

FACILITY PERMIT TO OPERATE

**PQ CORPORATION
8401 QUARTZ AVE
SOUTH GATE, CA 90280**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By _____
Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance

FACILITY PERMIT TO OPERATE PQ CORPORATION

TABLE OF CONTENTS

Section	Description	Revision #	Date Issued
A	Facility Information	DRAFT	08/15/2013
B	RECLAIM Annual Emission Allocation	DRAFT	08/15/2013
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	DRAFT	08/15/2013
E	Administrative Conditions	DRAFT	08/15/2013
F	RECLAIM Monitoring and Source Testing Requirements	DRAFT	08/15/2013
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	DRAFT	08/15/2013
H	Permit To Construct and Temporary Permit to Operate	DRAFT	08/15/2013
I	Compliance Plans & Schedules	DRAFT	08/15/2013
J	Air Toxics	DRAFT	08/15/2013
K	Title V Administration	DRAFT	08/15/2013
Appendix			
A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	DRAFT	08/15/2013
B	Rule Emission Limits	DRAFT	08/15/2013

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR: PQ CORPORATION

LEGAL OPERATOR (if different than owner):

EQUIPMENT LOCATION: 8401 QUARTZ AVE
SOUTH GATE, CA 90280-2536

MAILING ADDRESS: 8401 QUARTZ AVE
SOUTH GATE, CA 90280-2536

RESPONSIBLE OFFICIAL: LARRY MASARO

TITLE: DIRECTOR, NORTH AMERICAN PLANT
OPERATION

TELEPHONE NUMBER: (416) 255-7771

CONTACT PERSON: JIM OLIVIER

TITLE: PLANT MANAGER

TELEPHONE NUMBER: (323) 326-1100

TITLE V PERMIT ISSUED: June 11, 2008

TITLE V PERMIT EXPIRATION DATE: June 10, 2013

TITLE V	RECLAIM
YES	NOx: YES SOx: YES CYCLE: 2 ZONE: COASTAL

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin End (month/year)	Zone	NOx RTC Initially Allocated	NOx RTC ¹ Holding as of 07/01/2013 (pounds)	Non-Tradable ² Non-Usable RTCs (pounds)
7/2010 6/2011	Coastal	289126	0	9734
7/2010 6/2011	Inland	0	2713	0
1/2011 12/2011	Coastal	0	0	0
7/2011 6/2012	Coastal	289126	4016	13622
7/2011 6/2012	Inland	0	4462	0
1/2012 12/2012	Coastal	0	27128	0
7/2012 6/2013	Coastal	289126	53286	13622
1/2012 12/2012	Inland	0	16600	0
7/2012 6/2013	Inland	0	4462	0
1/2013 12/2013	Coastal	0	12500	0
7/2013 6/2014	Coastal	289126	63286	13622
1/2013 12/2013	Inland	0	17500	0
7/2013 6/2014	Inland	0	4462	0
7/2014 6/2015	Coastal	289126	93286	13622
7/2014 6/2015	Inland	0	4462	0
7/2015 6/2016	Coastal	289126	93286	13622
7/2015 6/2016	Inland	0	4462	0

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin End (month/year)	Zone	NOx RTC Initially Allocated	NOx RTC ¹ Holding as of 07/01/2013 (pounds)	Non-Tradable ² Non-Usable RTCs (pounds)
7/2016 6/2017	Coastal	289126	93286	13622
7/2016 6/2017	Inland	0	4462	0
7/2017 6/2018	Coastal	289126	93286	13622
7/2017 6/2018	Inland	0	4462	0
7/2018 6/2019	Coastal	289126	93286	13622
7/2018 6/2019	Inland	0	4462	0
7/2019 6/2020	Coastal	289126	93286	13622
7/2019 6/2020	Inland	0	4462	0
7/2020 6/2021	Coastal	289126	93286	13622
7/2020 6/2021	Inland	0	4462	0
7/2021 6/2022	Coastal	289126	93286	13622
7/2021 6/2022	Inland	0	4462	0
7/2022 6/2023	Coastal	289126	93286	13622
7/2022 6/2023	Inland	0	4462	0
7/2023 6/2024	Coastal	289126	93286	13622
7/2023 6/2024	Inland	0	4462	0
7/2024 6/2025	Coastal	289126	93286	13622

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin End (month/year)	Zone	NOx RTC Initially Allocated	NOx RTC ¹ Holding as of 07/01/2013 (pounds)	Non-Tradable ² Non-Usable RTCs (pounds)
7/2024 6/2025	Inland	0	4462	0
7/2025 6/2026	Coastal	289126	93286	13622
7/2025 6/2026	Inland	0	4462	0
7/2026 6/2027	Coastal	289126	93286	13622
7/2026 6/2027	Inland	0	4462	0
7/2027 6/2028	Coastal	289126	93286	13622
7/2027 6/2028	Inland	0	4462	0

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of SOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total SOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin End (month/year)	Zone	SOx RTC Initially Allocated	SOx RTC ¹ Holding as of 07/01/2013 (pounds)	Non-Tradable ² Credits (NTCs) (pounds)
7/2010 6/2011	Coastal	1342	0	
7/2011 6/2012	Coastal	1342	0	
7/2012 6/2013	Coastal	1342	0	
7/2013 6/2014	Coastal	1342	0	
7/2014 6/2015	Coastal	1342	0	
7/2015 6/2016	Coastal	1342	0	
7/2016 6/2017	Coastal	1342	0	
7/2017 6/2018	Coastal	1342	0	
7/2018 6/2019	Coastal	1342	0	
7/2019 6/2020	Coastal	1342	0	
7/2020 6/2021	Coastal	1342	0	
7/2021 6/2022	Coastal	1342	0	
7/2022 6/2023	Coastal	1342	0	
7/2023 6/2024	Coastal	1342	0	
7/2024 6/2025	Coastal	1342	0	
7/2025 6/2026	Coastal	1342	0	
7/2026 6/2027	Coastal	1342	0	

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (h)(2) of Rule 2002.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of SO_x RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total SO_x emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin End (month/year)	Zone	SO _x RTC Initially Allocated	SO _x RTC ¹ Holding as of 07/01/2013 (pounds)	Non-Tradable ² Credits (NTCs) (pounds)
7/2027 6/2028	Coastal	1342	0	

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (h)(2) of Rule 2002.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. If the facility submits a permit application to increase in an annual allocation to a level greater than the facility's starting Allocation plus Non-Tradable credits as listed below, the application will be evaluated for compliance with Rule 2005 (c)(4). Rule 2005 (e) - Trading Zone Restrictions applies if an annual allocation is increased to a level greater than the facility's Starting Allocation plus Non-Tradable Credits:

Year		Zone	NOx RTC	Non-Tradable
Begin	End		Starting Allocation	Credits(NTC)
(month/year)			(pounds)	(pounds)
7/1994	6/1995	Coastal	504806	0

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. If the facility submits a permit application to increase in an annual allocation to a level greater than the facility's starting Allocation plus Non-Tradable credits as listed below, the application will be evaluated for compliance with Rule 2005 (c)(4). Rule 2005 (e) - Trading Zone Restrictions applies if an annual allocation is increased to a level greater than the facility's Starting Allocation plus Non-Tradable Credits:

Year		Zone	SOx RTC	Non-Tradable
Begin	End		Starting Allocation	Credits(NTC)
(month/year)			(pounds)	(pounds)
7/1994	6/1995	Coastal	3638	1101

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION C: FACILITY PLOT PLAN

(TO BE DEVELOPED)

