

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

GENERAL PERMIT OR REGISTRATION APPLICATION FORM



San Diego County
Air Pollution
Control District

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

REASON FOR SUBMITTAL OF APPLICATION:

- | | | |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <input type="checkbox"/> New Installation | <input type="checkbox"/> Existing Unpermitted Equipment or Rule 11 Change | <input type="checkbox"/> Modification of Existing Permitted Equipment |
| <input type="checkbox"/> Amendment to Existing Authority to Construct or Application | <input type="checkbox"/> Change of Equipment Location | <input type="checkbox"/> Change of Equipment Ownership (please provide proof of ownership) |
| <input type="checkbox"/> Change of Permit Conditions | <input type="checkbox"/> Change Permit to Operate Status to Inactive | <input type="checkbox"/> Banking Emissions |
| <input type="checkbox"/> Registration of Portable Equipment | <input checked="" type="checkbox"/> Other (Specify) <u>Rule 1210 2016 Risk Reduction and Audit Plan</u> | |

List affected APP/PTO Record ID(s): Not Applicable

APPLICANT INFORMATION

Name of Business (DBA) GKN Chem-tronics, Inc.

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

If yes, list assigned Site Record IDs listed on your Permits APCD1978-SITE-00031

Name of Legal Owner (if different from DBA) Same

Equipment Owner

Authority to Construct Mailing Address

Name: GKN Chem-tronics, Inc.	Name: GKN Chem-tronics, Inc.
Mailing Address: 1150 W. Bradley Ave.	Mailing Address: 1150 W. Bradley Ave.
City: El Cajon State: CA Zip: 92020	City: El Cajon State: CA Zip: 92020
Phone: (619) 258-5069	Phone: (619) 258-5069
E-Mail Address: tony.brentnall@usa.gknaerospace.com	E-Mail Address: tony.brentnall@usa.gknaerospace.com

Permit To Operate Mailing Address

Invoice Mailing Address

Name: GKN Chem-tronics, Inc.	Name: GKN Chem-tronics, Inc.
Mailing Address: 1150 W. Bradley Ave.	Mailing Address: 1150 W. Bradley Ave.
City: El Cajon State: CA Zip: 92020	City: El Cajon State: CA Zip: 92020
Phone: (619) 258-5069	Phone: (619) 258-5069
E-Mail Address: tony.brentnall@usa.gknaerospace.com	E-Mail Address: tony.brentnall@usa.gknaerospace.com

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

Equipment Location Address 1150 W. Bradley Ave. City El Cajon State: CA

Parcel No. _____ Zip 92020 Phone (619) 258-5000 E-mail: tony.brentnall@usa.gknaerospace.com

Site Contact Tony Brentnall Phone (619) 258-5069

General Description of Equipment/Process General Application for Rule 1210 2016 Risk Reduction Audit & Plan

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

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

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

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

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

Print Name Tony Brentnall

Phone (619) 258-5069

Date 1-31-23

Company GKN Chem-tronics, Inc.

E-mail Address tony.brentnall@usa.gknaerospace.com

Internal Use Only

Date _____	Staff Initials: _____	Amt Rec'd \$ _____	Fee Schedule _____
RNP: _____	EMF: _____	NBF: _____	TA: _____

GEN_APP_Form_Rev Date: Aug. 2017

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

www.sdapcd.org

GENERAL PERMIT OR REGISTRATION APPLICATION INSTRUCTIONS



San Diego County
Air Pollution
Control District

GENERAL

The owner or designated agent must complete and sign this form and file it with one copy of all attachments, required supplementary forms, drawings and the appropriate fee.

The appropriate fee (payable to "San Diego County APCD") must be submitted with this Permit/Registration Application. Application processing will not begin until the full required fee has been received. Excess fees will be refunded upon completion of the application process. If you do not know the appropriate fee or need to discuss the information required, please contact the District at (858) 586-2600 and ask for assistance in determining an application fee.

