



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

November 23, 2011

Mr. Gerardo Rios  
Chief – Permit Office  
US EPA, Region IX Air 3  
75 Hawthorne Street  
San Francisco, CA 94105

Dear Mr. Rios:

Subject: Transmittal of Proposed Title V Renewal Permit  
Abbott Cardiovascular Systems, Inc., ID 45488

Enclosed are the proposed Title V renewal permit, permit summary, statement of basis, and public notice for Abbott Cardiovascular Systems, Inc., located at 26531 Ynez Road, Temecula, California 92591. Also included is the addition of equipment previously under ID 156808, which was determined to be a contiguous property, and a change of condition for the laser cutters. With your receipt of the proposed Title V renewal permit, we will note that EPA's 45-day review period shall begin on November 23, 2011.

If you have any questions concerning the proposed Title V renewal permit, please contact Ms. Dixie Richards, Sr. Quality Engineer, at (909) 396-2395 or you may contact her by email at [drichards@aqmd.gov](mailto:drichards@aqmd.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Brian L. Yeh", is written over a horizontal line.

Brian L. Yeh  
Senior Manager  
Mechanical, Chemical, and Public Services

BLY:DR

Enclosures: Proposed Title V Renewal Permit  
Permit Summary  
Statement of Basis  
Public Notice  
Permit Modification Evaluation

## FACILITY PERMIT TO OPERATE

**ABBOTT CARDIOVASCULAR SYSTEMS, INC.  
26531 YNEZ RD  
TEMECULA, CA 92591**

### 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 ABBOTT CARDIOVASCULAR SYSTEMS, INC.

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**SECTION A: FACILITY INFORMATION**

**LEGAL OWNER &/OR OPERATOR:** ABBOTT CARDIOVASCULAR SYSTEMS, INC.

**LEGAL OPERATOR (if different than owner):**

**EQUIPMENT LOCATION:** 26531 YNEZ RD  
TEMECULA, CA 92591-4628

**MAILING ADDRESS:** 26531 YNEZ RD  
TEMECULA, CA 92390

**RESPONSIBLE OFFICIAL:** KEN CARLISLE

**TITLE:** VICE PRESIDENT, CUSTOMER & SITE SERVICES

**TELEPHONE NUMBER:** (951) 914-2400

**CONTACT PERSON:** EDWARD S LEE

**TITLE:** ADVISOR, ENVIRONMENTAL AFFAIRS

**TELEPHONE NUMBER:** (951) 914-2250

**TITLE V PERMIT ISSUED:** December 21, 2006

**TITLE V PERMIT EXPIRATION DATE:** December 20, 2011

<b>TITLE V</b>	<b>RECLAIM</b>
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<b>YES</b>	<b>NOx:</b>	<b>NO</b>
	<b>SOx:</b>	<b>NO</b>
	<b>CYCLE:</b>	<b>0</b>
	<b>ZONE:</b>	<b>INLAND</b>

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION**

**NOT APPLICABLE**

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**SECTION C: FACILITY PLOT PLAN**

**(TO BE DEVELOPED)**

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**Facility Equipment and Requirements  
(Section D)**

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct and Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMITTED EQUIPMENT LIST**

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AND PERMITS TO OPERATE AT THIS FACILITY:

<b>Application number</b>	<b>Permit to Operate number</b>	<b>Equipment description</b>
317616	F4131	I C E (>500 HP) EM ELEC GEN DIESEL
358501	F22021	I C E (>500 HP) EM ELEC GEN-DIESEL
518886	G13003	SCRUBBER
518885	G13004	SCRUBBER
419503	F71623	AIR POLLUTION CONTROL SYSTEM
515810	G13996	LASER CUTTING MACHINE
443789	F83293	I C E (>500 HP) EM ELEC GEN-DIESEL
447835	F83295	ETHYLENE OXIDE STERILIZER, HOSPITAL
447836	F83294	ETHYLENE OXIDE STERILIZER, HOSPITAL
447837	F83299	AIR POLLUTION CONTROL SYSTEM
518884	G13002	AIR POLLUTION CONTROL SYSTEM
497147	G5761	AIR POLLUTION CONTROL SYSTEM
487407		BOILER (5-20 MMBTU/HR) NAT GAS ONLY
487409		BOILER (5-20 MMBTU/HR) NAT GAS ONLY
487410		BOILER (5-20 MMBTU/HR) NAT GAS ONLY
487445	F99218	BOILER (<5 MMBTU/HR) NAT GAS ONLY
487556	F99219	BOILER (<5 MMBTU/HR) NAT GAS ONLY
487447	F99220	BOILER (<5 MMBTU/HR) NAT GAS ONLY
487448	F992214	BOILER (<5 MMBTU/HR) NAT GAS ONLY
524958	G15506	EXTRUDER
526846	G15507	EXTRUDER

**NOTE: EQUIPMENT LISTED ABOVE THAT HAS NO CORRESPONDING PERMIT TO OPERATE NUMBER IS ISSUED PERMIT TO CONSTRUCT. THE ISSUANCE OR DENIAL OF ITS PERMIT TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.**

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**FACILITY WIDE CONDITION(S)**

**Condition(s):**

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 RINGLEMANN 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]
2. THE OPERATOR SHALL NOT USE FUEL OIL CONTAINING SULFUR COMPOUNDS IN EXCESS OF 15 PPM BY WEIGHT.  
[RULE 431.2]
3. THE OPERATOR SHALL NOT USE GASEOUS FUEL CONTAINING SULFUR COMPOUNDS IN EXCESS OF 40 PPMV CALCULATED AS HYDROGEN SULFIDE AVERAGED OVER FOUR HOURS.  
[RULE 431.1].
4. THE OPERATOR SHALL LIMIT THE PLANTWIDE NITROGEN OXIDES (NO<sub>x</sub>) EMISSIONS FROM PERMITTED EQUIPMENT TO LESS THAN FOUR (4) TONS IN ANY ONE YEAR.  
[RULE 1303(b)(2)-OFFSET]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. F4131  
A/N 317616**

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, MODEL 3512 TA, TWELVE CYLINDER, DIESEL FUELED, 1568 B.H.P., TURBOCHARGED/AFTERCOOLED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 199 HOURS IN ANY ONE YEAR.  
[RULE 1110.2, 1304(a)(4)-OFFSET AND MODELING EXEMPTION]
4. A NON-RESETTABLE TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINES ELAPSED OPERATING TIME.  
[RULE 1110.2, 1304(a)(4)-OFFSET AND MODELING EXEMPTION]
5. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED OPERATING TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.  
[RULE 1110.2, 1304(a)(4)-OFFSET AND MODELING EXEMPTION]
6. THIS ENGINE SHALL HAVE THE FUEL INJECTION TIMING RETARDED BY FOUR DEGREES WITH RESPECT TO STANDARD TIMING.  
[RULE 1303(a)(1)-BACT]

**Emissions And Requirements:**

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS  
[Rule 404]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. F22021**

**A/N 358501**

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, 16 CYLINDERS, TURBOCHARGED, AFTERCOOLED, MODEL NO. 3516 DITA (1750 KW), 2518 BHP, DIESEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.  
[RULE 1303(a)(1)-BACT]
4. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 72 HOURS IN ANY ONE YEAR.  
[RULE 1303(a)(1)-BACT]
5. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 1303(a)(1)-BACT]
6. THE FUEL INJECTION TIMING OF THIS ENGINE SHALL BE SET AND MAINTAINED AT 4 DEGREES RETARDED RELATIVE TO PRODUCTION TIMING AS ESTABLISHED BY CATERPILLAR IN PRODUCT NEWS BULLETIN 'REQUIREMENTS TO COMPLY WITH SCAQMD CERTIFIED EQUIPMENT'.  
[RULE 1303(a)(1)-BACT]

**Emissions And Requirements:**

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
PM: RULE 404. SEE APPENDIX B FOR EMISSION LIMITS  
[RULE 404]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. G13003  
A/N 518886**

**Equipment Description**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. SCRUBBER, HARRINGTON, MODEL ECH 4, 4' -0" W. x 12' -0" L x 7' -3" H, WITH LANPAC POLYPROPYLENE PACKING MEDIA, SPRAY NOZZLES, AND MIST ELIMINATOR.
2. EXHAUST SYSTEM WITH TWO 5.36-HP BLOWERS, VENTING UP TO EIGHT BENCH TYPE ACID POLISHING BAYS.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE I, WITH AN EFFECTIVE DATE OF SEPTEMBER 10, 2010 OR EARLIER, EXCEPT FOR SODIUM HYDROXIDE, PHOSPHORIC ACID, HYDROCHLORIC ACID, SULFURIC ACID, NITRIC ACID, AND ETHYLENE GLYCOLS.  
[Rule 1401]
4. A DIFFERENTIAL PRESSURE GAUGE, INDICATING INCHES OF WATER COLUMN, SHALL BE INSTALLED AND MAINTAINED ACROSS THE SCRUBBER. THE DIFFERENTIAL PRESSURE ACROSS THE PACKING SHALL NOT EXCEED 2.0 INCHES OF WATER COLUMN WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1405]
5. A CONTINUOUS FLOW METER INDICATING THE FLOW RATE IN GALLONS PER MINUTE SHALL BE INSTALLED AND MAINTAINED ON THE RECIRCULATION LINE TO THE SCRUBBER. NOT LESS THAN 80 GALLONS PER MINUTE OF RECIRCULATING SCRUBBER SOLUTION SHALL BE SUPPLIED TO THE SCRUBBER SPRAY NOZZLES WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1405]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