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: RAW MATERIAL RECEIVING AND STORAGE					
UNLOADING ARM, BOTTOM, TANK TRUCK, TANK CAR A/N: 238436	D1	C7		PM: (9) [RULE 405, 2-7-1986]	C1.1, D323.2
UNLOADING ARM, BOTTOM, TANK TRUCK, TANK CAR A/N: 238436	D2	C7		PM: (9) [RULE 405, 2-7-1986]	C1.1, D323.2
CONVEYOR, BELT A/N: 238436	D3			PM: (9) [RULE 405, 2-7-1986]	D323.2
BUCKET ELEVATOR A/N: 238436	D4	C7		PM: (9) [RULE 405, 2-7-1986]	D323.2
STORAGE SILO, T-51, SODA ASH, 40,000 CU. FT., 40 TONS CAPACITY A/N: 238436	D5	C7		PM: (9) [RULE 405, 2-7-1986]	C1.1, D323.2
STORAGE SILO, T-53, SAND, 40,000 CU. FT., 40 TONS A/N: 238436	D6	C7		PM: (9) [RULE 405, 2-7-1986]	C1.1, D323.2
BAGHOUSE, CARTRIDGE FILTER, MIKRO-PUL, MODEL CF-4, 4 CARTRIDGE A/N: 120497	C7	D1 D2 D4 D5 D6		PM: (9) [RULE 404, 2-7-1986]	C10.1, D12.1, D322.1, D381.1, E102.1, H23.2, K67.2
Process 2: FURNACE					
System 1: RAW MATERIAL MIXING AND STORAGE					
CONVEYOR, SCREW, SAND A/N: 528528	D8	C53		PM: (9) [RULE 405, 2-7-1986]	D323.2
CONVEYOR, SCREW, SODA ASH A/N: 528528	D9	C53		PM: (9) [RULE 405, 2-7-1986]	D323.2
HOPPER, ALUMINUM TRIHYDRATE OR RECYCLE GLASS FINES A/N: 528528	D57			PM: (9) [RULE 405, 2-7-1986]	D323.2

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: FURNACE					
CONVEYOR, SCREW, ALUMINUM TRIHYDRATE OR RECYCLE GLASS FINES A/N: 528528	D58			PM: (9) [RULE 405, 2-7-1986]	D323.2
CONVEYOR, SCREW, BATCH MIXER, TUNNEL A/N: 528528	D11	C53		PM: (9) [RULE 405, 2-7-1986]	D323.2
BUCKET ELEVATOR A/N: 528528	D12	C53		PM: (9) [RULE 405, 2-7-1986]	D323.2
CONVEYOR, SCREW, CROSS-OVER A/N: 528528	D13			PM: (9) [RULE 405, 2-7-1986]	D323.2
BIN, TWO COMPARTMENT, 40 TONS A/N: 528528	D14			PM: (9) [RULE 405, 2-7-1986]	D323.2
BAGHOUSE, POLYESTER FELT, MIKRO PULSAIRE, MODEL 36S-6-30, 268 SQ.FT.; 36 BAGS A/N: 399814	C53	D8 D9 D11 D12		PM: (9) [RULE 404, 2-7-1986]	C10.1, D12.1, D322.1, D381.1, E102.1, H23.2, K67.2
System 2: SODIUM SILICATE MELTING FURNACE					
CONVEYOR, SCREW, BATCH WETTER, WITH WATER SPRAY NOZZLES AND A BATCH FEEDER A/N: 528527	D16			PM: (9) [RULE 405, 2-7-1986]	C8.1, D323.2
CONVEYOR, SCREW, BATCH WETTER, WITH WATER SPRAY NOZZLES AND A BATCH FEEDER A/N: 528527	D17			PM: (9) [RULE 405, 2-7-1986]	C8.1, D323.2

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2: FURNACE					
FURNACE, MELTING, (TOTAL OF 12 BURNERS), NATURAL GAS, WITH TWO REGENRATORS AND 20 OVERFIRE AIR PORTS, 56.6 MMBTU/HR WITH A/N: 528527 BLOWER, PRIMARY COMBUSTION AIR, 20 HP BLOWER, SECOND STAGE COMBUSTION AIR, 2 BLOWERS IN PARALLEL, ONE IN OPERATION AND ONE BACK-UP, 15 HP EACH	D18		NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5A) [RULE 409, 8-7-1981]	A63.2, B59.1, C1.4, D323.1
CONVEYOR, BELT, CHAIN TYPE A/N: 528527	D19			PM: (9) [RULE 405, 2-7-1986]	D323.2
TANK, T-60, SODIUM SILICATE, 9032 CU.FT. A/N: 528527	D20	C21		PM: (9) [RULE 405, 2-7-1986]	D323.2
BAGHOUSE, CLOTH FILTER, MIKRO-PUL, MODEL 25S-8-30G, 25 BAGS A/N: 218656	C21	D20		PM: (9) [RULE 404, 2-7-1986]	C10.1, D12.1, D322.1, D381.2, E102.1, H23.2, K67.2
Process 3: SODIUM SILICATE PROCESSING					
System 1: SOLID SODIUM SILICATE LOADING					
FEEDER, VIBRATING A/N: 263640	D22			PM: (9) [RULE 405, 2-7-1986]	C1.2, D323.2
CONVEYOR, BELT A/N: 263640	D23	C32		PM: (9) [RULE 405, 2-7-1986]	D323.2
BUCKET ELEVATOR A/N: 263640	D24	C32		PM: (9) [RULE 405, 2-7-1986]	D323.2

- | | |
|---|---|
| <p>* (1) (1A) (1B) Denotes RECLAIM emission factor
 (3) Denotes RECLAIM concentration limit
 (5) (5A) (5B) Denotes command and control emission limit
 (7) Denotes NSR applicability limit
 (9) See App B for Emission Limits</p> | <p>(2) (2A) (2B) Denotes RECLAIM emission rate
 (4) Denotes BACT emission limit
 (6) Denotes air toxic control rule limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements</p> |
|---|---|

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3: SODIUM SILICATE PROCESSING					
STORAGE SILO, T-52, SODIUM SILICATE, WITH A VIBRATORY FEEDER, 40 TONS A/N: 263640	D25	C31		PM: (9) [RULE 405, 2-7-1986]	C1.2, D323.2
BIN, WEIGH, BELT FEEDER A/N: 263640	D26	C32		PM: (9) [RULE 405, 2-7-1986]	D323.2
CONVEYOR, BELT, INCLINED A/N: 263640	D27	C32		PM: (9) [RULE 405, 2-7-1986]	D323.2
PACKAGING MACHINE, WEIGH, SUPER SACK, WITH A SURGE BIN A/N: 263640	D28	C32		PM: (9) [RULE 405, 2-7-1986]	C1.2, D323.2
UNLOADING ARM, TANK TRUCK A/N: 263640	D29	C32		PM: (9) [RULE 405, 2-7-1986]	C1.2, D323.2
CONVEYOR, RETRACTABLE A/N: 263640	D30	C32		PM: (9) [RULE 405, 2-7-1986]	D323.2
CONVEYOR, BELT, PORTABLE, RAILCAR LOADING, VAN STONE, MODEL C, 570" L. X 24" W., (OPTIONAL) A/N: 375053	D54	C31 C55		PM: (9) [RULE 405, 2-7-1986]	C1.5, D323.2, E1.1
BAGHOUSE, CLOTH FILTER, MIKRO-PUL, MODEL 168S-10, 2000 SQ.FT.; 168 BAGS A/N: 478536	C31	D25 D54		PM: (9) [RULE 404, 2-7-1986]	C10.1, D12.1, D322.1, D381.1, E102.1, H23.2, K67.2
BAGHOUSE, CLOTH FILTER, MIKRO-PUL, MODEL 100S-10, 100 BAGS A/N: 238435	C32	D23 D24 D26 D27 D28 D29 D30		PM: (9) [RULE 404, 2-7-1986]	C10.1, D12.1, D322.1, D381.1, E102.1, H23.2, K67.2
System 3: SODIUM SILICATE DISSOLVING					

