recovery System (SRS): Three regenerative carbon adsorber beds. SRS is primarily a process equipment. As such, it is not subject to CAM.	Yes	135 lb/year	15,000 tons of biogum per year (Condition #1)			No	The Solvent Recovery system (The SRS), recovers IPA for recycle in our Biogum manufacturing processes. The SRS equipment (i.e., three carbon adsorber beds) is considered a piece of process equipment for purposes of the Compliance Assurance Monitoring Rule due to the economic benefits of recovering IPA back into the SBP Biogum production (see definition of Inherent Process Equipment in 40 CFR § 64.1 Definitions). Therefore, the SRS is not considered an emissions control device for purposes of Compliance Assurance Monitoring and a CAM Plan is not required for this emission unit.
1676 (SA 6710)	DRY SIDE EQUIPMENT CONSISTING OF THE FOLLOWING: FOUR MILLS 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; ONE MASS FLOW HOPPER FOR BAG AND BARREL STATION; ONE SIFTER AND PNEUMATIC CONVEYOR FOR USE MASS FLOW HOPPER; ONE SIFTER AND PNEUMATIC CONVEYOR FOR USE BLENDERS NO. 8 & 7; ONE SIFTER AND PNEUMATIC CONVEYOR FOR USE BLENDERS NO. 8 & 9; ONE STRAY DUST COLLECTION SYSTEM, INCLUDING MILL ROOM CENTRAL VACUUM SYSTEM; THREE STRAY DUST BAGHOUSES (A, B, AND C), AND- ONE PERLITE SYSTEM	PM	4 milling cyclones; 4 fine cyclones; 4 mill Baghouses; 1 transfer baghouse; stray dust collector	PM	0.1 gr/scf (Rule 52) Rule 54 Emission Standards	15,000 lbs per day	0.10	100	No	Used an EF of 0.07 lb PM10 per ton of materials processed, from SDAPCD S09 - SCREENING OPERATION, FINES MATERIAL, DRY, UNCONTROLLED, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY 15,000 lbs per day equals to 2,737.5 tons per year assuming continuous operation.