6. AN AUTOMATIC PH METER AND CONTROLLER SHALL BE INSTALLED AND MAINTAINED TO CONTINUOUSLY MEASURE AND RECORD THE pH OF THE RECIRCULATION SCRUBBING SOLUTION. THE SCRUBBING SOLUTION SHALL BE MAINTAINED AT pH 8.0 OR HIGHER WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1405]

**Periodic Monitoring:**

7. A DAILY OPERATION RECORD OF THIS EQUIPMENT SHALL BE MAINTAINED IN A WRITTEN FORM. THE RECORD SHALL INCLUDE, AT A MINIMUM, THE MINIMUM PH OF THE SCRUBBING SOLUTION, DIFFERENTIAL PRESSURE ACROSS THE SCRUBBER, AND FLOW RATE OF THE SCRUBBING SOLUTION AND MAKE UP WATER. THESE RECORDS SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE UPON REQUEST BY DISTRICT PERSONNEL.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. G13004  
A/N 518885**

**Equipment Description**

**AIR POLLUTION CONTROL SYSTEM CONSISTING OF:**

1. SCRUBBER, HARRINGTON, MODEL ECH 4, 4' -0" W. x 12' -0" L x 7' -3" H, WITH LANPAC POLYPROPYLENE PACKING MEDIA, SPRAY NOZZLES, AND MIST ELIMINATOR.
2. EXHAUST SYSTEM WITH TWO 5.36-HP BLOWERS, VENTING UP TO EIGHT ACID POLISHING BAYS.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE I, WITH AN EFFECTIVE DATE OF SEPTEMBER 10, 2010 OR EARLIER, EXCEPT FOR SODIUM HYDROXIDE, PHOSPHORIC ACID, HYDROCHLORIC ACID, SULFURIC ACID, NITRIC ACID, AND ETHYLENE GLYCOLS.  
[Rule 1401]
4. A DIFFERENTIAL PRESSURE GAUGE, INDICATING INCHES OF WATER COLUMN, SHALL BE INSTALLED AND MAINTAINED ACROSS THE SCRUBBER. THE DIFFERENTIAL PRESSURE ACROSS THE PACKING SHALL NOT EXCEED 2.0 INCHES OF WATER COLUMN WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1405]
5. A CONTINUOUS FLOW METER INDICATING THE FLOW RATE IN GALLONS PER MINUTE SHALL BE INSTALLED AND MAINTAINED ON THE RECIRCULATION LINE TO THE SCRUBBER. NOT LESS THAN 80 GALLONS PER MINUTE OF RECIRCULATING SCRUBBER SOLUTION SHALL BE SUPPLIED TO THE SCRUBBER SPRAY NOZZLES WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1405]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

6. AN AUTOMATIC PH METER AND CONTROLLER SHALL BE INSTALLED AND MAINTAINED TO CONTINUOUSLY MEASURE AND RECORD THE pH OF THE RECIRCULATION SCRUBBING SOLUTION. THE SCRUBBING SOLUTION SHALL BE MAINTAINED AT pH 8.0 OR HIGHER WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1405]

**Periodic Monitoring:**

7. A DAILY OPERATION RECORD OF THIS EQUIPMENT SHALL BE MAINTAINED IN A WRITTEN FORM. THE RECORD SHALL INCLUDE, AT A MINIMUM, MINIMUM PH OF THE SCRUBBING SOLUTION, DIFFERENTIAL PRESSURE ACROSS THE SCRUBBER, AND FLOW RATE OF THE SCRUBBING SOLUTION AND MAKE UP WATER. THESE RECORDS SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE UPON REQUEST BY DISTRICT PERSONNEL.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. F71623**

**A/N 419503**

**Equipment Description:**

**AIR POLLUTION CONTROL SYSTEM CONSISTING OF:**

1. CATALYTIC OXIDIZER, DONALDSON, MODEL ETO ABATOR, WITH 8.5 KW ELECTRICAL PREHEATER .
2. EXHAUST SYSTEM WITH A 3/4-H.P. BLOWER VENTING TO TWO STERILIZERS.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. CATALYST BED TEMPERATURE SHALL BE MAINTAINED ABOVE 280 DEGREES F AND NOT TO EXCEED 500 DEGREES F EXCEPT DURING START-UP OPERATIONS.  
[RULE 1303(a)(1)-BACT]
4. THIS EQUIPMENT SHALL NOT BE PURGED OR AIRWASHED UNLESS IT IS VENTED TO THE AIR POLLUTION CONTROL EQUIPMENT, WHICH IS IN FULL USE AND HAS BEEN ISSUED A PERMIT TO OPERATE.  
[RULE 1303(a)(1)-BACT]
5. THIS EQUIPMENT SHALL BE IN FULL USE WHEN THE STERILIZER IT SERVES IS IN OPERATION.  
[RULE 1303(a)(1)-BACT]
6. THE STERILIZER EXHAUST SYSTEM SHALL BE LEAK FREE.  
[RULE 1303(a)(1)-BACT]
7. LEAK INSPECTIONS SHALL BE CONDUCTED ONCE EVERY SIX MONTHS IN ACCORDANCE WITH RULE 1405.  
[RULE 1405]
8. RECORDS OF THE LEAK INSPECTIONS SHALL BE MAINTAINED IN ACCORDANCE WITH RULE 1405, AND KEPT ON FILE FOR AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT STAFF UPON REQUEST.  
[Rue 1405]
9. THIS EQUIPMENT SHALL COMPLY WITH THE REQUIREMENTS OF RULE 1405.  
[Rule 1405]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. G13996  
A/N 515810**

**Equipment Description**

LASER CUTTING AND LATHING SYSTEM, BUILDING A, CONSISTING OF:

1. 11 LASERS, SPI FIBER, EACH 100 WATTS MAXIMUM, 5 – 10 WATTS IN USE
2. 5 LASERS, LASAQ, EACH 250 WATTS MAXIMUM, 5 – 10 WATTS IN USE

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 6400 STENTS IN ANY ONE DAY.  
[RULE 1401]
4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 1280 STAINLESS STEEL STENTS IN ANY ONE DAY.  
[RULE 1401]
5. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE I, WITH AN EFFECTIVE DATE OF SEPTEMBER 10, 2010 OR EARLIER, EXCEPT FOR CHROMIUM (NOT TO EXCEED 21%), OR NICKEL (NOT TO EXCEED 15%).  
[Rule 1401]

**Periodic Monitoring**

6. THE OPERATOR SHALL KEEP A DAILY RECORD OF THE NUMBER OF STENTS AND THE TYPE OF ALLOY PROCESSED. SUCH RECORD SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND SHALL BE AVAILABLE TO DISTRICT STAFF UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. F83293**

**A/N 443789**

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, 6 CYLINDER, TURBOCHARGED, AFTERCOOLED, MODEL 3456 DITA AA, 764 BHP, DIESEL FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATION OF THIS ENGINE BEYOND 20 HOURS PER YEAR FOR MAINTENANCE AND PERFORMANCE TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO ROTATING OUTAGES, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED, OR HAS INDICATED THAT THE DISTRIBUTION COMPANY IS EXPECTED TO ISSUE SUCH ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN THE UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.  
[RULE 1470]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN A TOTAL OF 200 HOURS IN ANY ONE CALENDAR YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS FOR MAINTENANCE AND PERFORMANCE TESTING.  
[RULE 1470]
5. AN OPERATIONAL, NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.  
[RULE 1470]
6. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATE IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY COMPANY OR THE GRID OPERATOR.  
[RULE 1470]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

7. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.  
[RULES 431.2, 1470]

**Periodic Monitoring**

8. AN ENGINE OPERATING LOG SHALL BE MAINTAINED ON A MONTHLY BASIS, WHICH SHALL INCLUDE MANUAL AND AUTOMATIC OPERATION AND SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:
- A. EMERGENCY USE HOURS OF OPERATION
  - B. MAINTENANCE AND TESTING HOURS
  - C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION). IN ADDITION, EACH TIME THE ENGINE IS STARTED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION. THE LOG SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT STAFF UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.  
[RULE 3004(a)(4)- MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. F83295  
A/N 447835**

