STATEMENT OF BASIS
Title V Permit

Facility Name:	GKN Aerospace Chem-tronics Inc
Title V App. Number:	APCD2024-APP-008126
Title V Permit Number:	APCD2025-TVP-00052
Facility ID:	APCD1978-SITE-00031
Equipment Address:	1150 W Bradley Ave, El Cajon, CA 92050
Facility Contact:	Tony Brentnall
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Permit Engineer:	Maria Galvez
Date:	August 19, 2025
Senior Engineer:	Nicholas Horres (August 19, 2025)

1.0 Type of Action and Summary of Changes.

This is an application for a new Title V permit for an existing aerospace manufacturing facility. The facility is subject to Title V permitting because of the District's redesignation to severe ozone nonattainment, and the facility was expected to be a new federal major stationary source for NOx emissions.

2.0 History of Title V Applications and Modifications/Applications since previous Renewal.

This is the initial Title V application for this facility. The application was received on 02/15/2024. The equipment was already in operation and is required to obtain a permit based on the District's redesignation to severe ozone nonattainment, with the facility expected to be a major stationary source of NOx, due to potential to emit of NOx exceeding the major source thresholds. The application is timely, because it was submitted by the deadline provided by the District of 2/21/24 for all facilities that became subject to Title V permitting with revised District Rule 1401 (effective 2/21/23).

There are no previously approved Title V applications for this facility.

The District has received applications from this facility as shown in the following table over the history of the facility. These applications are submitted under the District's local permitting program. (See Appendix A of the permit). Only applications for active permits are included here.

Permits that have been retired prior to the application submittal will not be included for this review.

Application Number	Affected Permit to Operate(s)	Description	Outcome
APCD1998-APP-971018	N/A	Previous initial Title V permit application. Source testing was completed to establish site-specific NOx emission factor for titanium milling. Based on this factor, facility was determined to be below major source thresholds at the time, and the Title V permit was not required.	Cancelled
	APCD2003-PTO-006657	*No records available for applications associated with this equipment, but initial permit for abrasive blast room issued.*	
APCD1987-APP-870381	**APCD2003-PTO-007554**	Modify acid chemical milling operation to add wet scrubber to reduce HCl emissions	Approved
APCD1988-APP-870584		Modify wet scrubber for chemical milling operation	Approved
APCD1995-APP-941145		Modify acid chemical milling operation to vent bulk storage tanks to existing water scrubber	Approved
APCD2006-APP-984486		Modify acid chemical milling operation	Approved
APCD2015-APP-004164	**APCD2003-PTO-870784**	Review facility-wide VOC emissions and establish limits as needed	Approved
APCD1989-APP-880870	**APCD2003-PTO-880870**	Initial application to permit an existing paint booth	Approved
APCD2015-APP-004164		Review facility-wide VOC emissions and establish limits as needed	Approved
APCD1995-APP-941146	**APCD2003-PTO-941146**	Initial application for paint booth and oven (existing, previously exempt)	Approved
APCD1996-APP-960916		Modification to aerospace coating spray booth	Approved
APCD1999-APP-973604	**APCD2003-PTO-973604**	New abrasive blasting operation	Approved
APCD1999-APP-973605	**APCD2003-PTO-973605**	Initial application for abrasive blasting equipment (existing, previously exempt)	Approved
APCD1999-APP-973606	**APCD2003-PTO-973606**	New abrasive blast cabinet	Approved
	APCD2006-PTO-977663	*No records available for applications associated with this equipment, but initial*	

		permit for facility-wide wipe cleaning issued.	
APCD2004-APP-981182	**APCD2006-PTO-981182**	New aerospace coating operation	Approved
APCD2015-APP-004164		Review facility-wide VOC emissions and establish limits as needed	Approved
APCD1987-APP-870207	**APCD2007-PTO-870207**	Modify plasma spray booth	Approved
APCD1996-APP-951115		Modify plasma spray booth controls	Approved
APCD2006-APP-984482		Condition change for thermal spray booths; new metal spray ATCM	Approved
APCD2010-APP-001182		Modify thermal spray booth to add control system	Approved
APCD2019-APP-005822		Modify control systems for thermal spray booth	Approved
APCD1991-APP-910006	**APCD2007-PTO-910006**	New plasma spray booth	Approved
APCD1996-APP-951116		Modify plasma spray booth controls	Approved
APCD2006-APP-984482		Condition change for thermal spray booths; new metal spray ATCM	Approved
APCD1997-APP-970016	**APCD2007-PTO-970016**	New thermal spray booth	Approved
APCD2006-APP-984482		Condition change for thermal spray booths; new metal spray ATCM	Approved
APCD2004-APP-981058	**APCD2007-PTO-981058**	New thermal spray booth	Approved
APCD2000-APP-974535	**APCD2008-PTO-974535**	New cold solvent degreasing tank	Approved
APCD2001-APP-976803		Modify dimensions of cold solvent degreasing tank	Approved
APCD2009-APP-987936	**APCD2010-PTO-000401**	New emergency diesel engine	Approved
APCD2021-CER-000095	**APCD2021-PTO-003801**	Registration of an existing medium boiler	Approved
APCD2021-CER-000096	**APCD2021-PTO-003802**	Registration of an existing medium boiler	Approved

APCD2021-CER-000097	**APCD2021-PTO-003803**	Registration of an existing medium boiler	Approved
APCD2022-APP-007208	**APCD2024-PTO-004848**	New aerospace coating operation	Approved
APCD2018-APP-005643	**APCD2024-PTO-004860**	New thermal spray booth	Approved

3.0 Facility Description.

GKN Aerospace Chem-tronics is an aerospace parts manufacturer that employs several unique metal fabrication processes, including utilization of highly concentrated chemical solutions with relatively uncommon equipment and control systems. Other more common operations at this facility include paint spray booths, thermal spraying, and abrasive blasting. This site has various equipment as described by the following permits.