- | | |
|--|--|
| <ul style="list-style-type: none"> * (1) (1A) (1B) Denotes RECLAIM emission factor (3) Denotes RECLAIM concentration limit (5) (5A) (5B) Denotes command and control emission limit (7) Denotes NSR applicability limit (9) See App B for Emission Limits | <ul style="list-style-type: none"> (2) (2A) (2B) Denotes RECLAIM emission rate (4) Denotes BACT emission limit (6) Denotes air toxic control rule limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) (10) See section J for NESHAP/MACT requirements |
|--|--|

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3: SODIUM SILICATE PROCESSING					
TANK, SODIUM SILICATE, DISSOLVING, WITH A FEEDER, 481 CU.FT. A/N: 171510	D36			PM: (9) [RULE 405, 2-7-1986]	D323.2
TANK, SODIUM SILICATE, DISSOLVING, WITH A FEEDER, 481 CU.FT. A/N: 171510	D37			PM: (9) [RULE 405, 2-7-1986]	D323.2
TANK, SODIUM SILICATE, DISSOLVING, WITH A FEEDER, 481 CU.FT. A/N: 171510	D38			PM: (9) [RULE 405, 2-7-1986]	D323.2
TANK, SODIUM SILICATE, DISSOLVING, WITH A FEEDER, 481 CU.FT. A/N: 171510	D39			PM: (9) [RULE 405, 2-7-1986]	D323.2
TANK, WITH A CYCLONE, 7540 CU.FT. A/N: 171510	D40			PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]	D323.1, E71.1
TANK, WITH A CYCLONE, 7540 CU.FT. A/N: 171510	D41			PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]	D323.1, E71.1
System 5: SOLID SODIUM SILICATE LOADING (WAREHOUSE)					
CONVEYOR, BELT, PORTABLE, RAILCAR LOADING, VAN STONE, MODEL C, 570" L. X 24" W., (OPTIONAL) A/N: 375053	D54	C31 C55		PM: (9) [RULE 405, 2-7-1986]	C1.5, D323.2, E1.1
BAGHOUSE, CLOTH FILTER, MIKRO PULSAIRE, MODEL 36S-10-30, 424 SQ.FT.; 36 BAGS A/N: 375052	C55	D54		PM: (9) [RULE 404, 2-7-1986]	C10.1, D12.1, D322.1, D381.2, E102.1, H23.2, K67.2

- | | |
|---|---|
| <p>* (1) (1A) (1B) Denotes RECLAIM emission factor
 (3) Denotes RECLAIM concentration limit
 (5) (5A) (5B) Denotes command and control emission limit
 (7) Denotes NSR applicability limit
 (9) See App B for Emission Limits</p> | <p>(2) (2A) (2B) Denotes RECLAIM emission rate
 (4) Denotes BACT emission limit
 (6) Denotes air toxic control rule limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements</p> |
|---|---|

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 6: EXTERNAL COMBUSTION					
BOILER, NO. 3, NATURAL GAS, HURST, MODEL S4-G-H400-150, WITH LOW NOX BURNER, FLUE GAS RECIRCULATION, 16.6 MMBTU/HR WITH A/N: 353359 BURNER, NATURAL GAS, COEN, MODEL HTE-12, WITH LOW NOX BURNER	D51		NOX: LARGE SOURCE**	CO: 100 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; CO: 400 PPMV NATURAL GAS (5) [RULE 1146, 11-17-2000; RULE 1146, 9-5-2008]; NOX: 20 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; NOX: 20 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409, 8-7-1981]	D328.2
Process 7: Rule 219 Exempt Equipment/Processes with Source-Specific Requirements					
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E50			ROG: (9) [RULE 1113, 7-13-2007; RULE 1113, 6-3-2011]	K67.1
RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS	E56				H23.1
STORAGE TANK, PROPANE, 100 GALS	E59				H23.3

* (1) (1A) (1B) Denotes RECLAIM emission factor
 (2) (2A) (2B) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit
 (4) Denotes BACT emission limit
 (5) (5A) (5B) Denotes command and control emission limit
 (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits
 (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**

**FACILITY PERMIT TO OPERATE
 PQ CORPORATION**

SECTION D: DEVICE ID INDEX

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D1	1	1	0
D2	1	1	0
D3	1	1	0
D4	1	1	0
D5	1	1	0
D6	1	1	0
C7	1	1	0
D8	1	2	1
D9	1	2	1
D11	2	2	1
D12	2	2	1
D13	2	2	1
D14	2	2	1
D16	2	2	2
D17	2	2	2
D18	3	2	2
D19	3	2	2
D20	3	2	2
C21	3	2	2
D22	3	3	1
D23	3	3	1
D24	3	3	1
D25	4	3	1
D26	4	3	1
D27	4	3	1
D28	4	3	1
D29	4	3	1
D30	4	3	1
C31	4	3	1
C32	4	3	1
D36	5	3	3
D37	5	3	3
D38	5	3	3
D39	5	3	3
D40	5	3	3

**FACILITY PERMIT TO OPERATE
PQ CORPORATION**

SECTION D: DEVICE ID INDEX

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D41	5	3	3
E50	6	7	0
D51	6	6	0
C53	2	2	1
D54	4	3	1
D54	5	3	5
C55	5	3	5
E56	6	7	0
D57	1	2	1
D58	2	2	1
E59	6	7	0

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

DEVICE CONDITIONS

A. Emission Limits

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 7846 LBS IN ANY ONE DAY
SOX	Less than or equal to 176 LBS IN ANY ONE DAY
CO	Less than or equal to 8406 LBS IN ANY ONE DAY
PM	Less than or equal to 223 LBS IN ANY ONE DAY

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D18]

B. Material/Fuel Type Limits

B59.1 The operator shall not use the following material(s) in this device :

dense type soda ash with less than 58 percent by weight sodium oxide

[**RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D18]

C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the material processed to no more than 800 ton(s) in any one day.

For the purpose of this condition, material processed shall be defined as sand and soda ash.

[**RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1, D2, D5, D6]

C1.2 The operator shall limit the material processed to no more than 1056 ton(s) in any one day.

For the purpose of this condition, material processed shall be defined as solid sodium silicate.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[**RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D22, D25, D28, D29]

C1.4 The operator shall limit the material processed to no more than 263 ton(s) in any one day.

For the purpose of this condition, material processed shall be defined as the furnace pull rate.

[**RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D18]

C1.5 The operator shall limit the material processed to no more than 4000 ton(s) in any one calendar month.

For the purpose of this condition, material processed shall be defined as solid sodium silicate.

[**RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D54]

C8.1 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 1 gpm.

The operator shall monitor the spray nozzles for the rate of water being applied to dry materials.

To comply with this condition, the operator shall install and maintain a flow meter to accurately indicate the flow rate of water being supplied to the spray nozzles.

[**RULE 1303(a)(1)-BACT, 5-10-1996**; RULE 1303(a)(1)-BACT, 12-6-2002]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D16, D17]

C10.1 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, is maintained between 1 and 8 inches water column.