**Equipment Description:**

STERILIZER, ETHYLENE OXIDE, 3M MODEL 8 XL, 8.8 CUBIC FEET INTERNAL CAPACITY.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATOR SHALL NOT OPERATE THIS STERILIZER UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT, WHICH IS IN FULL USE AND HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[Rule 1303(a)(1)-BACT]
4. THIS EQUIPMENT SHALL NOT USE MORE THAN 170 GRAMS OF ETHYLENE OXIDE IN ANY ONE CYCLE.  
[Rule 1401]
5. THE OPERATOR SHALL CONDUCT NO MORE THAN TWO STERILIZING CYCLES IN THIS EQUIPMENT IN ANY ONE DAY.  
[Rule 1401]
6. THE OPERATOR SHALL MAINTAIN THE STERILIZER EXHAUST SYSTEM TO BE LEAK FREE, WITH LEAK TESTS CONDUCTED EVERY SIX MONTHS IN ACCORDANCE WITH THE TEST METHODS SPECIFIED IN RULE 1405.  
[Rule 1405]
7. THE OPERATOR SHALL NOT PURGE OR AIRWASH THIS EQUIPMENT UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT, WHICH IS IN FULL USE AND HAS BEEN ISSUED A PERMIT TO OPERATE.  
[Rule 1304(a)(1)]

**Periodic Monitoring:**

8. THE OPERATOR SHALL MAINTAIN A DAILY OPERATING LOG AND RECORD THE LEAK TESTS IN ACCORDANCE WITH RULE 1405, WHICH SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS, AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4)- MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. F83294**

**A/N 447836**

**Equipment Description:**

STERILIZER, ETHYLENE OXIDE, 3M, MODEL 8XL, 8.8 CUBIC FEET INTERNAL CAPACITY.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATOR SHALL NOT OPERATE THIS STERILIZER UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT, WHICH IS IN FULL USE AND HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.  
[Rule 1304(a)(1) BACT]
4. THIS EQUIPMENT SHALL NOT USE MORE THAN 170 GRAMS OF ETHYLENE OXIDE IN ANY ONE CYCLE.  
[Rule 1401]
5. THE OPERATOR SHALL CONDUCT NO MORE THAN TWO STERILIZING CYCLES IN THIS EQUIPMENT IN ANY ONE DAY.  
[Rule 1401]
6. THE OPERATOR SHALL MAINTAIN THE STERILIZER EXHAUST SYSTEM TO BE LEAK FREE, WITH LEAK TESTS CONDUCTED EVERY SIX MONTHS IN ACCORDANCE WITH THE TEST METHODS SPECIFIED IN RULE 1405.  
[RULE 1405]
7. THE OPERATOR SHALL NOT PURGE OR AIRWASH THIS EQUIPMENT UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT, WHICH IS IN FULL USE AND HAS BEEN ISSUED A PERMIT TO OPERATE.  
[RULE 1304(a)(1) BACT]

**Periodic Monitoring:**

8. THE OPERATOR SHALL MAINTAIN A DAILY OPERATING LOG AND RECORD THE LEAK TESTS IN ACCORDANCE WITH RULE 1405, WHICH SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS, AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.  
[RULE 1405, 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. F83299  
A/N 447837**

**Equipment Description:**

**AIR POLLUTION CONTROL SYSTEM CONSISTING OF:**

1. CATALYTIC OXIDIZER, 3M, MODEL 50 SCFM, 5 KW ELECTRIC PREHEATER.
2. EXHAUST BLOWER, 2 HP, 50 CFM

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE CATALYST BED TEMPERATURE SHALL BE MAINTAINED ABOVE 280 BUT NOT TO EXCEED 500 DEGREES F EXCEPT DURING START-UP OPERATIONS OF THIS EQUIPMENT.  
[RULE 1303(a)(1)-BACT]
4. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS TEMPERATURE INDICATOR AND RECORDER TO ACCURATELY INDICATE AND RECORD THE TEMPERATURE AT THE EXHAUST OF THE OXIDIZER.  
[RULE 1303(a)(1)-BACT]
5. THIS EQUIPMENT SHALL BE IN FULL USE WHEN THE STERILIZER IT SERVES IS IN OPERATION.  
[RULE 1303(a)(1)-BACT]
6. ONLY ONE STERILIZER SHALL BE VENTED TO THIS EQUIPMENT AT ANY ONE TIME. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF RULE 1405.  
[RULE 1303(a)(1)-BACT]
7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF RULE 1405.  
[RULE 1405]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO CONSTRUCT/OPERATE**

**Permit No.  
G13002  
A/N 518884**

**Equipment Description**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. SCRUBBER, HARRINGTON, MODEL ECH 44-5 LB, 5' -8" W. x 11' -8" L x 6' -11" H, WITH SPRAY NOZZLE.
2. EXHAUST SYSTEM WITH TWO 20-HP BLOWERS, VENTING UP TO 10 BENCH-TYPE ACID POLISHING BAYS.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE I, WITH AN EFFECTIVE DATE OF SEPTEMBER 10, 2010 OR EARLIER, EXCEPT FOR SODIUM HYDROXIDE, PHOSPHORIC ACID, HYDROCHLORIC ACID, SULFURIC ACID, NITRIC ACID, AND ETHYLENE GLYCOLS.  
[Rule 1401]
4. A DIFFERENTIAL PRESSURE GAUGE, INDICATING INCHES OF WATER COLUMN, SHALL BE INSTALLED AND MAINTAINED ACROSS THE SCRUBBER. THE DIFFERENTIAL PRESSURE ACROSS THE PACKING SHALL NOT EXCEED 2.0 INCHES OF WATER COLUMN WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1405]
5. A CONTINUOUS FLOW METER INDICATING GALLONS PER MINUTE SHALL BE MAINTAINED IN THE SCRUBBING SOLUTION RECIRCULATION LINE TO THE SCRUBBER. NOT LESS THAN 55 GALLONS PER MINUTE OF RECIRCULATING SCRUBBER SOLUTION SHALL BE SUPPLIED TO THE SCRUBBER SPRAY NOZZLES WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1303(a)(1)-BACT]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

6. THE SCRUBBING SOLUTION TO THE SCRUBBER NOZZLES SHALL BE MAINTAINED AT pH 8.0 OR HIGHER WHEN THE EQUIPMENT IT SERVES IS IN OPERATION. AN AUTOMATIC pH METER AND CONTROLLER SHALL BE INSTALLED AND MAINTAINED TO CONTINUOUSLY MEASURE AND RECORD THE pH OF THE SOLUTION.  
[RULE 1303(a)(1)-BACT]

**Periodic Monitoring:**

7. A DAILY OPERATION RECORD OF THIS EQUIPMENT SHALL BE MAINTAINED IN A WRITTEN FORM. THE RECORD SHALL INCLUDE, AT A MINIMUM, THE MINIMUM PH OF THE SCRUBBING SOLUTION, DIFFERENTIAL PRESSURE ACROSS THE SCRUBBER, AND FLOW RATE OF THE SCRUBBING SOLUTION AND MAKE UP WATER. THESE RECORDS SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE UPON REQUEST BY DISTRICT PERSONNEL.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO CONSTRUCT/OPERATE**

**Permit No. G5761  
A/N 497147**

**Equipment Description**

AIR POLLUTION CONTROL SYSTEM NO. 1 CONSISTING OF:

1. SCRUBBER, HARRINGTON, MODEL ECH 4, 4' -0" W. X 12' -0" L. X 7' -3" H, WITH SPRAY NOZZLE.
2. EXHAUST SYSTEM WITH TWO 20-HP BLOWERS, VENTING BENCH-TYPE POLISHING STATIONS.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE I, WITH AN EFFECTIVE DATE OF MARCH 7, 2008 OR EARLIER, EXCEPT FOR SODIUM HYDROXIDE (CAS # 1310-73-2), PHOSPHORIC ACID (CAS # 7664-38-20), AND HYDROCHLORIC ACID (CAS # 7647-01-0).  
[Rule 1401]
4. NOT LESS THAN 55 GALLONS PER MINUTE OF RECIRCULATING SCRUBBER SOLUTION SHALL BE SUPPLIED TO THE SCRUBBER SPRAY NOZZLES WHEN THE EQUIPMENT IT SERVES IS IN OPERATION.  
[RULE 1303(a)(1)-BACT]
5. A FLOW METER INDICATING GALLONS PER MINUTE (GPM) SHALL BE MAINTAINED IN THE SCRUBBING SOLUTION CIRCULATION LINE TO THE SCRUBBER.  
[RULE 1303(a)(1)-BACT]
6. THE SCRUBBING SOLUTION TO THE SCRUBBER NOZZLES SHALL BE MAINTAINED AT pH 8.0 OR HIGHER. THE pH METER SHALL BE USED TO MEASURE THE pH OF THE SOLUTION ON A DAILY BASIS.  
[RULE 1303(a)(1)-BACT]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO DEMONSTRATE COMPLIANCE WITH CONDITIONS 4 AND 6. THE RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

# FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

## PERMIT TO CONSTRUCT

Permit No.  
A/N 487407

### Equipment Description:

BOILER NO. 1, WATERTUBE TYPE, CLEAVER BROOKS MODEL FLX 700-800, EQUIPPED WITH LOW NO<sub>x</sub> BURNER, 8 MMBTU/HR, NATURAL GAS FIRED.

### Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE BOILER SHALL BE EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE COMBUSTION AIR AND FUEL AS THE BOILER LOAD VARIES. THIS AUTOMATIC CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED AT LEAST ONCE EVERY SIX MONTHS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO MAINTAIN ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME FIRING RANGE. NO<sub>x</sub>, O<sub>2</sub>, AND CO SHALL BE MEASURED AND RECORDED ALONG WITH THE TUNE-UP PROCEDURES.  
[Rule 1146]
4. THE NO<sub>x</sub> AND CO CONCENTRATIONS, IN PARTS PER MILLION BY VOLUME (PPMV), ON A DRY BASIS CORRECTED TO 3% OXYGEN, SHALL NOT EXCEED THE FOLLOWING:

POLLUTANTS PPMV

NO <sub>x</sub>	12
CO	100

[Rule 1303(a)-BACT]

5. THE OPERATOR SHALL NOT OPERATE ALL OF THE THREE BOILERS AT THE SAME TIME.  
[Rule 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL CONDUCT A SOURCE TEST TO DETERMINE THE NO<sub>x</sub> AND CO EMISSIONS, IN PPMV AND IN LBS/HOUR, AT THE STACK WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS. SUCH SOURCE TEST SHALL BE CONDUCTED DURING THE FIRST 180 DAYS OF OPERATION AND WITHIN 45 DAYS FROM THE APPROVAL OF THE TEST PROTOCOL BY THE DISTRICT. THE SOURCE TEST REPORT SHALL INCLUDE THE CONCENTRATION IN PPM AT 3% OXYGEN AND EMISSION RATE OF NO<sub>x</sub> AND CO IN LBS/DAY, AND SHALL BE SUBMITTED TO THE DISTRICT WITHIN 45 DAYS OF THE DATE OF THE SOURCE TEST.  
[Rule 1303(a)(1)-BACT]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NO. 5. SUCH RECORDS SHALL BE KEPT FOR AT LEAST THE LAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

# FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

## PERMIT TO CONSTRUCT

Permit No.  
A/N 487409

### Equipment Description:

BOILER NO. 2, WATERTUBE TYPE, CLEAVER BROOKS MODEL FLX 700-800, EQUIPPED WITH LOW NO<sub>x</sub> BURNER, 8 MMBTU/HR, NATURAL GAS FIRED.

### Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE BOILER SHALL BE EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE COMBUSTION AIR AND FUEL AS THE BOILER LOAD VARIES. THIS AUTOMATIC CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED AT LEAST ONCE EVERY SIX MONTHS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO MAINTAIN ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME FIRING RANGE. NO<sub>x</sub>, O<sub>2</sub>, AND CO SHALL BE MEASURED AND RECORDED ALONG WITH THE TUNE-UP PROCEDURES.  
[Rule 1146]
4. THE NO<sub>x</sub> AND CO CONCENTRATIONS, IN PARTS PER MILLION BY VOLUME (PPMV), ON A DRY BASIS CORRECTED TO 3% OXYGEN, SHALL NOT EXCEED THE FOLLOWING:
 

POLLUTANTS	PPMV
NO <sub>x</sub>	12
CO	100

 [Rule 1303(a)-BACT]
5. THE OPERATOR SHALL NOT OPERATE ALL OF THE THREE BOILERS AT THE SAME TIME.  
[Rule 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL CONDUCT A SOURCE TEST TO DETERMINE THE NO<sub>x</sub> AND CO EMISSIONS, IN PPMV AND IN LBS/HOUR, AT THE STACK WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS. SUCH SOURCE TEST SHALL BE CONDUCTED DURING THE FIRST 180 DAYS OF OPERATION AND WITHIN 45 DAYS FROM THE APPROVAL OF THE TEST PROTOCOL BY THE DISTRICT. THE SOURCE TEST REPORT SHALL INCLUDE THE CONCENTRATION IN PPM AT 3% OXYGEN AND EMISSION RATE OF NO<sub>x</sub> AND CO IN LBS/DAY, AND SHALL BE SUBMITTED TO THE DISTRICT WITHIN 45 DAYS OF THE DATE OF THE SOURCE TEST.  
[Rule 1303(a)-BACT]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NO. 5. SUCH RECORDS SHALL BE KEPT FOR AT LEAST THE LAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

## FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

### PERMIT TO CONSTRUCT

**Permit No.**  
**A/N 487410**

**Equipment Description:**

BOILER NO. 3, WATERTUBE TYPE, CLEAVER BROOKS MODEL FLX 700-800, EQUIPPED WITH LOW NO<sub>x</sub> BURNER, 8 MMBTU/HR, NATURAL GAS FIRED.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE BOILER SHALL BE EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE COMBUSTION AIR AND FUEL AS THE BOILER LOAD VARIES. THIS AUTOMATIC CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED AT LEAST ONCE EVERY SIX MONTHS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO MAINTAIN ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME FIRING RANGE. NO<sub>x</sub>, O<sub>2</sub>, AND CO SHALL BE MEASURED AND RECORDED ALONG WITH THE TUNE-UP PROCEDURES.  
[Rule 1146]
4. THE NO<sub>x</sub> AND CO CONCENTRATIONS, IN PARTS PER MILLION BY VOLUME (PPMV), ON A DRY BASIS CORRECTED TO 3% OXYGEN, SHALL NOT EXCEED THE FOLLOWING:
 

POLLUTANTS	PPMV
NO <sub>x</sub>	12
CO	100

  
[Rule 1303(a)-BACT]
5. THE OPERATOR SHALL NOT OPERATE ALL OF THE THREE BOILERS AT THE SAME TIME.  
[Rule 1303(b)(2)-OFFSET]
6. THE OPERATOR SHALL CONDUCT A SOURCE TEST TO DETERMINE THE NO<sub>x</sub> AND CO EMISSIONS, IN PPMV AND IN LBS/HOUR, AT THE STACK WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS. SUCH SOURCE TEST SHALL BE CONDUCTED DURING THE FIRST 180 DAYS OF OPERATION AND WITHIN 45 DAYS FROM THE APPROVAL OF THE TEST PROTOCOL BY THE DISTRICT. THE SOURCE TEST REPORT SHALL INCLUDE THE CONCENTRATION IN PPM AT 3% OXYGEN AND EMISSION RATE OF NO<sub>x</sub> AND CO IN LBS/DAY, AND SHALL BE SUBMITTED TO THE DISTRICT WITHIN 45 DAYS OF THE DATE OF THE SOURCE TEST.  
[Rule 1303(a)(1)-BACT]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NO. 5. SUCH RECORDS SHALL BE KEPT FOR AT LEAST THE LAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

## FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

**Permit No. F99218**  
**A/N 487445**

**Equipment Description:**

BOILER, WATERTUBE TYPE, PARKER BOILERS, MODEL T-3900LR, EQUIPPED WITH LOW NO<sub>x</sub> BURNER, 3.9 MMBTU/HR, NATURAL GAS FIRED, AND A 3 H.P. COMBUSTION BLOWER.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT MAY NOT BURN MORE THAN 2,675,000 CUBIC FEET OF NATURAL GAS IN ANY ONE MONTH. A NON-RESETTABLE, TOTALIZING FUEL FLOW METER SHALL BE MAINTAINED IN THE FULE SUPPLY TO MEASURE THE AMOUNT OF NATURAL GAS BURNED.  
[RULE 1303(b)(2)-OFFSET]
4. THE NO<sub>x</sub> AND CO CONCENTRATIONS, IN PARTS PER MILLION BY VOLUME (PPMV), ON A DRY BASIS CORRECTED TO 3% OXYGEN, SHALL NOT EXCEED THE FOLLOWING:

POLLUTANTS PPMV

NO <sub>x</sub>	12
CO	100

[Rule 1303(a)-BACT]

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NO. 3. SUCH RECORDS SHALL BE KEPT FOR AT LEAST THE LAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**Permit No. F99219  
A/N 487446**

**Equipment Description:**

BOILER, WATERTUBE TYPE, PARKER BOILERS, MODEL T-3900LR, EQUIPPED WITH LOW NO<sub>x</sub> BURNER, 3.9 MMBTU/HR, NATURAL GAS FIRED, AND A 3 H.P. COMBUSTION BLOWER.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT MAY NOT BURN MORE THAN 2,675,000 CUBIC FEET OF NATURAL GAS IN ANY ONE MONTH. A NON-RESETTABLE, TOTALIZING FUEL FLOW METER SHALL BE MAINTAINED IN THE FULE SUPPLY TO MEASURE THE AMOUNT OF NATURAL GAS BURNED.  
[RULE 1303(b)(2)-OFFSET]
4. THE NO<sub>x</sub> AND CO CONCENTRATIONS, IN PARTS PER MILLION BY VOLUME (PPMV), ON A DRY BASIS CORRECTED TO 3% OXYGEN, SHALL NOT EXCEED THE FOLLOWING:

POLLUTANTS PPMV

NO <sub>x</sub>	12
CO	100

[Rule 1303(a)-BACT]