Equipment type	Permit Number	Permit Description
Abrasive blasting	APCD2003-PTO-006657	ABRASIVE BLAST ROOM (3375 CU FT): CUSTOM-MADE, 15' X 15' X 15'; EXHAUST SYSTEM WITH 6-CHAMBER BAG FILTER (APPL #13377) 0581 NO APP 974903 (4/00) Aluminum oxide abrasive; Maximum blast capacity: 1856 lb/hr.
	APCD2003-PTO-973604	AUTOMATIC ABRASIVE BLAST CABINET: EMPIRE BOOTH MODEL SPCL-84108, S/N E99020 AND BLAST MACHINE; EMPIRE/TORIT DUST CONTROL EQUIPMENT, 2,000 CU FT PER CARTRIDGE (EM2-4), FRACTIONAL EFFICIENCY 99.999 PERCENT AT 0.5 MICRONS; RECYCLING; ALUMINUM OXIDE #100 ABRASIVE. 973604AFS27MAR2001 Maximum blast capacity: 952 lb/hr.
	APCD2003-PTO-973605	ABRASIVE BLAST GLOVE BOX: UNIVERSAL EQUIPMENT MFG., INC. (UNIBLAST), MODELS SERIES, ALUMINUM OXIDE ABRASIVE, RECYCLING, BLDG. 1, ANNEX, CHEMTRONICS MAINTENANCE NO. GE-278. 973605AFS19JUN2000 Maximum blast capacity: 1052 lb/hr.
	APCD2003-PTO-973606	Abrasive blast cabinet: Empire booth & blast machine, Model SPCL-84120-P, S/N E22032, Chemtronics maintenance No. GE-1007; Aluminum oxide abrasive, with recycling Maximum blast capacity: 952 lb/hr. Controlled by a dust collector: Donaldson Torit, Model DFO2-4, S/N 17134437-L1-1.

		2000 cfm, 4 cartridge filters each providing 760 sq ft filtration area, rated 99.999% control efficiency for 0.2 micron and larger.
Acid Etching and Pickling	APCD2003-PTO-007554	An Inconel 718 (Line 1W) and Inconel 625 (Line 1E) acid etching and pickling operation consisting of a dedicated enclosure (GKN Building 4B) equipped with a 7000 gallon capacity Inconel 718 acid etching tank, a 5000 gallon capacity Inconel 718 pickling tank, a 7000 gallon capacity Inconel 625 acid etching tank, a 1500 gallon capacity Inconel 625 pickling tank, two (2) independent fresh air make up blower units (located on the roof with a nominal 20,000 cfm capacity each), two (2) etching line air curtains, a Duall Model PT 508-96 packed bed single-stage fume scrubber, S/N 8574, with a nominal 20,000 acfm capacity exhaust fan (Line 1W), a modified Duall Model PT 512-102 packed bed single-stage fume scrubber, S/N 7215, with a nominal 13,000 acfm capacity exhaust fan (Line 1E) and all associated support equipment including bulk chemical storage tanks, fresh air intake and exhaust ducting, piping, valves, mist eliminators, temperature gauges, differential pressure gauges (3), scrubber liquid recirculation pumps (4), recirculation liquid flow meters (2), caustic delivery systems (2), scrubber recirculation liquid pH meters (2), monitoring devices, and data recorders. (984641/981796/974903/984486/941145/974903/2012-002229)
Aerospace Coating	APCD2003-PTO-870784	Aerospace coating operation: conducted inside the scribe room (Building#4) equipped with a 24,000CFM fan using brushes and rollers using Rule 67.9 compliant coatings and solvents.
	APCD2003-PTO-880870	an aerospace coating application station located in Building 1 and consisting of: One (1) open-faced dry film lube booth: Internal Dimensions: 48"W X 36"D X 80"H Manufacturer: SBS GKN Maintenance ID No. AV387 Stack Diameter: 1.5 ft Stack Height: 23 ft Fan rating: 3,000 CFM Vertical exhaust Equipped with a rain cap Filter: three-stage with filter pad/prefilter blocks/HEPA final stage. One (1) Wisconsin corporation model SWN-69-73 electric oven and one (1) Blue M MP-966-GRI-HP electric oven, ovens shared with permit 981182.