To comply with this condition, the operator shall monitor the differential pressure as specified in condition number 12-1.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C7, C21, C31, C32, C53, C55]

D. Monitoring/Testing Requirements

D12.1 The operator shall install and maintain a(n) differential pressure gauge to accurately indicate the pressure across the filters.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C7, C21, C31, C32, C53, C55]

D322.1 The operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C7, C21, C31, C32, C53, C55]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D18, D40, D41]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D323.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D1, D2, D3, D4, D5, D6, D8, D9, D11, D12, D13, D14, D16, D17, D19, D20, D22, D23, D24, D25, D26, D27, D28, D29, D30, D36, D37, D38, D39, D54, D57, D58]

- D328.2 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with BACT limit. The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D51]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D381.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a quarterly basis, at least, unless the equipment did not operate during the entire quarterly period. The routine quarterly inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions; and
- 3). Date and time visible emission was abated.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C7, C31, C32, C53]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D381.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions; and
- 3). Date and time visible emission was abated.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C21, C55]

E. Equipment Operation/Construction Requirements

E1.1 The operator shall vent the emissions from this equipment to only one of the devices identified in the "connected to" column of this facility permit at any given time.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D54]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

E71.1 The operator shall not run this equipment if more than two dissolvers are feeding into it.

[**RULE 1303(a)(1)-BACT, 5-10-1996**; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D40, D41]

E102.1 The operator shall discharge dust collected in this equipment only into closed containers.

[**RULE 1303(a)(1)-BACT, 5-10-1996**; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C7, C21, C31, C32, C53, C55]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Refrigerants	District Rule	1415
Refrigerants	40CFR82, SUBPART	F

[**RULE 1415, 12-3-2010**; **40CFR 82 Subpart F, 5-14-1993**]

[Devices subject to this condition : E56]

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1155

[RULE 1155, 12-4-2009]

[Devices subject to this condition : C7, C21, C31, C32, C53, C55]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1177

[RULE 1177, 6-1-2012]

[Devices subject to this condition : E59]

K. Record Keeping/Reporting

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : E50]

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Visual inspections of the filter bags for any tear or damage once a year

the name of the person performing the inspection and/or maintenance of the filter media

the date, time and results of the inspection

the date, time and description of any maintenance or repairs resulting from the inspection

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C7, C21, C31, C32, C53, C55]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION E: ADMINISTRATIVE CONDITIONS

The operating conditions in this section shall apply to all permitted equipment at this facility unless superseded by condition(s) listed elsewhere in this permit.

1. The permit shall remain effective unless this permit is suspended, revoked, modified, reissued, denied, or it is expired for nonpayment of permit processing or annual operating fees. [201, 203, 209, 301]
 - a. The permit must be renewed annually by paying annual operating fees, and the permit shall expire if annual operating fees are not paid pursuant to requirements of Rule 301(d). [301(d)]
 - b. The Permit to Construct listed in Section H shall expire one year from the Permit to Construct issuance date, unless a Permit to Construct extension has been granted by the Executive Officer or unless the equipment has been constructed and the operator has notified the Executive Officer prior to the operation of the equipment, in which case the Permit to Construct serves as a temporary Permit to Operate. [202, 205]
 - c. The Title V permit shall expire as specified under Section K of the Title V permit. The permit expiration date of the Title V facility permit does not supercede the requirements of Rule 205. [205, 3004]
2. The operator shall maintain all equipment in such a manner that ensures proper operation of the equipment. [204]
3. This permit does not authorize the emissions of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules and Regulations of the AQMD. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other governmental agencies. [204]
4. The operator shall not use equipment identified in this facility permit as being connected to air pollution control equipment unless they are so vented to the identified air pollution control equipment which is in full use and which has been included in this permit. [204]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION E: ADMINISTRATIVE CONDITIONS

5. The operator shall not use any equipment having air pollution control device(s) incorporated within the equipment unless the air pollution control device is in full operation.[204]
6. The operator shall maintain records to demonstrate compliance with rules or permit conditions that limit equipment operating parameters, or the type or quantity of material processed. These records shall be made available to AQMD personnel upon request and be maintained for at least: [204]
 - a. Three years for a facility not subject to Title V; or
 - b. Five years for a facility subject to Title V.
7. The operator shall maintain and operate all equipment to ensure compliance with all emission limits as specified in this facility permit. Compliance with emission limits shall be determined according to the following specifications, unless otherwise specified by AQMD rules or permit conditions: [204]
 - a. For internal combustion engines and gas turbines, measured concentrations shall be corrected to 15 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1110.2, 1134, 204]
 - b. For other combustion devices, measured concentrations shall be corrected to 3 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1146, 1146.1, 204]
 - c. For a large NO_x source, compliance with a RECLAIM concentration limit shall be measured over a continuous 60 minutes for that source; [2012]
 - d. For non-combustion sources, compliance with emission limits shall be determined and averaged over a period of 60 minutes. [204]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION E: ADMINISTRATIVE CONDITIONS

- e. For the purpose of determining compliance with Rule 407, carbon monoxide (CO) shall be measured on a dry basis and be averaged over 15 consecutive minutes, and sulfur compound which would exist as liquid or gas at standard conditions shall be calculated as sulfur dioxide (SO₂) and be averaged over 15 consecutive minutes; [407]
 - f. For the purpose of determining compliance with Rule 409, combustion contaminant emission measurements shall be corrected to 12 percent carbon dioxide (CO₂) at standard conditions and averaged over 15 consecutive minutes. [409]
 - g. For the purpose of determining compliance with Rule 475, combustion contaminant emission measurements shall be corrected to 3 percent of oxygen (O₂) at standard conditions and averaged over 15 consecutive minutes or any other averaging time specified by the Executive Officer. [475]
8. All equipment operating under the RECLAIM program shall comply concurrently with all provisions of AQMD Rules and Regulation, except those listed in Table 1 of Rule 2001 for NO_x RECLAIM sources and Table 2 of Rule 2001 for SO_x RECLAIM sources. Those provisions listed in Tables 1 or 2 shall not apply to NO_x or SO_x emissions after the date the facility has demonstrated compliance with all monitoring and reporting requirements of Rules 2011 or 2012, as applicable. Provisions of the listed AQMD rules in Tables 1 or 2 which have initial implementation dates in 1994 shall not apply to a RECLAIM NO_x or SO_x source, respectively. [2001]
9. The operator shall, when a source test is required by AQMD, provide a source test protocol to AQMD no later than 60 days before the proposed test date. The test shall not commence until the protocol is approved by AQMD. The test protocol shall contain the following information: [204, 304]
- a. Brief description of the equipment tested.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION E: ADMINISTRATIVE CONDITIONS

- b. Brief process description, including maximum and normal operating temperatures, pressures, through-put, etc.
 - c. Operating conditions under which the test will be performed.
 - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts/stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
 - e. Brief description of sampling and analytical methods used to measure each pollutant, temperature, flow rates, and moisture.
 - f. Description of calibration and quality assurance procedures.
 - g. Determination that the testing laboratory qualifies as an "independent testing laboratory" under Rule 304 (no conflict of interest).
10. The operator shall submit a report no later than 60 days after conducting a source test, unless otherwise required by AQMD Rules or equipment-specific conditions. The report shall contain the following information: [204]
- a. The results of the source test.
 - b. Brief description of the equipment tested.
 - c. Operating conditions under which the test will be performed.
 - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts/stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
 - e. Field and laboratory data forms, strip charts and analyses.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION E: ADMINISTRATIVE CONDITIONS

- f. Calculations for volumetric flow rates, emission rates, control efficiency, and overall control efficiency.
- 11. The operator shall, when a source test is required, provide and maintain facilities for sampling and testing. These facilities shall comply with the requirements of AQMD Source Test Method 1.1 and 1.2. [217]
- 12. Whenever required to submit a written report, notification or other submittal to the Executive Officer, AQMD, or the District, the operator shall mail or deliver the material to: Deputy Executive Officer, Engineering and Compliance, AQMD, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182. [204]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

The Facility shall comply with all applicable monitoring and source testing requirements in Regulation XX. These requirements may include but are not limited to the following:

I. NO_x Monitoring Conditions

A. The Operator of a NO_x Major Source, as defined in Rule 2012, shall, as applicable:

1. Install, maintain, and operate an AQMD certified direct or time-shared monitoring device or an approved alternative monitoring device for each major NO_x source to continuously measure the concentration of NO_x emissions and all other applicable variables specified in Rule 2012, Table 2012-1 and Rule 2012, Appendix A, Table 2-A to determine the NO_x emissions rate from each source. The time-sharing of CEMS among NO_x sources may be allowed by the Executive Officer in accordance with the requirements for time sharing specified in Appendix A. [2012]
2. Install, maintain, and operate a totalizing fuel meter approved by the Executive Officer for each major source. [2012]
3. If the facility is operating existing CEMS and fuel meters, continue to follow recording and reporting procedures required by AQMD Rules and Regulations in effect prior to October 15, 1993 until the CEMS is certified pursuant to Rule 2012. [2012]
4. Use valid data collected by an AQMD certified or provisionally certified CEMS in proper operation that meets all the requirements of Appendix A of Rule 2012, unless final certification of the CEMS is denied, to determine mass emissions for all purposes, including, but not limited to, determining: [2012]
 - a. compliance with the annual Allocation;
 - b. excess emissions;
 - c. the amount of penalties; and
 - d. fees.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

5. Follow missing data procedures as specified in Rule 2012 Appendix A whenever valid data is not available or collected to determine mass emissions for all purposes, including, but not limited to, determining: [2012]
 - a. compliance with the annual Allocation;
 - b. excess emissions;
 - c. the amount of penalties; and
 - d. fees.

B. The Operator of a NO_x large Source, as defined in Rule 2012, shall, as applicable:

1. Install, maintain, and operate a totalizing fuel meter and any device specified by the Executive Officer as necessary to determine monthly fuel usage or other applicable variables specified in Rule 2012, Appendix A, Table 3-A. The sharing of totalizing fuel meter may be allowed by the Executive Officer if the fuel meter serves large sources which have the same emission factor, concentration limit, or emission rate. The sharing of totalizing fuel meters shall not be allowed for large sources which are required to comply with an annual heat input limit. [2012]
2. Comply at all times with the specified NO_x concentration limit in PPM measured over any continuous 60 minutes for that source or establish an equipment-specific emission rate that is reliable, accurate, representative of that sources emissions, and in accordance with the requirements specified in Rule 2012, Appendix A, Chapter 5. [2012]

C. The Operator of a NO_x Process Unit, as defined in Rule 2012, shall, as applicable:

Not Applicable

II. NO_x Source Testing and Tune-up conditions

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

1. The operator shall conduct all required NO_x source testing in compliance with an AQMD-approved source test protocol. [2012]
2. The operator shall, as applicable, conduct source tests for every large NO_x source no later than June 30, 1997 and every 3 years thereafter. The source test shall include the determination of NO_x concentration and a relative accuracy audit of the exhaust stack flow determination (e.g. in-stack flow monitor or fuel flow monitor based F-factor calculation). Such source test results shall be submitted per the schedule described by APEP. In lieu of submitting the first source test report, the facility permit holder may submit the results of a source test not more than 3 years old which meets the requirements when conducted. [2012]
3. All NO_x large sources and NO_x process units shall be tuned-up in accordance with the schedule specified in Rule 2012, Appendix A, Chapter 5, Table 5-B. [2012]

III. SO_x monitoring conditions

D. The Operator of a SO_x Major Source, as defined in Rule 2011, shall, as applicable:

Not Applicable

E. The Operator of a SO_x Process Unit, as defined in Rule 2011, shall, as applicable:

Not Applicable

IV. SO_x Source Testing Conditions

Not Applicable

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR RECLAIM SOURCES

The Facility shall comply with all applicable reporting and recordkeeping requirements in Regulation XX. These requirements may include but are not limited to the following:

I. Recordkeeping Requirements for all RECLAIM Sources

1. The operator shall maintain all monitoring data required to be measured or reported pursuant to Rule 2011 and Rule 2012, whichever is applicable. All records shall be made available to AQMD staff upon request and be maintained for at least:
 - a. Three years after each APEP report is submitted to AQMD for a facility not subject to Title V, unless a different time period is required in Rule 2011 or Rule 2012 [2011 & 2012]; or
 - b. Five years after each APEP report is submitted to AQMD for a facility subject to Title V. [3004(a)(4)(E)]
 - c. Notwithstanding the above, all data gathered or computed for intervals of less than 15 minutes shall only be maintained a minimum of 48 hours. [2011 & 2012]
2. The operator shall store on site and make available to the Executive Officer upon request: records used to determine emissions, maintenance records, sources test reports, relative accuracy test audit reports, relative accuracy audit reports and fuel meter calibration records. [2011 & 2012]

II. Reporting Requirements for all RECLAIM Sources

1. The operator shall submit a quarterly certification of emissions including the facility's total NO_x or SO_x emissions, whichever is applicable, for the quarter within 30 days after the end of the first three quarters and 60 days after the end of the fourth quarter of a compliance year. [2011 & 2012]

NO_x Reporting Requirements

- A. The Operator of a NO_x Major Source, as defined in Rule 2012, shall, as applicable:

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR RECLAIM SOURCES

1. No later than 12 months after entry into the RECLAIM program or after the initial operation of a new major source, whichever is later, install, maintain, and operate a reporting device to electronically report everyday to the AQMD central station for each major NO_x source, the total daily mass emissions of NO_x and daily status codes. Such data shall be transmitted by 5:00 p.m. of the following day. If the facility experiences a power, computer, or other system failure that prevents the submittal of the daily report, the Facility Permit holder shall be granted 24 hours extension to submit the report. [2012]
 2. Calculate NO_x emissions pursuant to missing data procedures set forth in Appendix A, Chapter 2 of Rule 2012 if the Facility Permit holder fails to meet the deadline for submitting the daily report. [2012]
 3. Submit an electronic report within 15 days following the end of each month totaling NO_x emissions from all major NO_x sources during the month. [2012]
 4. For those facilities with existing CEMS and fuel meters as of October 15, 1993, continue to follow recording and reporting procedures required by AQMD Rules and Regulations in effect until the CEMS is certified pursuant to Rule 2011 and/or Rule 2012, as applicable. [2012]
- B. The Operator of a NO_x Large Source, as defined in Rule 2012, shall:
1. Install, maintain and operate a modem or any reporting device approved by the Executive Officer to report, to the AQMD, the total monthly NO_x mass emissions from each large NO_x source. The Operator shall comply with this requirement within 12 months of the date of entry to the RECLAIM Program. Such data shall be reported within 15 days after the end of each calendar month. [2012]
- C. The Operator of a NO_x Process Unit, as defined in Rule 2012, shall:

**FACILITY PERMIT TO OPERATE
PQ CORPORATION**

**SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR
RECLAIM SOURCES**

Not Applicable

SOx Reporting Requirements

D. The Operator of a SOx Major Source, as defined in Rule 2011, shall, as applicable:

Not Applicable

E. The Operator of a SOx Process Unit, as defined in Rule 2011, shall:

Not Applicable

**FACILITY PERMIT TO OPERATE
PQ CORPORATION**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

NONE

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules.

NONE

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.