Compliance Assurance Monitoring Applicability Analysis

Permit Number	Emission Unit	Pollutant Controlled	Control Device	Subject to Emission Standard?	Applicable Emission Standard	Throughput or emissions limit	Uncontrolled Emissions, ton/yr	CAM applicability Threshold, ton/yr	Subject to CAM?	Notes
2185	Pilot Plant	PM	Stary Dust Baghouse/Dryer Baghouse Cyclones					100		
2185	Pilot Plant	VOC	Scrubber	Yes	95% VOC control	Annual Biogum Production (EABP) shall not exceed 92.9 tons per year.		25	Yes	Controlled PTE exceeds the CAM applicability threshold.
3129	Boiler, Natural Gas, 78 MMBtu/hour	NOx	Flue Gas Recirculation Boiler is equipped with low NOx burner	Yes	9 PPMV corrected to 3% O2		16.75	25	No	Used SDAPCD EF of 50 lb/MMSCF for low NOx boilers. Converted to lb/MMBTU by using a HHV of 1020 as specified in the APCD methodology: B17 - BOILER, NATURAL GAS FIRED, 0.3 - 100 MMBTU/HR, LOW NOx BURNERS https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/combustion-gas-fuels/APCD-Boiler-Natural-Gas-Fired-03-100-MMBtu-Low-NOx-Burners.pdf
3410	Vibrating Screen/Sieve	PM	Stray dust baghouses; 4 milling cyclones; 4 fine cyclones; 4 mill Baghouses; 1 transfer baghouse; boxer baghouse	Yes	0.1 gr/scf	0.7 tons/hr	0.21	100	No	This equipment is used with PTOs 1676, 901285, and 489. PM EF is based on Engineering Evaluation for APCD2017-APP-005122. EF = 0.07 lb PM10 per ton of materials processed, from SDAPCD S09 - SCREENING OPERATION, FINES MATERIAL, DRY, UNCONTROLLED, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY 0.07 tons/hr * 24 hr/day * 365 day/year = 6,132 tons per year
4380	Bulk Sodium Carbonate Transfer/Storage System	PM	1 baghouse; 2 cyclones; filter collector		0.1 gr/scf (Rule 52) Rule 54 Emission	10 tons per hour (from equipment description)	43.8	100	No	Uncontrolled PTE is below CAM applicability threshold.
7484 (ATC)	Rental Boiler, 90.65 MMBtu/hr; Manufacturer: Nebraska, Model: NOS-2A/S-55, Equipped with a low-NOx burner:	NOx	Selective Catalytic Reduction (SCR)	Yes	5 parts per million by volume (ppmv) on a dry basis corrected to 3 percent oxygen.	389 MMScf per calendar year (Condition #11)	9.73	25	No	Uncontrolled PTE is based on the annual limit of 389 MMSCF/year and an emission factor of 50 lb/MMSCF for low NOx boilers. B17 - BOILER, NATURAL GAS FIRED, 0.3 - 100 MMBTU/HR, LOW NOx BURNERS https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/combustion-gas-fuels/APCD-Boiler-Natural-Gas-Fired-03-100-MMBtu-Low-NOx-Burners.pdf
901285	Milling system	PM	3 cyclones; 2 baghouses; 2 stray dust baghouses; 1 stray dust baghouse shared with milling system; 1 baghouse			330 lb/hr	0.05	100	No	330 lb/hr Cap equals to 1445 tons of materials processed per year, assuming continuous operation. Used an EF of 0.07 lb PM10 per ton of materials processed, from SDAPCD S09 - SCREENING OPERATION, FINES MATERIAL, DRY, UNCONTROLLED, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY
940006	Biogum Pilot Plant	PM	Baghouse	Yes	0.1 gr/scf (Rule 52) Rule 54 Emission Standards	2,600,000 lbs/year (Condition 3)	0.05	100	No	1300 tons of materials is processed per year, assuming continuous operation. Used an EF of 0.07 lb PM10 per ton of materials processed, from SDAPCD S09 - SCREENING OPERATION, FINES MATERIAL, DRY, UNCONTROLLED, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY
940043	IPA Storage Tank	VOC	Scrubber	No	95% VOC control		1.25	25	No	Engineering Evaluation, dated 12/12/94 shows controlled VOC emissions of 50 lb/year for this emission unit with a 98% scrubber control efficiency. Uncontrolled emissions are estimated based on these parameters. Uncontrolled emissions are well below the major source threshold for VOC.
973094, 973095, 973096.	Sifter	PM	Depend on process, either connect to abatement devices under PTO901285	Yes	0.1 gr/scf	None listed in the permit	< 100 ton/year	100	No	Based on the nature of these units and PM calculations shown above, uncontrolled emissions are expected to be well below 100 tons/year.
975096, 973092	Screen	PM	Depend on process, either connect to abatement devices under PTO901285 or PTO001676	Yes	0.1 gr/scf	None listed in the permit	< 100 ton/year	100	No	Based on the nature of these units and PM calculations shown above, uncontrolled emissions are expected to be well below 100 tons/year.

**COMPLIANCE ASSURANCE MONITORING PLAN FOR
SCRUBBER FOR VOC (ISOPROPYL ALCOHOL) CONTROL
CP KELCO PILOT PLANT
APCD2004-PTO-002185**

I. Purpose

This document fulfills the Compliance Assurance Monitoring requirements for the Isopropyl Alcohol (IPA) scrubber at the CP Kelco Pilot Plant.

II. Background

Emissions Unit

Description:	Pilot Plant Recovery Systems
Identification:	Permit Numbers: APCD2004-PTO-002185
Facility:	CP Kelco Pilot Plant

Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.:	San Diego County Air Pollution Control District (SDCAPCD) Rule 67.10
Regulated Pollutant:	Volatile Organic Compounds (VOC's), specifically Isopropyl Alcohol (IPA)
Emission Limit:	95% reduction by weight of VOC's [Rule 67.10 (d)(2)(i)]
Existing Monitoring Requirement:	Scrubber source test

Control Technology Description

Packed bed scrubber: 12,000 actual cubic feet per minute (ACFM) water scrubber and associated vapor recovery ducting, fans, enclosures, and monitoring equipment.

III. Monitoring Approach

The key elements of the monitoring approach for VOC, including the indicators to be monitored, indicator ranges, and performance criteria, are represented in Table 1.