	APCD2003-PTO-941146	AEROSPACE COATING APPLICATION STATION, CONSISTING OF: ONE (1) BINKS MODEL PFA 16-10-TLO PAINT SPRAY BOOTH, 16'8"L X 16'5"W X 10'5"H, EQUIPPED WITH EXHAUST FAN, THREE-STAGE FILTERS WITH THIRD STAGE (HEPA) AT 99.97% EFFICIENCY ON 0.3 UM AT RATED FLOW, VENTED TO FOUR (4) TSU 1000R CARBON ADSORBERS (4,500-CFM EACH); IPEI ELECTRIC OVEN (200 DEG F); TWO (2) DEVILBISS MODEL JGA COMPRESSED AIR & ONE (1) DEVILBISS MODEL MSV 531 HVLP SPRAY GUNS; ONE (1) VOLUMETRIC FLOW METER AND ONE (1) DIFFERENTIAL PRESSURE GAUGE. #974903 (4/00) 977562/941146/ATS/NOAPP
	APCD2006-PTO-981182	An aerospace coating operation located in Building 3 and consisting of: one (1) enclosed paint spray booth; manufacturer: SBS; model: unknown; internal dimensions: 48" W x 78" D x 84" H; equipped with a 2,000 CFM exhaust fan; stack height: 37 feet; stack diameter: 1.5 feet; vertical exhaust with no rain cap/flapper valve; AFSI model 2400 VOM mist collector three-stage exhaust filter system (includes paint arrestor pad, pleated air filters and HEPA filter); and one (1) grieve model HX-500 (S/N 490213) electric oven which exhaust into the building. one (1) open-faced dry film lube spray booth; manufacturer: Donaldson-Torit; model: ECB-2; internal dimensions: 85" W x 90" D x 84" H; equipped with either a 6,200 or 9,000 CFM fan; stack height: 37 feet; stack diameter: 1.5 feet; vertical exhaust with no rain cap/flapper valve; equipped with HEPA filter; and one (1) Wisconsin corporation model SWN-68-7E (S/N 032559210) electric oven shared with PTO 880870. Oven exhaust is equipped with a rain cap.
	APCD2024-PTO-004848	Aerospace coating operation consisting of an open faced booth and electric oven: Negatively ventilated open faced spray booth; Manufacturer: AAIR Purification Systems Model: IB-BS IB-05-08-05-00 Dimensions: 5'L X 5'W X 8'L Exhaust flow: 4,000 cfm

		Filter: filter pad / pleated filters / HEPA
Cold Solvent Dip Tank	APCD2008-PTO-974535	COLD SOLVENT CYLINDRICAL DIP TANK: DIMENSIONS: 90-INCH DIAMETER X 120 INCHES HIGH DEGREASING SOLVENT: SEE ATTACHMENT AA 974535 GDS 3/00 #974903 (4/00) 976803 GDS 0402(MODIFIED 07-08 SRH)
Emergency Diesel Engine	APCD2010-PTO-000401	Emergency Standby Diesel Engine: Deere, Model: 6068HFS89, S/N: CD6068L013267, 315 bhp, Tier 3 certified, Family No.: 7JDXL06.8101, Model Year: 2007, turbocharged, driving a 235 kW Leroy Somer generator.
Medium boilers	APCD2021-PTO-003801	Registration of a medium boiler, Boiler #1: Parker Boiler Co. Model 90, S/N 40651, rated at 3.78 MMBtu/hour.
	APCD2021-PTO-003802	Registration of a medium boiler, Boiler #2: Parker Boiler Co., Model 105-115, S/N 49380, rated at 4.83 MMBtu/hour.
	APCD2021-PTO-003803	Registration of a medium boiler, Boiler #3: Parker Boiler Co., Model 105-150 (119), S/N 28190, rated at 4.995 MMBtu/hour.
Thermal Spray	APCD2007-PTO-870207	Enclosed flame/plasma metal spray booth, 12' x 16' x 8'8"h, vented at a nominal air flow rate of 15,000 acfm to either of the following: (i) a Donaldson-Torit model DFO-3-36 cartridge filter system with automatic pulse cleaning and a HEPA safety after-filter with a minimum of 99.97% particulate removal efficiency at 0.3 microns. (ii) a Dust Hog model FJH-64-4-H-55 cartridge filter system with automatic pulse cleaning and a HEPA safety after-filter with a minimum of 99.97% particulate removal efficiency at 0.3 microns.
	APCD2007-PTO-910006	An enclosed flame/plasma metal spray booth, 12' x 20' x 10'h, vented at a nominal air flow rate of 16,000 acfm to a Dust Hog model FJH-64-4-H-55 cartridge filter system with automatic pulse cleaning and a HEPA safety after-filter with a minimum of 99.97% particulate removal efficiency at 0.3 microns. (APPS 910006, 930668, 971669, 973807, 974903, 975267, 984482, and 001183) revised 12/11 DB
	APCD2007-PTO-970016	AN ENCLOSED FLAME/PLASMA/HV OF METAL SPRAY BOOTH, 4' X 10' X 8'H, VENTED AT A NOMINAL RATE OF 10,000 ACFM TO A DEDICATED DUST HOG MODEL KJ4-48-4 CARTRIDGE FILTER SYSTEM WITH AUTOMATIC PULSE CLEANING AND A HEPA SAFETY AFTER-FILTER. (APPS 970016, 973187, 974903, 975266, AND 984482) LAST REV 10/07 DB
	APCD2007-PTO-981058	AN ENCLOSED PLASMA / FLAME / HVOF THERMAL METAL SPRAY BOOTH (APPROXIMATELY 12' X 8.5' X 10'H) VENTED AT A

		NOMINAL RATE OF 6000 ACFM TO A DEDICATED TORIT MODEL DFT3-24 CARTRIDGE FILTER SYSTEM WITH AUTOMATIC REVERSE PULSE CLEANING AND A HEPA SAFETY AFTER-FILTER. (APP 981058 / DB / 9-07)
	APCD2024-PTO-004860	Thermal spraying operation consisting of: one HVOF thermal spray robotic gun operating (maximum capacity of 22 lbs/hour) with serial number: YR-MH00024-AUU in an enclosed thermal spray booth (approximately 12' long x 12' wide x 10' high) vented at a nominal flowrate of 3,000 cubic feet per minute (CFM) by a 7.5 horsepower direct drive electric blower to an automatic jet self-cleaning 2-stage dust collector equipped with cartridge filters and HEPA after filters, and one dust collector cabinet to discharge waste dust into collection drums.
Wipe Cleaning	APCD2006-PTO-977663	FACILITY-WIDE WIPE CLEANING APPLICATION OPERATIONS: CONSISTING OF DISPENSING CONTAINERS WITH SQUEEZE CONTAINERS WITH NARROW TIPS, SPRAY BOTTLES, DISPENSERS WITH PRESS DOWN CAPS AND CLOTH OR PAPER USED TO WIPEDOWN SURFACES WITH SOLVENTS. 977663(ABG)

The following equipment operates at the facility under Certificates of Registration or Certificates of Exemption, which are not included in the Title V permit as insignificant units and are not subject to federally enforceable requirements, aside from generally applicable requirements specified elsewhere in the Title V permit.