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NO. 3. SUCH RECORDS SHALL BE KEPT FOR AT LEAST THE LAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

# FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

**Permit No. F99220  
A/N 487447**

**Equipment Description:**

BOILER, WATERTUBE TYPE, PARKER BOILERS, MODEL T-3900LR, EQUIPPED WITH LOW NO<sub>x</sub> BURNER, 3.9 MMBTU/HR, NATURAL GAS FIRED, AND A 3 H.P. COMBUSTION BLOWER.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT MAY NOT BURN MORE THAN 2,675,000 CUBIC FEET OF NATURAL GAS IN ANY ONE MONTH. A NON-RESETTABLE, TOTALIZING FUEL FLOW METER SHALL BE MAINTAINED IN THE FULE SUPPLY TO MEASURE THE AMOUNT OF NATURAL GAS BURNED.  
[RULE 1303(b)(2)-OFFSET]
4. THE NO<sub>x</sub> AND CO CONCENTRATIONS, IN PARTS PER MILLION BY VOLUME (PPMV), ON A DRY BASIS CORRECTED TO 3% OXYGEN, SHALL NOT EXCEED THE FOLLOWING:

**POLLUTANTS PPMV**

NO <sub>x</sub>	12
CO	100
[Rule 1303(a)-BACT]	

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NO. 3. SUCH RECORDS SHALL BE KEPT FOR AT LEAST THE LAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

## FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

**Permit No. F99221**  
**A/N 487448**

**Equipment Description:**

BOILER, WATERTUBE TYPE, PARKER BOILERS, MODEL T-3900LR, EQUIPPED WITH LOW NO<sub>x</sub> BURNER, 3.9 MMBTU/HR, NATURAL GAS FIRED, AND A 3 H.P. COMBUSTION BLOWER.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT MAY NOT BURN MORE THAN 2,675,000 CUBIC FEET OF NATURAL GAS IN ANY ONE MONTH. A NON-RESETTABLE, TOTALIZING FUEL FLOW METER SHALL BE MAINTAINED IN THE FULE SUPPLY TO MEASURE THE AMOUNT OF NATURAL GAS BURNED.  
[RULE 1303(b)(2)-OFFSET]
4. THE NO<sub>x</sub> AND CO CONCENTRATIONS, IN PARTS PER MILLION BY VOLUME (PPMV), ON A DRY BASIS CORRECTED TO 3% OXYGEN, SHALL NOT EXCEED THE FOLLOWING:

POLLUTANTS PPMV

NO <sub>x</sub>	12
CO	100

[Rule 1303(a)-BACT]

**Periodic Monitoring:**

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION NO. 3. SUCH RECORDS SHALL BE KEPT FOR AT LEAST THE LAST FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. G15506  
A/N 524958**

**Equipment Description**

PLASTIC EXTRUSION LINE #1 CONSISTING OF:

1. HOPPER, WITH A DRYER, EDD NO. 2067198, 1.66 W ELECTRICALLY HEATED, DRI-AIR, ARID-X10, 1'D X 2'6"H
2. EXTRUDER, 70 RPM, EDD NO. 2068465, WITH A 2.25 KW ELECTRICALLY HEATED BARREL MELTER, AND A 3 HP MIXER, 4"W X 1'10"L X 4"H

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE I, WITH AN EFFECTIVE DATE OF SEPTEMBER 10, 2010 OR EARLIER.  
[RULE 1401]
4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 7200 POUNDS OF MATERIAL PER MONTH.  
[RULE 1303(b)(2)-OFFSET]

**Periodic Monitoring:**

7. A MONTHLY OPERATION RECORD OF THIS EQUIPMENT SHALL BE MAINTAINED IN A WRITTEN FORM. THESE RECORDS SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE UPON REQUEST BY DISTRICT PERSONNEL.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**PERMIT TO OPERATE**

**Permit No. G15507  
A/N 526846**

**Equipment Description**

PLASTIC EXTRUSION LINE #8 CONSISTING OF:

1. HOPPER (SHARED), WITH A DRYER, EDD NO. 2067198, 1.66 W ELECTRICALLY HEATED, DRI-AIR, ARID-X10, 1'D X 2'6"H
2. EXTRUDER, 35 RPM, EDD NO. 2068464, WITH A 2.25 KW ELECTRICALLY HEATED BARREL MELTER, AND A 3 HP MIXER, 4.75"W X 1'10"L X 4.75"H

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE I, WITH AN EFFECTIVE DATE OF SEPTEMBER 10, 2010 OR EARLIER.  
[RULE 1401]
4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 7200 POUNDS OF MATERIAL PER MONTH.  
[RULE 1303(b)(2)-OFFSET]

**Periodic Monitoring:**

7. A MONTHLY OPERATION RECORD OF THIS EQUIPMENT SHALL BE MAINTAINED IN A WRITTEN FORM. THESE RECORDS SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE UPON REQUEST BY DISTRICT PERSONNEL.  
[RULE 3004(a)(4) MONITORING AND RECORDKEEPING]

## FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

### RULE 219 EQUIPMENT

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

**Periodic Monitoring:**

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS 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 COATING.

FOR OTHER 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 COATING.

[RULE 3004 (a) (4) MONITORING AND RECORDKEEPING]

**Emissions And Requirements:**

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

[RULE 1113, RULE 1171]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

**Emissions And Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS  
[RULE 1171]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, BOILER, > 400,000 BTU/HR BUT < 2 MMBTU/HR.

**Emissions And Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: 0.1 gr/scf, RULE 409  
NOx: 30 PPMV, RULE 1146.2  
CO: 400 PPMV, RULE 1146.2  
CO: 2000 PPMV, RULE 407

## FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

### RULE 219 EQUIPMENT

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, < 53 FT3, WITH DUST FILTER.

**Periodic Monitoring:**

1. THE OPERATOR SHALL PERFORM AN ANNUAL INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA AND IMPROPERLY INSTALLED FILTER MEDIA. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
  - A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE FILTER MEDIA;
  - B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND
  - C. THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.[RULE 3004 (a)(4) MONITORING AND RECORDKEEPING]
2. THE OPERATOR SHALL DISCHARGE DUST COLLECTED IN THIS EQUIPMENT ONLY INTO CLOSED CONTAINERS.  
[RULE 3004 (a)(1)]
3. 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:
  - A. STACK OR EMISSION POINT IDENTIFICATION;
  - B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND
  - C. DATE AND TIME VISIBLE EMISSION WAS ABATED.[RULE 3004 (a)(4) MONITORING AND RECORDKEEPING]

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**Emissions And Requirements:**

4. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

PM: RULE 1140, SEE APPENDIX B FOR EMISSION LIMITS

## **FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

### **RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, VOC EMISSIONS THREE POUNDS PER DAY OR LESS OR 66 POUNDS PER CALENDAR MONTH OR LESS.

**Emissions And Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1145, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

[RULE 1145, RULE 1171]

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## FACILITY PERMIT TO OPERATE ABBOTT CARDIOVASCULAR SYSTEMS, INC.

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### 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 statues 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]

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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 five years. [204]
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]
  - 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 non-combustion sources, compliance with emission limits shall be determined and averaged over a period of 60 minutes; [204]
  - d. 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 compounds which would exist as liquid or gas at standard conditions shall be calculated as sulfur dioxide (SO<sub>2</sub>) and be averaged over 15 consecutive minutes; [407]
  - e. For the purpose of determining compliance with Rule 409, combustion contaminant emission measurements shall be corrected to 12 percent of carbon dioxide (CO<sub>2</sub>) at standard conditions and averaged over a minimum of 15 consecutive minutes. [409]

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**SECTION E: ADMINISTRATIVE CONDITIONS**

- f. For the purpose of determining compliance with Rule 475, combustion contaminant emission measurements shall be corrected to 3 percent of oxygen (O<sub>2</sub>) at standard conditions and averaged over 15 consecutive minutes or any other averaging time specified by the Executive Officer. [475]
8. 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.
  - b. Brief process description, including maximum and normal operating temperatures, pressures, throughput, 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 and 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 (conflict of interest).
9. 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.

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**SECTION E: ADMINISTRATIVE CONDITIONS**

- b. Brief description of the equipment tested.
  - c. Operating conditions under which the test was 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 and 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.
  - f. Calculations for volumetric flow rates, emission rates, control efficiency, and overall control efficiency.
10. 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]
11. 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]

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS**

NOT APPLICABLE

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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

NOT APPLICABLE

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

NONE

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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.

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**SECTION J. AIR TOXICS**

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NOT APPLICABLE

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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)]

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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)]

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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)]

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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)]

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**SECTION K: TITLE V Administration  
EMERGENCY PROVISIONS**

17. An emergency<sup>1</sup> 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]

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<sup>1</sup> "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  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**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.

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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;

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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 ABBOTT CARDIOVASCULAR SYSTEMS, INC.