REASON FOR SUBMITTAL OF APPLICATION

- New Installation - check if you are installing equipment that does not currently have a District Permit to Operate (PTO)
- Existing Unpermitted Equipment or Rule 11 Change - check if applying for existing equipment that is currently unpermitted or equipment that is now subject to District Rules due to Rule 11 changes
- Modification of Existing Permitted Equipment - check if you are making a change to equipment with a current District Permit to Operate. (List affected PTO Record ID(s) – Note: PTO Record ID Format: APCD2015-PTO-123456)
- Amendment to Existing Application - check if you are amending a previously submitted application form or current Authority to Construct. (List affected Application Record ID(s) Application Record ID Format: APCD2015-APP-123456)
- Change of Equipment Location - check if you are moving non-portable equipment with a current District Permit to Operate. (List affected PTO Record IDs)
- Change of Equipment Ownership - check if you wish to transfer ownership of a District Permit to Operate to a different owner. **Provide proof of ownership with application.** (List affected PTO Record ID(s))
- Change of Permit Conditions - check if you are proposing changes only to conditions for an existing permit to operate. (List affected PTO Record ID(s) on line 12)
- Change Permit to Operate Status to Inactive - Used to place a permit in inactive (non-operational) status. (List affected PO #(s))
- Banking Emissions - check if you are applying for emission reduction credits
- Registration of Portable Equipment - check this line if you are applying for registration of portable equipment
- Other - check for any action not covered
- List affected Application/PTO Record ID(s) - list any permits or open applications affected by the proposed modification/change

TRADE SECRET INFORMATION AND PUBLIC AVAILABILITY OF APPLICATIONS

All information submitted with this application is considered a public record and is accessible online while under review unless otherwise designated as Trade Secret.

If your application contains information you consider to be trade secret or otherwise confidential, you must indicate so on this form and attach a separate document justifying the request as required by District Rule 176. Only this application form and the justification will be made available online if this status is requested; however, the District may make additional information available if it is publicly requested and determined not to qualify as trade secret as described in District Rules 176 and 177.

APPLICANT INFORMATION

Please enter the requested addresses, including the address to be used to send the Authority to Construct, Permit to Operate, and invoices.

EQUIPMENT/PROCESS INFORMATION

Check Stationary or Portable depending upon the type of equipment for which you are filing an application. Also check Yes if the equipment is portable and will operate more than 180 consecutive days at a single site. Otherwise, check No.

Please enter the location where the equipment is or will operate. If the application is for a portable operation please enter the address that will be used to store the portable unit.

INDEMNIFICATION

In accordance with District Rule 40(d)(8)(vi), the applicant, to the extent the applicant is at fault in causing liability to the District, shall indemnify the District (including its agents, officers and employees) from any claim, action, liability, or proceeding to attack, set aside, void or annul the applicant's project or any of the proceedings, acts or determinations taken, done or made as a result of the District's processing and/or approval of the project. The applicant's obligation to indemnify shall include, but not be limited to, payment of all court costs and attorneys' fees, costs of any judgments or awards against the District, damages, and/or settlement costs, which arise out of the District's processing and/or approval of the applicant's project, except that an applicant shall only be responsible for indemnifying the District according to the proportion of fault caused by the applicant, as determined by a court. By signing and submitting this application, an applicant agrees to such indemnification.

**SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT
RULE 1210 RISK REDUCTION AUDIT AND PLAN**

For

GKN Chem-tronics, Inc.
1150 West Bradley Avenue
El Cajon, CA 92020

**San Diego Air Pollution Control District
Facility ID# 00031**

Submitted to:

**San Diego Air Pollution Control District
Air Toxics Engineering Division**
10124 Old Grove Rd.
San Diego, CA 92131

January 31, 2023

TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 FACILITY INFORMATION	2
3.0 RISK REDUCTION AUDIT AND PLAN	4
4.0 RISK REDUCTION DEMONSTRATION.....	4
5.0 RISK REDUCTION SCHEDULE	5
6.0 CONCLUSIONS	5