Permit Number	Permit Description
APCD2000-PTO-972770	METAL INSPECTION OPERATION CONSISTING OF ONE (1) PENETRANT SPRAY STATION(ENCLOSED) VENTED TO A TORIT MODEL C MIST COLLECTOR, ONE (1) RINSEEMULSIFIER STATION, DRAIN AND DRIER STATIONS USING 10 GAL/YEAR OF ARDROX985 P-13 AND 220 GAL/YEAR OF ARDROX 985-914 AS FLOURESCENT PENTRANTS ANDAND 440 GALLONS OF ARDROX 9PR-12 (USED AS 5% BY WEIGHT AQUEOUS SOLUTION) ASAN EMULSIFYING AGENT. #974903 (4/00)
APCD2002-PTO-977384	LASER SCRIBING OPERATIONS CONSISTING OF ONE GENERAL LASER MG 176 ONEWESTERN LASER MG 175 AND ONE LUMONICS LASER MG 302.

Other insignificant units at this facility include:

- Fuel burning equipment: (i) fuel-burning equipment, except internal combustion engines, with a maximum gross heat input < 1 MMBtu/hr when not part of a process, process line, line, equipment, article, machine, or other contrivance for

which a permit is required; (ii) fuel burning equipment, except steam boilers, process heaters, steam generators, and internal combustion engines, with a maximum gross heat input rate < 20 MMBtu/hr, and fired exclusively on natural gas, LPG, or a combination of the two; and (iii) steam boilers, process heaters, and steam generators with a maximum gross heat input < 5 MMBtu/hr. [Reg XIV, Appendix A, (d)(4)(i) through (iii)]

- Brazing, welding equipment including arc welding equipment. [Reg XIV, Appendix A, (d)(21)]
- Abrasive blasting equipment with a manufacturer-rated sand capacity <100 pounds or <1 cubic foot. [Reg XIV, Appendix A, (d)(34)]
- Paper shredders and paper disintegrators which have a capacity <600 lb/hr, and associated conveying systems and baling equipment. [Reg XIV, Appendix A, (d)(41)]
- Titanium chemical milling at temperatures below 110°F. [Reg XIV, Appendix A, (d)(51)]
- Powder coating operations, except metalizing gun operations, where surface preparation or cleaning solvent usage is < 0.5 gal/day. [Reg XIV, Appendix A, (d)(62)]
- Stationary organic compound storage tanks <250 gallons. [Reg XIV, Appendix A, (e)(1)]
- Liquid surface coating or adhesive application where not more than 20 gal/year of material containing organic compounds are applied. [Reg. XIV, Appendix A, (h)(1)]
- Liquid surface coating application operations using hand-held brushes for application of a primer coating from containers of 8 oz or less in size to fasteners to be installed on aerospace component parts. [Reg. XIV, Appendix A, (h)(5)]
- Liquid surface coating application operations using air brushes with a coating capacity < 2 oz. for application of a stencil coating [Reg. XIV, Appendix A, (h)(6)].
- Plastics manufacturing or fabrication operations which emit < 5lb/day VOC [Reg. XIV, Appendix A, (i)(3)]
- Equipment used for inspection of metal products except metal inspection tanks utilizing a suspension of magnetic or fluorescent dye particles in volatile organic solvent which have a liquid surface area > 5 ft^2 and are equipped with spray type flow or means of solvent agitation. [Reg. XIV, Appendix A, (o)(5)]
- Refrigeration units except those used as, or in conjunction with, air pollution control equipment with a charge < 50 lbs of a Class I or II ozone depleting compounds. [Reg XIV, Appendix A, (o)(18)]

4.0 Title V Applicability.

GKN Aerospace Chemtronics is a major source of NOx and VOC, as shown in section 6.0 below. This was determined from potential to emit for permitted emission units and actual emissions from emission units which are exempt from permit requirements.

The Title V regulation applies to any stationary source that is a major stationary source as defined in Rule 1401. Rule 1401(c)(26) defines “major stationary source” as any stationary source which emits or has the potential to emit one or more air contaminants in amounts equal to

or greater than the following emission rates: (i) 10 tons per year of any federal hazardous air pollutant (HAP), including fugitive emissions; (ii) 25 tons per year of any combination of federal HAPs, including fugitive emissions; (iii) emission rates of a "Federal Major Stationary Source" as defined in Rule 20.1 New Source Review – General Provisions.

Rule 1401(b)(4) states that the Title V regulation does not apply to insignificant emission units as specified in Rule 1411, but this exemption does not exclude the emissions from such insignificant emission units in determining the applicability of the Title V regulation.

Rule 20.1(c)(30) defines "Federal Major Stationary Source" as a stationary source which has an aggregate potential to emit one or more air contaminants in amounts equal to or greater than any of the emission rates listed in Table 20.1-5b. These emission rates are: 25 tons per year for NOx and VOC, and 100 tons per year for PM2.5, PM10, SOx, and CO. Rule 20.1(d)(1)(ii) provides guidelines for determining aggregate potential to emit for a stationary source. Part (B) specifies that the potential to emit of emission units exempt from permit requirements shall not be included in the aggregate potential to emit of a stationary source except that emissions of any air contaminant from such emission units shall be included if the actual emissions of such air contaminant would be determining as to whether the stationary source is a federal major stationary source. Therefore, only those NOx emissions from insignificant emission units which are causing the stationary source to exceed the federal major stationary source threshold are included in the facility potential to emit.