### 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.

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 1110.2	7-9-2010	Non federally enforceable
RULE 1113	11-8-1996	Federally enforceable
RULE 1113	6-3-2011	Non federally enforceable
RULE 1122	10-1-2004	Federally enforceable
RULE 1122	5-1-2009	Non federally enforceable
RULE 1140	2-1-1980	Federally enforceable
RULE 1140	8-2-1985	Non federally enforceable
RULE 1145	12-4-2009	Non federally enforceable
RULE 1145	2-14-1997	Federally enforceable
RULE 1146	11-17-2000	Federally enforceable
RULE 1146	9-5-2008	Non federally enforceable
RULE 1171	11-7-2003	Federally enforceable
RULE 1171	5-1-2009	Non federally enforceable
RULE 1303(a)(1)-BACT	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable
RULE 1401	12-7-1990	Non federally enforceable
RULE 1405	1-4-1991	Non federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable
RULE 3004(a)(4)-Periodic Monitoring	12-12-1997	Federally enforceable
RULE 401	11-9-2001	Non federally enforceable

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**SECTION K: TITLE V Administration**

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 401	3-2-1984	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 431.2	5-4-1990	Federally enforceable
RULE 431.2	9-15-2000	Non federally enforceable
RULE 442	12-15-2000	Federally enforceable
RULE 481	1-11-2002	Federally enforceable
RULE 701	6-13-1997	Federally enforceable

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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

NONE

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 11-08-1996]**

- (1) Except as provided in paragraphs (c)(2), (c)(3), and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, or solicit the application of, any architectural coating 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, or manufacture, blend, or repackage such a coating for use within the District.
- (2) Except as provided in paragraphs (c)(3) and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, solicit the application of, 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.

**TABLE OF STANDARDS**

**VOC LIMITS**

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

COATING	Limit*	Effective Date of Adoption	Effective 1/1/1998	Effective 1/1/1999	Effective 7/1/2001	Effective 1/1/2005	Effective 7/1/2008
Bond Breakers	350						
Clear Wood Finishes							
Varnish	350						
Sanding Sealers	350						
Lacquer	680		550			275	
Concrete-Curing Compounds	350						
Dry-Fog Coatings	400						
Fire-proofing Exterior Coatings	350	450		350			
Fire-Retardant Coatings							
Clear	650						
Pigmented	350						
Flats	250				100		50
Graphic Arts (Sign) Coatings	500						

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 11-08-1996]**

Industrial Maintenance						
Primers and Topcoats						
Alkyds	420					
Catalyzed Epoxy	420					
Bituminous Coatings	420					
Materials						
Inorganic Polymers	420					
Vinyl Chloride Polymers	420					
Chlorinated Rubber	420					
Acrylic Polymers	420					
Urethane Polymers	420					
Silicones	420					
Unique Vehicles	420					
Japans/Faux Finishing	350	700		350		
Coatings						
Magnesite Cement Coatings	600			450		
Mastic Coatings	300					
Metallic Pigmented Coatings	500					
Multi-Color Coatings	420		250			
Pigmented Lacquer	680		550			275
Pre-Treatment Wash Primers	780					
Primers, Sealers, and	350					
Undercoaters						
Quick-Dry Enamels	400					
Roof Coatings	300					
Shellac						
Clear	730					
Pigmented	550					
Stains	350					
Swimming Pool Coatings						
Repair	650					
Other	340					
Traffic Coatings	250		150			
Waterproofing Sealers	400					
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

**TABLE OF STANDARDS (cont.)**

**VOC LIMITS**

**Grams of VOC Per Liter of Material**

COATING	Limit
Low-Solids Coating	120

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**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  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**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 <sup>1</sup>	Current Limit <sup>2</sup>	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 <sup>3</sup>		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  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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

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

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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

COATING CATEGORY	Ceiling Limit <sup>1</sup>	Current Limit <sup>2</sup>	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 <sup>4</sup>
Architectural Coatings, excluding IM Coatings	50
Solvent-Based IM	600
Waterborne IM	50

4. Effective January 1, 2014.

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1140 02-01-1980]**

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- (1) The operator shall not, if he complies with an applicable performance standard in section (b)(4) of Rule 1140, discharge into the atmosphere from any abrasive blasting 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 as No. 2 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 (1)(A).
  
- (2) The operator shall not, if he is not complying with an applicable performance standard in section (b)(4) of Rule 1140, discharge into the atmosphere from any abrasive blasting 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 as 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 (2)(A).

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**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

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**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1140 08-02-1985]**

- (1) The operator shall not, if he complies with an applicable performance standard in section (b)(4) of Rule 1140, discharge into the atmosphere from any abrasive blasting 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 as No. 2 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 (1)(A).
  
- (2) The operator shall not, if he is not complying with an applicable performance standard in section (b)(4) of Rule 1140, discharge into the atmosphere from any abrasive blasting 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 as 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 (2)(A).

**FACILITY PERMIT TO OPERATE  
 ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**APPENDIX B: RULE EMISSION LIMITS  
 [RULE 1145 12-04-2009]**

Except as otherwise provided in Rule 1145, no person shall apply on plastics, rubber, leather, or glass any coatings which are applied with a VOC content in excess of the limits listed in the Table of Standards.

**TABLE OF STANDARDS**

<b>VOC LIMITS                  LESS WATER AND LESS EXEMPT COMPOUNDS</b>		
<b>COATING CATEGORIES</b>	<b>g/L</b>	<b>lbs/gal</b>
Electrical dissipating and shock free coatings	360	3.0
Extreme performance two-component coatings	420	3.5
General one-component coatings	120	1.0
General two-component coatings	120	1.0
Leather antique coatings	156	1.3
Leather color coatings	60	0.5
Leather sealer coatings	60	0.5
Leather stain coatings	216	1.8
Leather top coatings	120	1.0
Metallic coatings	420	3.5
Military specification one-component coatings	340	2.8
Military specification two-component coatings	420	3.5
Mirror backing curtain coated coatings	500	4.2
Mirror backing rolled coated coatings	312	2.6
Mold seal coatings	750	6.3
Multi-color coatings	680	5.7
Refrigerated glass door coatings	480	4.0
Optical coatings	50	0.4
Vacuum metalizing coatings	800	6.7

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1171 11-07-2003]**

**(1) Solvent Requirements**

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
<b>(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application</b>	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	500 (4.2)
(iii) Medical Devices & Pharmaceuticals	800 (6.7)
<b>(B) Repair and Maintenance Cleaning</b>	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	900 (7.5)

**FACILITY PERMIT TO OPERATE  
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**APPENDIX B: RULE EMISSION LIMITS  
 [RULE 1171 11-07-2003]**

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(iii) Medical Devices & Pharmaceuticals	
(A) Tools, Equipment, & Machinery	800 (6.7)
(B) General Work Surfaces	600 (5.0)
(C) Cleaning of Coatings or Adhesives Application Equipment	550 (4.6)
(D) Cleaning of Ink Application Equipment	
(i) General	25 (0.21)
(ii) Flexographic Printing	25 (0.21)
(iii) Gravure Printing	
(A) Publication	750 (6.3)
(B) Packaging	25 (0.21)
(iv) Lithographic or Letter Press Printing	

**FACILITY PERMIT TO OPERATE  
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**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1171 11-07-2003]**

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Roller Wash – Step 1	600 (5.0)
(B) Roller Wash-Step 2, Blanket Wash, & On-Press Components	800 (6.7)
(C) Removable Press Components	25 (0.21)
(v) Screen Printing	750 (6.3)
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	800 (6.7)
(vii) Specialty Flexographic Printing	600 (5.0)
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)

**FACILITY PERMIT TO OPERATE  
 ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**APPENDIX B: RULE EMISSION LIMITS  
 [RULE 1171 05-01-2009]**

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals	800 (6.7)	
(B) Repair and Maintenance Cleaning		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	

**FACILITY PERMIT TO OPERATE  
 ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**APPENDIX B: RULE EMISSION LIMITS  
 [RULE 1171 05-01-2009]**

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY (cont.)</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(iii) Medical Devices & Pharmaceuticals		
(A) Tools, Equipment, & Machinery	800 (6.7)	
(B) General Work Surfaces	600 (5.0)	
(C) Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)	
(D) Cleaning of Ink Application Equipment		
(i) General	25 (0.21)	
(ii) Flexographic Printing	25 (0.21)	
(iii) Gravure Printing		
(A) Publication	100 (0.83)	
(B) Packaging	25 (0.21)	
(iv) Lithographic (Offset) or Letter Press Printing		
(A) Roller Wash, Blanket Wash, & On-Press Components	100 (0.83)	

**FACILITY PERMIT TO OPERATE  
 ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**APPENDIX B: RULE EMISSION LIMITS  
 [RULE 1171 05-01-2009]**

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY (cont.)</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(B) Removable Press Components	25 (0.21)	
(v) Screen Printing	100 (0.83)	
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	650 (5.4)	100 (0.83)
(vii) Specialty Flexographic Printing	100 (0.83)	
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)	

\* The specified limits remain in effect unless revised limits are listed in subsequent columns.