**FACILITY PERMIT TO OPERATE
PQ CORPORATION**

SECTION J: AIR TOXICS

NOT APPLICABLE

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

GENERAL PROVISIONS

1. This permit may be revised, revoked, reopened and reissued, or terminated for cause, or for failure to comply with regulatory requirements, permit terms, or conditions. [3004(a)(7)(C)]
2. This permit does not convey any property rights of any sort or any exclusive privilege. [3004(a)(7)(E)]

Permit Renewal and Expiration

3. (A) Except for solid waste incineration facilities subject to standards under section 129(e) of the Clean Air Act, this permit shall expire five years from the date that this Title V permit is issued. The operator's right to operate under this permit terminates at midnight on this date, unless the facility is protected by an application shield in accordance with Rule 3002(b), due to the filing of a timely and complete application for a Title V permit renewal, consistent with Rule 3003. [3004(a)(2), 3004(f)]

(B) A Title V permit for a solid waste incineration facility combusting municipal waste subject to standards under Section 129(e) of the Clean Air Act shall expire 12 years from the date of issuance unless such permit has been renewed pursuant to this regulation. These permits shall be reviewed by the Executive Officer at least every five years from the date of issuance. [3004(f)(2)]
4. To renew this permit, the operator shall submit to the Executive Officer an application for renewal at least 180 days, but not more than 545 days, prior to the expiration date of this permit. [3003(a)(6)]

Duty to Provide Information

5. The applicant for, or holder of, a Title V permit shall furnish, pursuant to Rule 3002(d) and (e), timely information and records to the Executive Officer or designee within a reasonable time as specified in writing by the Executive Officer or designee. [3004(a)(7)(F)]

Payment of Fees

6. The operator shall pay all required fees specified in Regulation III - Fees. [3004(a)(7)(G)]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

Reopening for Cause

7. The Executive Officer will reopen and revise this permit if any of the following circumstances occur:
- (A) Additional regulatory requirements become applicable with a remaining permit term of three or more years. Reopening is not required if the effective date of the requirement is later than the expiration date of this permit, unless the permit or any of its terms and conditions has been extended pursuant to paragraph (f)(4) of Rule 3004.
 - (B) The Executive Officer or EPA Administrator determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
 - (C) The Executive Officer or EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [3005(g)(1)]

COMPLIANCE PROVISIONS

8. The operator shall comply with all regulatory requirements, and all permit terms and conditions, except:
- (A) As provided for by the emergency provisions of condition no. 17 or condition no. 18, or
 - (B) As provided by an alternative operating condition granted pursuant to a federally approved (SIP-approved) Rule 518.2.

Any non-compliance with any federally enforceable permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. Non-compliance may also be grounds for civil or criminal penalties under the California State Health and Safety Code. [3004(a)(7)(A)]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

9. The operator shall allow the Executive Officer or authorized representative, upon presentation of appropriate credentials to:
 - (A) Enter the operator's premises where emission-related activities are conducted, or records are kept under the conditions of this permit;
 - (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (C) Inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (D) Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the facility permit or regulatory requirements. [3004(a)(10)(B)]

10. All terms and conditions in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA Administrator and citizens under the federal Clean Air Act, unless the term or condition is designated as not federally enforceable. Each day during any portion of which a violation occurs is a separate offense. [3004(g)]

11. A challenge to any permit condition or requirement raised by EPA, the operator, or any other person, shall not invalidate or otherwise affect the remaining portions of this permit. [3007(b)]

12. The filing of any application for a permit revision, revocation, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition. [3004(a)(7)(D)]

13. It shall not be a defense for a person in an enforcement action, including those listed in Rule 3002(c)(2), that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit, except as provided for in "Emergency Provisions" of this section. [3004(a)(7)(H)]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

14. The operator shall not build, erect, install, or use any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the California Health and Safety Code or of AQMD rules. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the California Health and Safety Code, or Rule 402 of AQMD Rules. [408]

15. Nothing in this permit or in any permit shield can alter or affect:
 - (A) Under Section 303 of the federal Clean Air Act, the provisions for emergency orders;
 - (B) The liability of the operator for any violation of applicable requirements prior to or at the time of permit issuance;
 - (C) The applicable requirements of the Acid Rain Program, Regulation XXXI;
 - (D) The ability of EPA to obtain information from the operator pursuant to Section 114 of the federal Clean Air Act;
 - (E) The applicability of state or local requirements that are not "applicable requirements", as defined in Rule 3000, at the time of permit issuance but which do apply to the facility, such as toxics requirements unique to the State; and
 - (F) The applicability of regulatory requirements with compliance dates after the permit issuance date. [3004(c)(3)]

16. For any portable equipment that requires an AQMD or state permit or registration, excluding a) portable engines, b) military tactical support equipment and c) AQMD-permitted portable equipment that are not a major source, are not located at the facility for more than 12 consecutive months after commencing operation, and whose operation does not conflict with the terms or conditions of this Title V permit: 1) the facility operator shall keep a copy of the AQMD or state permit or registration; 2) the equipment operator shall comply with the conditions on the permit or registration and all other regulatory requirements; and 3) the facility operator shall treat the permit or registration as a part of its Title V permit, subject to recordkeeping, reporting and certification requirements. [3004(a)(1)]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration EMERGENCY PROVISIONS

17. An emergency¹ constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limit only if:
- (A) Properly signed, contemporaneous operating records or other credible evidence demonstrate that:
 - (1) An emergency occurred and the operator can identify the cause(s) of the emergency;
 - (2) The facility was operated properly (i.e. operated and maintained in accordance with the manufacturer's specifications, and in compliance with all regulatory requirements or a compliance plan), before the emergency occurred;
 - (3) The operator took all reasonable steps to minimize levels of emissions that exceeded emissions standard, or other requirements in the permit; and,
 - (4) The operator submitted a written notice of the emergency to the AQMD within two working days of the time when the emissions limitations were exceeded due to the emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - (B) The operator complies with the breakdown provisions of Rule 430 – Breakdown Provisions, or subdivision (i) of Rule 2004 – Requirements, whichever is applicable. [3002(g), 430, 2004(i)]
18. The operator is excused from complying with any regulatory requirement that is suspended by the Executive Officer during a state of emergency or state of war emergency, in accordance with Rule 118 - Emergencies. [118]

¹ "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the operator, including acts of God, which: (A) requires immediate corrective action to restore normal operation; and (B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and (C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration RECORDKEEPING PROVISIONS

19. In addition to any other recordkeeping requirements specified elsewhere in this permit, the operator shall keep records of required monitoring information, where applicable, that include:
- (A) The date, place as defined in the Title V permit, and time of sampling or measurements;
 - (B) The date(s) analyses were performed;
 - (C) The company or entity that performed the analyses;
 - (D) The analytical techniques or methods used;
 - (E) The results of such analyses; and
 - (F) The operating conditions as existing at the time of sampling or measurement. [3004(a)(4)(B)]
20. The operator shall maintain records pursuant to Rule 109 and any applicable material safety data sheet (MSDS) for any equipment claimed to be exempt from a written permit by Rule 219 based on the information in those records. [219(t)]
21. The operator shall keep all records of monitoring data required by this permit or by regulatory requirements for a period of at least five years from the date of the monitoring sample, measurement, report, or application. [3004(a)(4)(E)]

REPORTING PROVISIONS

22. The operator shall comply with the following requirements for prompt reporting of deviations:
- (A) Breakdowns shall be reported as required by Rule 430 – Breakdown Provisions or subdivision (i) of Rule 2004 - Requirements, whichever is applicable.