While actual emissions of VOC are quite low, in the absence of more strict emission limits, the potential to emit for VOC exceeds the 25 tons/year threshold. While potential to emit for NOx is quite low, the actual emissions of NOx from cumulative operation of various insignificant units cause the facility PTE to exceed the 25 tons/year threshold for NOx, as well, when evaluating PTE according to the definitions and guidelines outlined above. Therefore, this facility is a federal major stationary source for both NOx and VOC emissions.

Additionally, while HAP emissions do not currently exceed the major source thresholds, there were no previous permit limits in place to ensure that emissions of all federal HAPs do not exceed 25 tons/year and emissions of any single federal HAP do not exceed 10 tons/year, especially when considering that HAP emissions from insignificant activities are not subject to any enforceable limits or process limitations that would lower PTE. Because of this, a facility-wide limit on HAP emissions will be in the Title V permit, ensuring that HAP emissions from this facility will remain below major source thresholds. This limit is enforced through requiring the facility to either: maintain documentation demonstrating that facility-wide PTE of HAPs is below major source thresholds according to permit limits, where applicable, and maximum capacities for insignificant emission units; or, calculate HAP emissions from this facility on a monthly basis according to SDAPCD default calculation methods, including HAP emissions from insignificant activities. This is not expected to be a significant change from past practice as District rules and regulations already require maintaining much of this information for compliance purposes and preparing emission inventories, and is primarily intended to ensure enforceability.

5.0 Compliance History

This is an existing facility which has maintained generally good compliance over time. The facility has received 9 notices of violation over many years of operation. Recent NOVs include operating non-HVLP spray guns to apply aerospace coatings. Past NOVs consisted of minor monitoring or recordkeeping violations, failure to submit a Health Risk Assessment under California H&SC Section 44360, or minor excess emissions due to exceeding permit limits or failing to maintain equipment in good operating condition. These violations have all been addressed and there is no on-going non-compliance at this facility.

6.0 Potential to Emit and Actual Emissions

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

Title V Major Source Determination: (Tons/year)				
Pollutant	Threshold	Facility Actual Emissions	Facility Potential to Emit	Major Source
Highest Federal HAP	10	4.3	<10	N
Sum of Federal Haps	25	6.6	<25	N
NOx	25	23.8	25.6	Y
VOC	25	2.9	25.6	N
PM10	100	4.64	11.8	N
SOx	100	0.007	0.04	N
CO	100	0.9	4.9	N

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

Criteria pollutant PTE of equipment is based on permit limits, when available, or equipment capacity where no other permit limit exists. Facility actual emissions from insignificant activities were included in determining Potential to Emit, for insignificant activities which contributed to the facility exceeding major source thresholds. Based on this information, the facility is a major source for both NOx and VOC. Emission calculations are attached.

Conditions have been added to the site's permit to limit facility-wide HAP emissions below major source thresholds.

7.0 40 CFR Part 64 CAM (Compliance Assurance Monitoring)

40 CFR §64.2(a) outlines general applicability of Part 64. This subsection states that Part 64 requirements apply to a pollutant-specific emissions unit at a major source if the unit satisfies the following criteria: (1) the unit is subject to an emission limitation or standard for the applicable air pollutant; (2) the unit uses a control device to achieve compliance with any such emission limitation or standard; and (3) the unit has a potential pre-control device emissions of the

applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

A majority of emission units at this facility have pre-control emissions well below the major source thresholds, so Part 64 requirements do not apply. The only "emission unit" with the potential to exceed major source thresholds are emissions associated with facility-wide titanium milling operations, which are not subject to an emission limitation or standard for NOx emissions, and do not use control devices to achieve compliance with any such emission limitation. It should also be noted that these facility-wide titanium milling operations are emissions reported cumulatively from various exempt emission units. Therefore, CAM requirements of 40 CFR Part 64 do not apply to any emission units at this facility.

8.0 Applicable Requirements

This section summarizes the major requirements that apply to this facility. This includes facility-wide requirements, those pertaining to the permitting program in general and those pertaining to equipment on a facility-wide basis, and permit-specific requirements for each permit/equipment type. Additionally, there are tables which present the primary limiting regulations that apply to each permit and/or equipment type.

General Facility-Wide Applicable Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. II	10(a) 10(b)	Permits Required – (a) Authority to Construct Permits Required – (b) Permit to Operate
SDCAPCD Reg. II	12	Registered Equipment
SDCAPCD Reg. II	19	Provision of Sampling & Testing Facilities
SDCAPCD Reg. II	19.3	Emission Information
SDCAPCD Reg. II	20.1-20.4	New Source Review
SDCAPCD Reg. II	21	Permit Conditions
SDCAPCD Reg. II	24	Temporary Permit to Operate
SDCAPCD Reg. II	25	Appeals
SDCAPCD Reg. IV	60	Circumvention
SDAPCD Reg. IV	71	Abrasive Blasting
SDCAPCD Reg. V	98*	Breakdown Conditions: Emergency Variance
SDCAPCD Reg. VI	101	Burning Control

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

Facility-wide Prohibitory and Other Requirements

Regulation	Rule Citation	Title
SDCAPCD Reg. IV	50	Visible Emissions
SDCAPCD Reg. IV	51	Nuisance
SDCAPCD Reg. IV	52	Particulate Matter
SDCAPCD Reg. IV	53	Specific Air Contaminants