Table 1 - Monitoring Approach for Pilot Plant Scrubber (Continued)

Parameter	Description
I. Performance Indicator	Water Flow Rate and Dryers Operation
II. Measurement Approach	The water flow rate is monitored with a flow meter. Dryer operation is indicated on the Human Machine Interface (HMI).
III. Indicator Range	Flow: 0-92 gallons per minute (gpm) Dryers: 0-3 Dryers operating at one time
	If the water flow rate is determined to be outside of the range specified in the permit for the number of dryers operating, the water flow rate must be restored or the operation must be shut down within 60 minutes, or the provisions of the SDCAPCD Rule 98 (Breakdown) must be followed, to avoid a reportable deviation.
III. Performance Criteria	
A. Data Representativeness	The magnetic flow meter is installed at the scrubber water inlet line. Accuracy is $\pm 1\%$ of full scale.
B. Verification of Operational Status	Not applicable. The monitoring device is not new or modified.
C. Quality Assurance and Control Practices	The flow meter will be calibrated annually.
D. Monitoring Frequency	Flow and dryer operation is controlled by the programmable logic controller (PLC) and displayed on the HMI in the Pilot Plant Control Room. If the scrubber water flow rate is not within the indicator range, an alarm will sound to alert operators of an upset condition.
E. Data Collection Procedures	Since the dryers are batch filled, monitoring takes place when the dryers are operating.
F. Averaging Period	Data are displayed on the display panel. If an alarm sounds, a record will be kept on the cause of the alarm and the corrective action taken.
	Data averaging is not applicable. Real-time data are displayed on the display panel

JUSTIFICATION

Background

The pollutant specific emissions unit (PESU) includes 3 dryers at CP Kelco Pilot Plant. The emissions from the dryers are controlled using a once-through water packed-bed scrubber, which uses fresh water at ambient temperature. When the programmable controller senses that a dryer fan is "ON" and pressure exists in the transfer duct leading to the dryer, it will direct the dryer exhaust to the scrubber. At the same time, the VOC fan will act to control the plenum pressure at a negative pressure relative to atmosphere. In addition, the water flow to the scrubber will be initiated to a desired set point depending on the number of dryers venting to the scrubber. The above steps relating to VOC control are automated. The scrubber is used to reduce VOC emissions from the dryers by 95 percent.

Rationale for Selection of Performance Indicator

The key performance indicator is **Water Flow Rate and Number of Dryers In Operation** as listed in Table 1. Justification for selection of this indicator is as follows.

The VOC-laden flow to the scrubber changes routinely based on the numbers of dryers that are operational. To achieve the desired emission reduction, a minimum water flow rate must be supplied to the scrubber for each dryer scenario to absorb the VOCs in the inlet gas stream. The water flow rate is the key operating parameter for the scrubber and is variable for the number of dryers operating. The plenum fan, which conveys the VOC stream to the scrubber, has a characteristic flow for each dryer scenario. For a given dryer scenario, the liquid flow is maintained above a minimum flow to provide sufficient mass transfer of VOCs from the gas phase to the liquid phase and to reduce emissions by a minimum of 95 percent.

Based on source testing, the minimum liquid flow rate for each dryer scenario required to maintain 95% control efficiency has been determined. Maintaining this minimum liquid flow for each dryer scenario will ensure VOC emissions reduction of 95 percent.

Rationale for Selection of Indicator Ranges

Source test data were reviewed to determine the indicator range. Emissions reduction of greater than 95% has been demonstrated, for the indicator range selected, through source testing.

Data Availability

As shown in Table 1, the proposed indicator is measured by a flow meter, and the values are displayed on a real-time basis on the display panel in the control room. If the measuring device or the display panel is not operational, CP Kelco will make necessary repairs or replace devices as

needed. CP Kelco expects to have functional devices and display panel readings at least 90% of the time the system is operating.

Proposed Inspection Schedule

None. All significant performance parameters are addressed by the monitoring approach.

Anticipated Ongoing Maintenance Steps

Water Flow Rate/Dryers Operation	Flow meter will be calibrated annually.
Total Scrubber Pressure Drop	On an annual basis, the lines to the indicator/transmitters will be checked for functionality and transmitter calibrated annually.
Plenum Static Pressure	The pressure transmitter will be calibrated annually.
Scrubber VOC Control Efficiency	If the VOC control efficiency is determined by a confirmation source test to be less than Rule 67.10 standard and the other indicators are found to be within appropriate ranges, an inspection of the scrubber and its packing will be made.

VII. Proposed Daily Record keeping Practices

CP Kelco will maintain a log of alarm events or the absence of alarm events. For alarm events, response actions will also be recorded on the log, or the log will reference a maintenance work order or work orders that will describe the response actions. Where maintenance work orders are referenced, those work orders will be maintained in agreement with record keeping requirements of Rule 67.10. The alarm system will be tested daily when the scrubber is operating, and this testing will be recorded on the log.