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

- (B) Other deviations from permit or applicable rule emission limitations, equipment operating conditions, or work practice standards, determined by observation or by any monitoring or testing required by the permit or applicable rules that result in emissions greater than those allowed by the permit or applicable rules shall be reported within 72 hours (unless a shorter reporting period is specified in an applicable State or Federal Regulation) of discovery of the deviation by contacting AQMD enforcement personnel assigned to this facility or otherwise calling (800) CUT-SMOG.
 - (C) A written report of such deviations reported pursuant to (B), and any corrective actions or preventative measures taken, shall be submitted to AQMD, in an AQMD approved format, within 14 days of discovery of the deviation.
 - (D) All other deviations shall be reported with the monitoring report required by condition no. 23. [3004(a)(5)]
23. Unless more frequent reporting of monitoring results are specified in other permit conditions or in regulatory requirements, the operator shall submit reports of any required monitoring to the AQMD at least twice per year. The report shall include a) a statement whether all monitoring required by the permit was conducted; and b) identification of all instances of deviations from permit or regulatory requirements. A report for the first six calendar months of the year is due by August 31 and a report for the last six calendar months of the year is due by February 28. [3004(a)(4)(F)]
24. The operator shall submit to the Executive Officer and to the Environmental Protection Agency (EPA), an annual compliance certification. For RECLAIM facilities, the certification is due when the Annual Permit Emissions Program (APEP) report is due and shall cover the same reporting period. For other facilities, the certification is due on March 1 for the previous calendar year. The certification need not include the period preceding the date the initial Title V permit was issued. Each compliance certification shall include:
- (A) Identification of each permit term or condition that is the basis of the certification;

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

- (B) The compliance status during the reporting period;
- (C) Whether compliance was continuous or intermittent;
- (D) The method(s) used to determine compliance over the reporting period and currently, and
- (E) Any other facts specifically required by the Executive Officer to determine compliance.

The EPA copy of the certification shall be sent to: Director of the Air Division Attn:
Air-3 USEPA, Region IX 75 Hawthorne St. San Francisco, CA 94105 [3004(a)(10)(E)]

25. All records, reports, and documents required to be submitted by a Title V operator to AQMD or EPA shall contain a certification of accuracy consistent with Rule 3003(c)(7) by a responsible official (as defined in Rule 3000). [3004(a)(12)]

PERIODIC MONITORING

26. All periodic monitoring required by this permit pursuant to Rule 3004(a)(4)(c) is based on the requirements and justifications in the AQMD document "Periodic Monitoring Guidelines for Title V Facilities" or in case-by-case determinations documented in the TitleV application file. [3004(a)(4)]

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

FACILITY RULES

This facility is subject to the following rules and regulations

With the exception of Rule 402, 473, 477, 1118 and Rules 1401 through 1420, the following rules that are designated as non-federally enforceable are pending EPA approval as part of the state implementation plan. Upon the effective date of that approval, the approved rule(s) will become federally enforceable, and any earlier versions of those rules will no longer be federally enforceable.

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 1113	6-3-2011	Non federally enforceable
RULE 1113	7-13-2007	Federally enforceable
RULE 1146	11-17-2000	Federally enforceable
RULE 1146	9-5-2008	Non federally enforceable
RULE 1155	12-4-2009	Non federally enforceable
RULE 1177	6-1-2012	Non federally enforceable
RULE 118	12-7-1995	Non federally enforceable
RULE 1303(a)(1)-BACT	12-6-2002	Non federally enforceable
RULE 1303(a)(1)-BACT	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	12-6-2002	Non federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable
RULE 1415	12-3-2010	Non federally enforceable
RULE 2012	5-6-2005	Federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable
RULE 219	6-1-2007	Non federally enforceable
RULE 219	9-4-1981	Federally enforceable
RULE 3002	11-14-1997	Federally enforceable
RULE 3002	11-5-2010	Non federally enforceable
RULE 3003	11-14-1997	Federally enforceable
RULE 3003	11-5-2010	Non federally enforceable

FACILITY PERMIT TO OPERATE PQ CORPORATION

SECTION K: TITLE V Administration

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 3004(a)(4)-Periodic Monitoring	12-12-1997	Federally enforceable
RULE 3005	11-14-1997	Federally enforceable
RULE 3005	11-5-2010	Non federally enforceable
RULE 3007	10-8-1993	Federally enforceable
RULE 304	6-1-2012	Non federally enforceable
RULE 401	11-9-2001	Non federally enforceable
RULE 401	3-2-1984	Federally enforceable
RULE 402	5-7-1976	Non federally enforceable
RULE 403	4-2-2004	Federally enforceable
RULE 403	6-3-2005	Non federally enforceable
RULE 404	2-7-1986	Federally enforceable
RULE 405	2-7-1986	Federally enforceable
RULE 407	4-2-1982	Federally enforceable
RULE 408	5-7-1976	Federally enforceable
RULE 409	8-7-1981	Federally enforceable
RULE 430	7-12-1996	Non federally enforceable
RULE 701	6-13-1997	Federally enforceable
40CFR 82 Subpart F	5-14-1993	Federally enforceable

FACILITY PERMIT TO OPERATE PQ CORPORATION

APPENDIX A: NOX AND SOX EMITTING EQUIPMENT EXEMPT FROM WRITTEN PERMIT PURSUANT TO RULE 219

1. ICE, 17 BHP, GASOLINE FUELED, DRIVING A WELDING EQUIPMENT.

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

- (1) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6) of Rule 1113, no person shall supply, sell, offer for sale, market, manufacture, blend, repackage, apply, store at a worksite, or solicit the application of any architectural coating within the District:
 - (A) That is listed in the Table of Standards 1 and contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified; or
 - (B) That is not listed in the Table of Standards 1, and contains VOC (excluding any colorant added to tint bases) in excess of 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, until January 1, 2014, at which time the limit drops to 50 grams of VOC per liter of coating, less water, less exempt compounds (0.42 pounds per gallon).
- (2) No person within the District shall add colorant at the point of sale that is listed in the Table of Standards 2 and contains VOC in excess of the corresponding VOC limit specified in the Table of Standards 2, after the effective date specified.

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

TABLE OF STANDARDS 1 VOC LIMITS

**Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds**

COATING CATEGORY	Ceiling Limit ¹	Current Limit ²	Effective Date		
			7/1/08	1/1/12	1/1/14
Bond Breakers		350			
Clear Wood Finishes		275			
Varnish	350	275			
Sanding Sealers	350	275			
Lacquer		275			
Concrete-Curing Compounds		100			
Concrete-Curing Compounds For Roadways and Bridges ³		350			
Concrete Surface Retarder		250			50
Driveway Sealer		100		50	
Dry-Fog Coatings		150			50
Faux Finishing Coatings					
Clear Topcoat		350		200	
Decorative Coatings		350			100
Glazes		350			
Japan		350			
Trowel Applied Coatings		350		150	50
Fire-Proofing Coatings		350			150
Flats	250	50	50		
Floor Coatings	100	50			
Form Release Compound		250			100
Graphic Arts (Sign) Coatings		500			150
Industrial Maintenance (IM) Coatings	420	100			
High Temperature IM Coatings		420			
Non-Sacrificial Anti-Graffiti Coatings		100			
Zinc-Rich IM Primers	340	100			
Magnesite Cement Coatings		450			
Mastic Coatings		300			100
Metallic Pigmented Coatings	500	500			150
Multi-Color Coatings		250			
Nonflat Coatings	150	50			
Pre-Treatment Wash Primers		420			
Primers, Sealers, and Undercoaters	200	100			
Reactive Penetrating Sealers		350			
Recycled Coatings		250			
Roof Coatings	250	50			
Roof Coatings, Aluminum		100			

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

Roof Primers, Bituminous	350	350		
Rust Preventative Coatings	400	100		
Stone Consolidant		450		
Sacrificial Anti-Graffiti Coatings		100		50
Shellac				
Clear		730		
Pigmented		550		
Specialty Primers	350	100		
Stains		100		

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

COATING CATEGORY	Ceiling Limit ¹	Current Limit ²	Effective Date		
			7/1/08	1/1/12	1/1/14
Stains, Interior	250	250			
Swimming Pool Coatings					
Repair		340			
Other		340			
Traffic Coatings		100			
Waterproofing Sealers	250	100			
Waterproofing Concrete/Masonry Sealers	400	100			
Wood Preservatives		350			

1. The specified ceiling limits are applicable to products sold under the Averaging Compliance Option.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards.
3. Does not include compounds used for curbs and gutters, sidewalks, islands, driveways and other miscellaneous concrete areas.