SDCAPCD Reg. IV	62	Sulfur Content of Fuels
SDCAPCD Reg. IV	66.1	Miscellaneous Surface Coating Operations and Other Processes Emitting VOCs
SDCAPCD Reg. IV	67.0.1	Architectural coating
SDCAPCD Reg. IV	67.6.1	Cold Solvent Cleaning and Stripping Operations
SDCAPCD Reg. IV	67.9	Aerospace Coating Operations
SDCAPCD Reg. IV	67.17	Storage of Materials Containing VOCs
SDCAPCD Reg. IV	69.2.2	Medium Boilers, Process Heaters, and Steam Generators
SDCAPCD Reg. IV	69.4.1	Stationary Reciprocating Internal Combustion Engines
SDCAPCD Reg. X	40 CFR 60 Subpart A	NSPS General Provisions
40 CFR Part 60	Subpart A	NSPS General Provisions
SDCAPCD Reg. XI	40 CFR 63 Subpart A	NESHAP General Provisions
40 CFR Part 63	Subpart A	NESHAP General Provisions
40 CFR Part 61	Subpart M*	NESHAP – Asbestos
SDCAPCD Reg. XII	1200**	Toxic Air Contaminants – New Source Review
SDCAPCD Reg. XII	1206*	Asbestos Removal, Renovation, and Demolition

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

***Not federally enforceable*

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

Rule 12 – This rule contains requirements for equipment registered under the District's registration program. Registrations are similar to operating permits, but are not subject to pre-construction review/NSR and typically are only issued to emission units which are also considered insignificant activities.

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

Rule 19.3 – This rule pertains to emission inventory information and specifies what data facilities are required to maintain or provide for the District in order to conduct state and federally required emission inventory analyses. Some of the required information is also required

by emission-unit specific permit conditions, but only if necessary to determine compliance with accurate requirements.

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

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

Rule 24 – This rule defines the District's ability to grant temporary authority to operate under the NSR program. A separate rule (1410) covers temporary operating authority under the Title V program.

Rule 25 – Outlines the requirements and process for appeals to the issuance of authorities to construct, permits to operate and modified permits to operate under the District's NSR permitting program. Decisions on permit appeals are made by the District's Hearing Board.

Rule 60 – Circumvention. This rule clarifies that circumvention of applicable requirements is not permissible – such as through piecemealing of projects or similar practices.

Rule 71 – Defines requirements for temporary abrasive blasting not conducted in a booth or enclosure, so would apply to activities such as facility maintenance not covered by the operating permits under appendix A.

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

Rule 101 – Outlines prohibitions on open burning.

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

Rule 51 – Public nuisance prohibition.

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

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

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

Rule 67.0.1 – Specifies requirements for architectural coatings as used for building construction and maintenance (not part of permitted operations). Applicable requirements primarily include purchasing products which meet specified VOC standards.

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

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

Rule 1210 – Requirements of the District's Air Toxics "Hot Spot's" program, which requires assessment of and, if necessary reduction of, air toxics and associated health risk from facilities which have been identified as high priority. This rule is not federally enforceable; however, GKN is subject to this rule and has fully complied with and implemented all requirements.

Rule 1206/40 CFR 61 Subpart M – Specifies requirements for remediation of asbestos containing materials during projects such as demolition. Rule 1206 contains applicable requirements which apply to the facility. This rule is implemented as a Compliance program and requires filing of notifications prior to any demolition involving asbestos, appropriate sampling methodologies, and control requirements when asbestos is identified.

Permit Specific Applicable Requirements:

SDAPCD Permit No.	Permit Description	Applicable Rules
APCD2003-PTO-006657, APCD2003-PTO-973604, APCD2003-PTO-973605, APCD2003-PTO-973606	Abrasive blasting	SDCAPCD Reg. IV Rule 20.1 SDCAPCD Reg. IV Rule 52 17 CCR Section 92000
APCD2003-PTO-007554	Chemical milling	SDCAPCD Reg. IV Rule 1200
APCD2003-PTO-870784, APCD2003-PTO-880870, APCD2003-PTO-941146, APCD2006-PTO-981182, APCD2024-PTO-004848	Aerospace coating	SDCAPCD Reg. IV Rule 20.3 (NSR) SDCAPCD Reg. IV Rule 1200 SDCAPCD Reg. IV Rule 67.17 SDCAPCD Reg. IV Rule 67.9 40 CFR 63 Subpart HHHHHH
APCD2008-PTO-974535	Cold solvent dip tank	SDCAPCD Reg. IV Rule 67.6.1
APCD2010-PTO-000401	Emergency diesel engine	SDCAPCD Reg. IV Rule 20.3 SDCAPCD Reg. IV Rule 69.4.1 SDCAPCD Reg. IV Rule 1200 17 CCR Section 93115 40 CFR 60 Subpart IIII 40 CFR 63 Subpart ZZZZ
APCD2007-PTO-870207, APCD2007-PTO-910006, APCD2007-PTO-970016, APCD2007-PTO-981058, APCD2024-PTO-004860	Thermal spray	SDCAPCD Reg. IV Rule 20.3 SDCAPCD Reg. IV Rule 1200 17 CCR Section 93101.5 40 CFR 63 Subpart WWWWWW
APCD2006-PTO-977663	Wipe cleaning	SDCAPCD Reg. IV Rule 20.3 SDCAPCD Reg. IV Rule 1200

Emission Limitations and Applicable Requirements by Equipment Type:

Abrasive Blasting	
Pollutant	Primary Limiting Regulations
NOx	N/A (does not emit)
VOC	N/A (does not emit)
PM10	Rule 20.1, 52
SO2	N/A (does not emit)
CO	N/A (does not emit)
Toxic Pollutants/HAP	Rule 1210