**FACILITY PERMIT TO OPERATE  
ABBOTT CARDIOVASCULAR SYSTEMS, INC.**

**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	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



# South Coast Air Quality Management District

## Statement of Basis

### Proposed Title V Renewal Permit

**Facility Name:** Abbott Cardiovascular Systems, Inc.  
**Facility ID:** 45489  
**SIC Code:**  
**Equipment Location:** 26531 Ynez Road  
Temecula, CA 92591

**Application #(s):** 528624  
**Application Submittal Date(s):** 10/ 26/2011

**AQMD Contact Person:** Dixie Richards  
**Phone Number:** (909) 396-2395  
**E-Mail Address:** drichards@aqmd.gov

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#### 1. Introduction and Scope of Permit

Title V is a national operating permit program for air pollution sources. Facilities subject to Title V must obtain a Title V permit and comply with specific Title V procedures to modify the permit. This permit replaces the facility's other existing permits. Title V does not necessarily include any new requirements for reducing emissions. It does, however, include new permitting, noticing, recordkeeping, and reporting requirements.

Pursuant to Title V of the federal Clean Air Act and AQMD Rule 3004(f), a Title V permit shall expire five years from the date of issuance unless such permit has been renewed. Accordingly, each facility is required to submit a Title V renewal application and requested the AQMD to renew their Title V permit. The proposed permit incorporates updates to the facility information provided in the facility's Title V renewal application and all rules and regulations that are currently applicable to the facility.

The AQMD implements Title V through Regulation XXX – Title V Permits, adopted by the AQMD Governing Board in order to comply with EPA's requirement that local air permitting authorities develop a Title V program. Regulation XXX was developed with the participation of the public and affected facilities through a series of public workshops, working group meetings, public hearings and other meetings.

The Title V major source threshold for a particular pollutant depends on the attainment status of the pollutant. NO<sub>2</sub>, SO<sub>2</sub>, and lead are in attainment with federal standards. The status of CO is currently serious nonattainment, but AQMD has petitioned to EPA for redesignation to

attainment status. The status for PM-10 is serious nonattainment. The status for ozone is currently extreme nonattainment.

A Title V renewal permit is proposed to be issued to cover the operations of Abbott Cardiovascular Systems, Inc., 26531 Ynez Road, Temecula, CA 92591. This facility is subject to Title V requirements because it is a major source.

## **2. Facility Description**

This is an existing facility that is in the business of manufacturing cardiovascular catheters and stents for the medical industry. This facility operates boilers, engines, sterilizers, extruders, and laser cutters. Emissions from sterilizers are controlled by a catalytic oxidizer. Emissions from the acid tanks, which do not require written permits, are controlled by scrubbers. Emissions from abrasive blasting equipment which does not require a written permit is controlled by a filter.

## **3. Construction and Permitting History**

The facility has been in constant operation at this location since 1984. Facility was previously permitted under Guident Inc. and Advanced Cardiovascular Systems, Facility ID 45489. Numerous permits to construct and or permits to operate have been issued to the facility. An initial Title V permit was issued to the facility on 10/26/01, and several permit revisions were subsequently issued to this facility.

## **4. Regulatory Applicability Determinations**

Applicable legal requirements for which this facility is required to comply are required to be identified in the Title V permit (for example, Section D, E, and H of the proposed Title V permit). Applicability determinations (i.e., determinations made by the District with respect to what legal requirements apply to a specific piece of equipment, process, or operation) can be found in the Engineering Evaluations. This facility is not subject to any NSPS Requirements.

## **5. Monitoring and Operational Requirements**

Applicable monitoring and operational requirements for which the facility is required to comply are identified in the Title V permit (for example, Section D, F, and J and Appendix B of the proposed Title V permit). Discussion of any applicable operational requirements can be found in the Engineering Evaluations. All periodic monitoring requirements were developed using strict adherence to the following applicable guidance documents: SCAQMD Periodic Monitoring Guidelines for Title V Facilities (November 1997); CAPCOA/CARB/EPA Region IX Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP (June 1999); and CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources (July 2001).

Emissions from sterilizers are controlled by a catalytic oxidizer. Emissions from the acid tanks, which do not require written permits, are controlled by scrubbers. Emissions from abrasive blasting equipment which does not require a written permit is controlled by a filter.

Uncontrolled VOC and PM emissions from each equipment are less than the major source thresholds of 10 tons and 70 per year, respectively. As a result, the catalytic oxidizer, scrubbers and filter are not subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64.

## 6. Permit Features

### Permit Shield

A permit shield is an optional part of a Title V permit that gives the facility an explicit protection from requirements that do not apply to the facility. A permit shield is a provision in a permit that states that compliance with the conditions of the permit shall be deemed compliance with all identified regulatory requirements. To incorporate a permit shield into the Title V permit involves submission of applications for change of conditions for each equipment affected by the permit shield. Permit shields are addressed in Rule 3004 (c). This facility has not applied for a permit shield.

### Streamlining Requirements

Some emission units may be subject to multiple requirements which are closely related or redundant. The conditions may be streamlined to simplify the permit conditions and compliance. Emission limits, work practice standards, and monitoring, recordkeeping, and reporting requirements may be streamlined. Compliance with a streamlined condition will be deemed compliance with the underlying requirements whether or not the emission unit is actually in compliance with the specific underlying requirement. This facility has not applied for any streamlined conditions.

## 7. Summary of Emissions and Health Risks

**Criteria Pollutant Emissions (tons/year)  
Annual Reported Emissions for Reporting Period 2010**

Pollutant	Emissions (tons/year)
NOx	2.207
CO	2.621
VOC	2.574
PM	0.276
SOx	0.028

**Toxic Air Contaminants Emissions (TAC)  
Annual Reported Emissions for Reporting Period 2010**

The Following TACs Were Reported	Emissions (lbs/yr)
1,3 - BUTADIENE	0.695
ACETALDEHYDE	2.758
ACROLEIN	0.266
AMMONIA	1062.82
ARSENIC	0.005
BENZENE	1.064
CADMIUM	0.004
CHROMIUM(IV)	<0.001
COPPER	0.013
DIESEL ENGINE EXHAUST, PM	107.2
ETHYL BENZENE	0.59
ETHYLENE OXIDE	0.001
FORMALDEHYDE	6.518
HEXANE	0.454
HYDROCHLORIC ACID	0.596
LEAD (INORGANIC)	0.026
MANGANESE	0.009
MERCURY	0.006
NAPHTHALENE	0.08
NICKEL	0.012
PAHS	0.121
SELENIUM	0.007
TOLUENE	2.479
XYLENES	1.727

**Health Risk from Toxic Air Contaminants**

The facility is subject to review by the Air Toxics Information and Assessment Act (AB2588).

**8. Compliance History**

As noted, the facility has been in constant operation since 1984. The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had one Notice of Violation issued in the last two years, for failure to submit a compliance plan for their boilers. The facility was also issued six Notices to Comply in the last two years: 1) 9/9/10 for failure to provide pH logs for the scrubbers, 2) 2/17/11 to provide a list of products for the lasers, 3)

3/16/11 to provide MSDS for the extruders, 4) 6/3/11 to provide a list of extruders that use plastisizers, 5) 6/15/11 to submit permit applications for the extruders that use organic plastisizers and 6) 8/17/11 to provide the start-up date of the boilers. Upon follow-up inspections, this facility was found to be in compliance.

#### **9. Compliance Certification**

By virtue of the Title V permit application and issuance of this Title V renewal permit, the reporting frequency for compliance certification for the facility shall be annual.



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

## NOTICE OF PROPOSED TITLE V RENEWAL PERMIT

The South Coast Air Quality Management District (AQMD) is proposing to renew the existing Title V permit that was previously issued to the following facility:

**Abbott Cardiovascular Systems, Inc.**  
26531 Ynez Road  
Temecula, CA 92591  
Facility ID# 45489

*Contact Person:*

Michael Volpone  
Environmental Engineer  
26531 Ynez Road  
Temecula, CA 92591

This is an existing facility applying for a Title V permit renewal that is engaged in manufacturing cardiovascular catheters and stents for the medical industry. This facility operates boilers, engines, sterilizers, extruders, and laser cutters. Emissions from sterilizers are controlled by a catalytic oxidizer. Emissions from the acid tanks, which do not require written permits, are controlled by scrubbers. Emissions from abrasive blasting equipment which does not require a written permit is controlled by a filter.

Pursuant to Title V of the federal Clean Air Act and AQMD Rule 3004(f), a Title V permit shall expire five years from the date of issuance unless such permit has been renewed. Accordingly, the above facility has submitted a Title V renewal application and requested the AQMD to renew their Title V permit. The proposed permit incorporates updates to the facility information provided in the facility's Title V renewal application and all rules and regulations that are currently applicable to the facility.

The proposed permit is available for public review at AQMD, 21865 Copley Dr.,

Diamond Bar, CA 91765 and at the Temecula Branch Library, 41000 County Center Drive, Temecula, CA 92591. Information regarding the facility owner's compliance history submitted to the AQMD pursuant to California Health & Safety Code Section 42336, or otherwise known to the AQMD based on credible information, is also available from the AQMD for public review. For more information or to review additional supporting documents, call the AQMD's Title V hotline at (909) 396-3013. Written comments should be submitted to:

South Coast Air Quality Management District  
Mechanical Operations Team  
21865 Copley Drive  
Diamond Bar, CA 91765  
Attention: Dixie Richards

Comments must be received by December 30, 2011. The AQMD will consider all public comments and may revise the Title V permit in accordance with AQMD rules and regulations.