TABLE OF STANDARDS 1 (cont.) VOC LIMITS

Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

TABLE OF STANDARDS 2 VOC LIMITS FOR COLORANTS

Grams of VOC Per Liter of Colorant Less Water and Less Exempt Compounds

COLORANT	Limit ⁴
Architectural Coatings, excluding IM Coatings	50
Solvent-Based IM	600
Waterborne IM	50

4. Effective January 1, 2014.

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 07-13-2007]

- (1) Except as provided in paragraphs (c)(2), (c)(3), (c)(4), and specified coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage any architectural coating for use in the District which, at the time of sale or manufacture, contains more than 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, and less any colorant added to tint bases, and no person shall apply or solicit the application of any architectural coating within the District that exceeds 250 grams of VOC per liter of coating as calculated in this paragraph.
- (2) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage, for use within the District, any architectural coating listed in the Table of Standards which contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified, and no person shall apply or solicit the application of any architectural coating within the District that exceeds the VOC limit as specified in this paragraph. No person shall apply or solicit the application within the District of any industrial maintenance coatings, except anti-graffiti coatings, for residential use or for use in areas such as office space and meeting rooms of industrial, commercial or institutional facilities not exposed to such extreme environmental conditions described in the definition of industrial maintenance coatings; or of any rust-preventative coating for industrial use, unless such a rust preventative coating complies with the Industrial Maintenance Coating VOC limit specified in the Table of Standards.

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 07-13-2007] TABLE OF STANDARDS VOC LIMITS

Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	Ceiling Limit*	Current Limit	Effective Date					
			1/1/03	1/1/04	1/1/05	7/1/06	7/1/07	7/1/08
Bond Breakers	350							
Clear Wood Finishes	350					275		
Varnish	350					275		
Sanding Sealers	350					275		
Lacquer	680	550			275			
Clear Brushing Lacquer	680				275			
Concrete-Curing Compounds	350						100	
Concrete-Curing Compounds For Roadways and Bridges**	350							
Dry-Fog Coatings	400						150	
Fire-Proofing Exterior Coatings	450	350						
Fire-Retardant Coatings***								
Clear	650							
Pigmented	350							
Flats	250	100						50
Floor Coatings	420		100			50		
Graphic Arts (Sign) Coatings	500							
Industrial Maintenance (IM) Coatings	420			250		100		
High Temperature IM Coatings			420					
Zinc-Rich IM Primers	420		340			100		
Japans/Faux Finishing Coatings	700	350						
Magnesite Cement Coatings	600	450						
Mastic Coatings	300							
Metallic Pigmented Coatings	500							
Multi-Color Coatings	420	250						
Nonflat Coatings	250		150			50		

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 07-13-2007]

COATING CATEGORY	Ceiling Limit*	Current Limit	Effective Date					
			1/1/03	1/1/04	1/1/05	7/1/06	7/1/07	7/1/08
Nonflat High Gloss	250		150				50	
Pigmented Lacquer	680	550			275			
Pre-Treatment Wash Primers	780		420					
Primers, Sealers, and Undercoaters	350		200			100		
Quick-Dry Enamels	400		250			150	50	
Quick-Dry Primers, Sealers, and Undercoaters	350		200			100		
Recycled Coatings			250					
Roof Coatings	300		250		50			
Roof Coatings, Aluminum	500				100			
Roof Primers, Bituminous	350		350					
Rust Preventative Coatings	420		400			100		
Shellac								
Clear	730							
Pigmented	550							
Specialty Primers	350					250	100	
Stains	350		250				100	
Stains, Interior	250							
Swimming Pool Coatings								
Repair	650		340					
Other	340							
Traffic Coatings	250	150					100	
Waterproofing Sealers	400		250			100		
Waterproofing	400					100		
Concrete/Masonry Sealers								
Wood Preservatives								
Below-Ground	350							
Other	350							

* The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards.

** Does not include compounds used for curbs and gutters, sidewalks, islands, driveways and other miscellaneous concrete areas.

*** The Fire-Retardant Coating category will be eliminated on January 1, 2007 and subsumed by the coating category for which they are formulated.

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 07-13-2007]

TABLE OF STANDARDS (cont.) VOC LIMITS

Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 404 02-07-1986]

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 404(a)

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
		Milligrams per Cubic Meter	Grains per Cubic Foot			Milligrams per Cubic Meter	Grains per Cubic Foot
Cubic meters Per Minute	Cubic feet Per Minute			Cubic meters Per Minute	Cubic feet Per Minute		
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
		Milligrams per Cubic Meter	Grains per Cubic Foot			Milligrams per Cubic Meter	Grains per Cubic Foot
Cubic meters Per Minute	Cubic feet Per Minute			Cubic meters Per Minute	Cubic feet Per Minute		
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter” Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
		Milligrams per Cubic Meter	Grains per Cubic Foot			Milligrams per Cubic Meter	Grains per Cubic Foot
Cubic meters Per Minute	Cubic feet Per Minute			Cubic meters Per Minute	Cubic feet Per Minute		
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 405 02-07-1986]

The operator shall not discharge into the atmosphere from this equipment, solid particulate matter including lead and lead compounds in excess of the rate shown in Table 405(a).

Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 405(a)

Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All Points of Process		Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All points of Process	
		Kilograms Per Hour	Pounds Per Hour			Kilograms Per Hour	Pounds Per Hour
100 or less	220 or less	0.450	0.99	9000	19840	5.308	11.7
150	331	0.585	1.29	10000	22050	5.440	12.0
200	441	0.703	1.55	12500	27560	5.732	12.6
250	551	0.804	1.77	15000	33070	5.982	13.2
300	661	0.897	1.98	17500	38580	6.202	13.7
350	772	0.983	2.17	20000	44090	6.399	14.1
400	882	1.063	2.34	25000	55120	6.743	14.9
450	992	1.138	2.51	30000	66140	7.037	15.5
500	1102	1.209	2.67	35000	77160	7.296	16.1
600	1323	1.340	2.95	40000	88180	7.527	16.6

FACILITY PERMIT TO OPERATE PO CORPORATION

APPENDIX B: RULE EMISSION LIMITS [RULE 405 02-07-1986]

Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All Points of Process		Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All points of Process	
		Kilograms Per Hour	Pounds Per Hour			Kilograms Per Hour	Pounds Per Hour
700	1543	1.461	3.22	45000	99210	7.738	17.1
800	1764	1.573	3.47	50000	110200	7.931	17.5
900	1984	1.678	3.70	60000	132300	8.277	18.2
1000	2205	1.777	3.92	70000	154300	8.582	18.9
1250	2756	2.003	4.42	80000	176400	8.854	19.5
1500	3307	2.206	4.86	90000	198400	9.102	20.1
1750	3858	2.392	5.27	100000	220500	9.329	20.6
2000	4409	2.563	5.65	125000	275600	9.830	21.7
2250	4960	2.723	6.00	150000	330700	10.26	22.6
2500	5512	2.874	6.34	175000	385800	10.64	23.5
2750	6063	3.016	6.65	200000	440900	10.97	24.2
3000	6614	3.151	6.95	225000	496000	11.28	24.9
3250	7165	3.280	7.23	250000	551200	11.56	25.5
3600	7716	3.404	7.50	275000	606300	11.82	26.1
4000	8818	3.637	8.02	300000	661400	12.07	26.6
4500	9921	3.855	8.50	325000	716500	12.30	27.1
5000	11020	4.059	8.95	350000	771600	12.51	27.6
6000	13230	4.434	9.78	400000	881800	12.91	28.5
7000	15430	4.775	10.5	450000	992100	13.27	29.3
8000	17640	5.089	11.2	500000 or more	1102000 or more	13.60	30.0