Rule 20.1 (New Source Review – General Provisions): Section (b) of this rule exempts portable and stationary abrasive blasting equipment that complies with the requirements of 17 CCR Section 92000 et. seq. These CCR sections contain various prohibitions, including visible emissions standards, nuisance prohibition, and compliance with performance standards. Compliance with visible emissions standards and nuisance prohibition are streamlined through

compliance with SDAPCD Rules 50 and 51, respectively, which are requirements of every SDAPCD permit. The only applicable performance standards set forth in 17 CCR Section 92500 et. seq. is for abrasive blasting to be conducted within a permanent building. All abrasive blasting permits at this facility are for operations conducted within permanent buildings and are required to comply with SDAPCD Rules 50 and 51. Therefore, all applicable requirements of 17 CCR 92000 et. seq. are met, and the abrasive blasting equipment is exempt from New Source Review.

Rule 52 – Particulate Matter: The only requirement of this rule is setting a maximum particulate emission standard that applies to all equipment. Except for some equipment which is subject to Rule 53 (combustion particulate emission standards) and a few minor exceptions, all sources of particulate matter from permitted operations are subject to Rule 52. Compliance for all sources is typically ensured by operational limits or control requirements (e.g. filters) which have been evaluated to ensure that the emission concentration cannot be exceeded and are specified in permit conditions as necessary.

Rule 1210 (Toxic Air Contaminant Health Risks – Public Notification and Risk Reduction) Various abrasive blasting operations at this facility are subject to risk reduction audits and plans under this rule, as a facility subject to the California AB2588 Air Toxics Hot Spots program. These requirements are not federally enforceable.

Aerospace Coatings	
Pollutant	Primary Limiting Regulation(s)
NOx	N/A (does not emit)
VOC	Rule 20.3; Rule 67.9; Rule 67.17
PM10	N/A (does not emit)
SO2	N/A (does not emit)
CO	N/A (does not emit)
Toxic Pollutants	Rule 1200; 40 CFR 63 Subpart HHHHHH

Rule 67.9 – This rule specifies prohibitory requirements for all aerospace coating operations including meeting specified VOC content limits based on the type of substrate/coating, need to use an approved application method, control equipment requirements for some equipment categories, and associated monitoring, recordkeeping and test methods. The applicable requirement(s) of each rule are listed in each permit with the rule as the basis.

40 CFR 63 Subpart HHHHHH – This facility operates five separate aerospace coating operations. Amongst these, two of the permits contain permit conditions prohibiting spray application of the target HAP metals and are not subject to requirements of this rule. The other three permits contain all applicable requirements of NESHAP HHHHHH including filter standards, application method and training requirements, prohibition on use of methylene chloride, and applicable recordkeeping and reporting requirements. The filter standards are subsumed by more stringent requirements of Rule 1200, operational standards are subsumed by the more stringent Rule 67.9 requirements, and the permit specifies any additional recordkeeping and reporting requirements not separately required by one of these rules.

40 CFR 63 Subpart XXXXXX – While this facility does fabricate metal products, it is a very unique operation (chemical milling of metal blocks to produce aerospace components), and is not

one of the source categories required to comply with this rule (see June 2020 EPA guidance: https://www.epa.gov/sites/default/files/2020-06/documents/qa-6x-9metal-fabricationfinishing-areaneshap-06-22-20.pdf).

Thermal Spray Operations	
Pollutant	Primary Limiting Regulation(s)
NOx	N/A (does not emit)
VOC	N/A (does not emit)
PM10	Rule 20.3; Rule 52
SO2	N/A (does not emit)
CO	N/A (does not emit)
Toxic Pollutants	Rule 1200; 17 CCR 93101.5; 40 CFR 63 WWWWWW

Emissions from thermal spray operations include both HAP and TAC emissions, which are also particulates. The operating permits for each thermal spray operation require the use of a particulate control system affixed with a HEPA-certified filter and state all applicable operating requirements including pressure monitoring and associated recordkeeping requirements. Federally applicable requirements of Rule 52 (Particulate concentration) and 40 CFR 63 Subpart WWWWWW requirements to operate a control system are less stringent than the requirements necessary under Rule 1200 and the state ATCM and therefore compliance can be ensured through compliance with the federally applicable requirements in ensured through the same conditions implementing Rules 1200 and the ATCM. For this reason, these conditions are all considered federal enforceable and included in that section of the permit.

Emergency Diesel Engine	
Pollutant	Primary Limiting Regulation(s)
NOx	Rule 20.3; Rule 69.4.1; 40 CFR 60 Subpart IIII
VOC	Rule 20.3; 40 CFR 60 Subpart IIII
PM10	Rule 20.3; Rule 53; 15 CCR 93115; 40 CFR 60 Subpart IIII
SO2	Rule 20.3; Rule 62; 40 CFR 60 Subpart IIII
CO	Rule 69.4.1; 40 CFR 60 Subpart IIII
Toxic Pollutants	Rule 1200; 40 CFR 63 Subpart ZZZZ

Rule 53 – Specific Air Contaminants: This rule is very similar to Rule 52, except applies to certain combustion sources and includes limits on emissions of sulfur compounds in addition to particulate matter. The engine is subject to the sulfur requirement of this rule and complies through the use of CARB certified diesel. Stationary liquid fueled piston-type internal combustion engines are exempt from the PM emission standards in this rule.

Rule 62 – Sulfur Content of Fuels: This rule applies to all combustion sources, except sewage treatment plant digestor gases and gases emitted from solid waste disposal landfill sites, and limits emissions of sulfur compounds. Compliance with this requirement is guaranteed through the use of CARB certified diesel.