The public may request AQMD to conduct a public hearing on the proposed permit by submitting a Hearing Request Form (Form 500-G) to Brian Yeh at the above AQMD address. The AQMD will hold a public hearing if there is evidence that the proposed permit is not correct or is not adequate to ensure compliance with regulatory requirements, and a hearing will likely provide additional information that will affect the drafting and/or issuance of the permit. A public hearing request form and the public hearing schedule may be obtained from the AQMD by calling the Title V hotline at (909) 396-3013, or from the internet at <http://www.aqmd.gov/titlev>. The request for a public hearing is due by December 14, 2011. A copy of the hearing request must also be sent by first class mail to the appropriate facility contact person listed above.

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COMPANY NAME: ABBOTT CARDIOVASULAR SYSTEMS AKA ABBOTT VASCULAR SYSTEMS  
PREVIOUSLY KNOWN AS GUIDANT, ADVANCED CARDIOVASCULAR

**EQUIPMENT DESCRIPTION**

A/N 529249

LASER CUTTING AND LATHING SYSTEM, BUILDING A, CONSISTING OF:

11 LASERS, SPI FIBER, EACH 100 WATTS MAXIMUM, 5-10 WATTS IN USE

5 LASERS, LASAQ, EACH 250 WATTS MAXIMUM, 5 – 10 WATTS IN USE

CHANGE OF CONDITION TO INCREASE MAXIMUM NICKEL FROM 12% TO 15%

A/N 529250

**TITLE V MODIFICATION**

**BACKGROUND**

These applications were submitted 11/15/2011 in response to a Notice of Violation for exceeding the permitted Ni percent.

**PROCESS DESCRIPTION**

Abbott Cardiovascular manufactures therapeutic medical devices for the treatment of atherosclerotic disease of the coronary and peripheral arteries. These devices include angioplasty balloon catheters, guide wires, wire-mesh stents, and accessories.

These laser-cutting machines are used to cut and lathe stainless steel and cobalt chrome stents. Currently, this equipment is processing approximately 20% stainless steel, 80% cobalt chrome. A stent is made by cutting a hollow tube using a laser beam. About 400 stents are made per machine per day. A laser beam is also used to lathe the surface of the stent.

Per the applicant, the lasers are programmed to be on for only picoseconds at a time, so the in use rating is much less than the maximum rating based on continuous operation.

**EMISSION CALCULATIONS**

Emission factors from stainless steel laser cutting source test conducted 6/2-3/2010 at Khume Industries, ST report 10-291

0.18 lb PM/lb material cut (test did not indicate PM10, 100% PM10 will be assumed)

18% Cr in material processed

2.0 x 10<sup>-4</sup> lb Cr+6/lb material cut

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**Cutting stent:**

Area of cut A = 5.22e-4 sq. in.  
 Volume of cut V = A x thickness, 0.0008"  
 Weight W = V x density D, 0.31 lb/cu. in.(cobalt chrome)

W = 5.22e-4 sq. in x 0.0008"  
 = 5.22e-4 x 0.0008" x 0.31 lb/cu. in.  
 = 1.3e-7 lb metal melted/stent cut

PM generated from cutting = (0.18 lb/lb metal melted)(1.3e-7 lb melted/stent cut)  
 = 2.33 e-8 lb PM/stent cut

**Lathing of stent:**

Area of the stent = Ao (outside)- Ai (inside), [the thickness of the tubing]  
 Length = 2.28 in.

Area A = 2.64e-4 sq. in.  
 Length L = 2.28"  
 Vol. = AL  
 = (2.64e-4sq. in.)(2.28in)  
 = 6.02 e-4 cu. in.

Weight of metal lathed W = (6.02e-4 cu. in.)(0.31 lb/cu. in.)  
 = 1.87e-4 lb metal melted

PM emissions from lathing = 1.87 e-4 lb metal melted x 0.18 lb PM/lb metal melted  
 = 3.366 e-5 lb PM/stent lathed

PM emissions (cutting + lathing) = 2.33 e-8 lb/stent + 3.366-5 lb/stent = 3.366 e-5 lb PM/ stent

Total PM emissions = 3.366 e-5 lb PM/stent x 400 stents/day/machine x 16 machines = 0.215 lb PM/day

**Toxic emissions for cobalt chrome and stainless steel stents**

Cobalt chrome: 21% chrome  
 Stainless steel: 20% chrome, 15% Ni

Using the test factor for Cr+6 for both stainless steel and cobalt chrome, and ratio for maximum chrome content:  
 $2.0 \times 10^{-4} \text{ lb Cr+6/lb material cut} \times (21\% \text{ Cr}/18\% \text{ Cr}) = 2.33 \times 10^{-4} \text{ lb Cr+6/lb material melted}$   
 $(2.33 \times 10^{-4} \text{ lb Cr+6/lb material melted})(1.3e-7 \text{ lb metal melted/stent cut} + 1.87e-4 \text{ lb metal melted/stent lathed})$   
 $= 4.36 \text{ e-8 lb Cr+6/stent (cobalt chrome, slightly less for stainless steel)}$

$(4.36 \text{ e-8 lb Cr+6/stent})(6400 \text{ stents/day}) = 2.79 \text{ e-4 Cr+6/day, max}$   
 $= 0.095 \text{ lb Cr+6/yr (max 365 day/yr)}$

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Using the test factor for PM, and ratio to maximum percent Ni

Previous (limited to 1600 ss stents/day, 12% Ni)

$$3.366 \text{ e-5 lb PM /stent} \times 0.12 = 4.04 \text{ e-6 lb Ni/stent (12\% Ni)}$$

$$4.04 \text{ e-6 lb Ni/stent} \times 1600 \text{ stents/day} = 0.006464 \text{ lb Ni/day (12\% Ni)}$$

$$2.36 \text{ lb Ni/yr (max 365 day/yr)}$$

Current (15% Ni)

$$3.366 \text{ e-5 lb PM /stent} \times 0.15 = 5.049 \text{ e-6 lb Ni/stent}$$

$$5.049 \text{ e-6 lb Ni/stent} \times 1600 \text{ stents/day} = 0.0081 \text{ lb Ni/day (assuming current permit limit on ss stents and 16\% Ni)}$$

$$2.95 \text{ lb Ni/yr (max 365 day/yr)}$$

Company has proposed a reduction in the number of stainless steel stents allowed so as to have no increase in Ni emissions.

$$1600 \times 12/15 = 1280 \text{ stainless steel stents/day}$$

$$5.049 \text{ e-6 lb Ni/stent} \times 1280 \text{ stents/day} = 0.006462 \text{ lb Ni/day}$$

$$2.36 \text{ lb Ni/yr (max 365 days/yr)}$$

#### RULE REVIEW

- Rule 212** Standards for approving permits
- 212(c)(1) Using the website Great Schools, the closest school, Temecula Montessori, is 0.4mile (2112 feet) from Abbott Cardiovascular. A public notice is not required under this paragraph.
- 212(c)(2) All pollutant emissions are less than the threshold. A public notice is not required under this paragraph.
- 212(c)(3) Risk exceeds R1401 threshold for maximum worst case production on all 16 machines. Number of stents produced will be limited so as to limit risk to below one in one million. A public notice is not required under this paragraph.
- RULE 219** Equipment not requiring a written permit  
No applicable exemption. Exceeds one in one million risk unless limited by permit condition. A permit is required.
- RULE 401** Visible emissions  
Compliance is expected
- RULE 402** Nuisance  
Compliance is expected
- REG XIII** New Source Review  
The total PM emission from this equipment is 0.2 lb/day, max, for 16 machines. BACT and offsets for PM are not required. Below screening level for PM modeling. Complies

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**RULE 1401      Toxics**

Risk threshold is on a permit unit basis. All of the lasers processing cobalt chrome or stainless steel (which are all in the same room) are considered to be a permit unit as determined by management.

Exceeds 1 in 1 million risk for maximum worst case capacity (6400 stainless steel stents/day). TBACT is a HEPA filter. Does not comply.

The number of stents will be limited to be below 1 in 1 million risk.

Per the health risk assessment submitted 1/28/11, adjusted risk is 0.88 in a million for maximum capacity of 6400 stents per day, total (maximum 21% Cr), of which 1600 stents/day were stainless steel (12% Ni, 20% Cr). Chronic and Acute risks were less than one.

Stainless steel stents reduced to 1280 stents/day (15% Ni). No increase in emissions or risk.

**REG XXX      Title V**

This is a minor permit revision. 45 day EPA notice is required.

**CONCLUSIONS AND RECOMMENDATION**

Compliance is expected with permit limits on the number of stents processed. Approval of a conditional permit to operate is recommended.