Rule 69.4.1 – Stationary Reciprocating Internal Combustion Engines: This rule sets maximum NOx, VOC, and CO standards for different types of engines, fuel specification requirements,

control equipment requirements for some engine types, associated monitoring, inspection and maintenance frequency, and recordkeeping. The applicable requirements are listed in the permit with this rule as the basis.

17 CCR 93115: Applicable requirements of the Stationary ATCM include purchasing an engine certified to EPA standards and meeting specified emission standards of the rule, installing an hour meter, conducting maintenance according to a written plan, restrictions on operating the engine for purposes other than emergency use and limited (50 hours/year) use for maintenance and testing, and maintaining records to substantiate compliance with these requirements. Applicable requirements are listed in the permit with this rule as the basis.

40 CFR 60 Subpart IIII: This rule applies stationary compression ignition (CI) and internal combustion engines (ICE) with requirements including purchasing a certified engine, operating it as directed by the manufacturer, and maintaining records to substantiate compliance. These requirements closely mirror the ATCM requirements, except that the NSPS is somewhat less stringent on allowable PM emission rate and contains some allowance for other types of operation not allowed by the Stationary Engine ATCM (17 CCR 93115). Permits that are used for operations subject to this rule have the more stringent ATCM applicable conditions applied.

40 CFR 63 subpart ZZZZ: This rule applies to stationary reciprocating internal combustion engines (RICE) and requires that all new emergency engines comply with the rule by complying with the NSPS (subpart IIII).

Cold Solvent Dip Tanks	
Pollutant	Primary Limiting Regulation(s)
NOx	N/A (does not emit)
VOC	Rule 67.6.1
PM10	N/A (does not emit)
SO2	N/A (does not emit)
CO	N/A (does not emit)
Toxic Pollutants	N/A (does not emit)

Rule 67.6.1 Applicable requirements related to the cold solvent dip tank are specified in Rule 67.6.1. These requirements include standards for VOC content of the solvent, design specifications for the dip tank including freeboard depth and other dimensional standards, and operating requirements designed to minimize VOC emissions. These requirements are all stated in the emission unit specific operating permit in Appendix A and conditions note Rule 67.6.1 as the basis.

Acid Etching and Pickling	
Pollutant	Primary Limiting Regulation(s)
NOx	N/A (No specific prohibitions – limited by permit conditions as they apply to nitric acid as a toxic)
VOC	N/A (does not emit)
PM10	N/A (does not emit)
SO2	N/A (does not emit)

CO	N/A (does not emit)
Toxic Pollutants	Rule 1200

The permit for the acid etching/pickling tank primarily contains requirements designed to limit TAC emissions under District Rule 1200. While this rule is not federally enforceable, the use of controls also serves to limit the potential to emit of NOx (in the form of nitric acid). For this reason, requirements related to controls and associated monitoring are considered federally enforceable.

Facility-wide Wipe Cleaning	
Pollutant	Primary Limiting Regulation(s)
NOx	N/A (does not emit)
VOC	Rule 20.3; Rule 67.9; Rule 67.17
PM10	N/A (does not emit)
SO2	N/A (does not emit)
CO	N/A (does not emit)
Toxic Pollutants	Rule 1200

This permit only emits VOC, a portion of which may also be HAP/TAC emissions. Emissions from this source are limited primarily by permit conditions specifying maximum usages of materials and annual emission rates for some TAC/HAPs based on NSR/Rule 1200 requirements, limitations on VOC content of materials used and storage of materials (Rule 67.9/67.17), and related recordkeeping requirements. Conditions which are solely implementing Rule 1200 are not considered federally enforceable; however, the limitations on HAP emissions are since they contribute to limiting emissions to ensure this is not a HAP major source.

9.0 Monitoring, Record-Keeping, and Reporting

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

The existing abrasive blasting operating permits were revised to add additional monitoring requirements pursuant to Rule 1420. These blasting operations are each equipped with dust collectors to comply with the particulate emission standards of Rule 52, but previously did not have consistent monitoring and record-keeping requirements. To ensure continuous compliance, conditions have been added to each permit to require consistent installation of a pressure monitor, setting of pressure limits, and associated recordkeeping.

10.0 Permit Streamlining

No additional streamlining was requested as part of the Title V permit. However, the equipment specific operating permits issued under the NSR program and listed under Attachment A implement some of the same concepts of streamlining by specifying the most stringent requirement between rules. Details of affected permits and requirements were explained in the previous rules analysis section. Any instances of streamlining permit requirements are highlighted and explained how compliance with various requirements is achieved through compliance with permit conditions. These include: the aerospace coating permits having the most stringent applicable requirement amongst Rules 67.9, NSR/Rule 1200 or NESHAP HHHHHH; thermal spray operations which have the less stringent NESHAP WWWWWW requirements subsumed by ATCM and Rule 1200 standards; and the emergency engines which subsume NESHAP ZZZZ and NSPS IIII requirements under more stringent ATCM conditions.

11.0 Permit Shield

Pursuant to District Rule 1410(p) and 40CFR §70.6(f), a Title V permit may include a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the permit issuance date. The applicant did not request a permit shield, and none is included in the permit.

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

Before issuing the final permit, The District will provide the opportunity for review by EPA and affected states and a public notice period. Notice will be provided to the EPA electronically through the EPS and will be sent electronically to affected states and tribes. The public notice and associated documents will be provided on the District's website and the public notice will be published in a newspaper. The District will incorporate any suggested changes made by EPA or the public if necessary and will re-notice if significant changes are made.

13.0 Conclusions / Recommendations

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

14.0 Attachments

The following are attached:

- Application Package
- Draft Permit
- Public Notice