TABLES

Table 1 Source and Proposed RRAP Measure Summary	2
Table 2 GKN Chem-tronics Acute Risk Comparison - 2016 HRA vs. 2020 HRA	5
Table 3 Schedule of Risk Reduction Measures Implementation	5

FIGURES

Figure 1 GKN Chem-tronics with Stack Locations of Sources with Nickel Emissions .	3
-----------------------------------------------------------------------------------	---

1.0 INTRODUCTION

A Health Risk Assessment was submitted to the San Diego County Air Pollution Control District (SDAPCD or District) July 5, 2022 for GKN Chem-tronics, Inc. (GKN) (SDAPCD Facility #00031).¹ On August 4, 2022, GKN received a letter from the District that notified GKN of the need for a risk reduction audit and plan (RRAP) based on the health risk assessment (HRA) approved by the District.² The approved HRA was based on the emission inventory year 2016 Toxic Emissions Inventory Report (TEIR).

The HRA results for 2016 indicated that the maximum worker acute non-cancer HHI exceeded the risk reduction level specified in District Rule 1210, section (e)(1). The acute non-cancer HHI from the HRA based on the emission inventory year 2016 was estimated at 1.36 HHI which exceeded the Rule 1210 threshold of 1.0 HHI. The biggest contributor to worker acute non-cancer risk at the Maximally Exposed Individual Worker (MEIW) was nickel emissions from a chemical mill sandblast booth stack (Device #6657) located approximately 35 meters south of the MEIW location.

The next program cycle HRA required was for CY 2020. It was required because the prioritization scores from the 2020 TEIR exceeded HRA required thresholds. The 2020 TEIR for this HRA included use of updated blasting emission factors reviewed and approved by SDAPCD August 17, 2022.³ These factors included site-specific sampling for nickel from the five sandblast booths at the facility.⁴ The 2020 HRA including the updated emission factors for nickel from Device #6657 and other booths was submitted in September 2022⁵ and approved by the District on November 15, 2022.⁶ The 2020 HRA demonstrated that acute risk at all off-site receptors was less than the 1.0 HHI threshold. The 2020 HRA also shows that, with the maximum hourly potential to emit (PTE) emissions for all sources at the facility, the acute risk impacts would be reduced to less than the 1.0 HHI threshold.

This RRAP addresses planned mitigation measures to support risk reduction for future years.

There were 10 sources identified in the final approved District HRA review as primary contributors to the acute risks (99%).⁷ It is proposed to reduce future year risks by implementing measures for these sources as practically possible. The measures are

¹ Submittal of AB2588 "Hot Spots" Health Risk Assessment for GKN Aerospace Chem-tronics Inc, prepared by BlueScape Environmental, Dated July 5, 2022.

² Approval of (2016) Revised AB2588 "Hot Spots" Health Risk Assessment, SDAPCD, (RRAP Required) Dated August 4, 2022.

³ Approval of (2020) Revised AB2588 "Hot Spots" Toxics Emission Inventory, SDAPCD, August 17, 2022.

⁴ In 2020 Revision Request 100_APCD Approval of Blast EF_081722.pdf the District-approved lower nickel emission factors for abrasive blasting Devices 6657, 973603, 973604, 973605, and 973606.

⁵ SDAPCD AB 2588 Health Risk Assessment Emission Inventory Year 2020, GKN Aerospace Chem-tronics, Inc., Submitted on September 29, 2022.

⁶ Approval of 2020 AB2588 "Hot Spots" Health Risk Assessment, SDAPCD, November 15, 2022.

⁷ Review & Summary of GKN 2016 AB2588 "Hot Spots" Health Risk Assessment, SDAPCD, August 4, 2022.

captured in Table 1 below. See Section 3.0 Risk Reduction Audit and Plan for details of proposed measures.

TABLE 1 SOURCE AND PROPOSED RRAP MEASURE SUMMARY			
Source	PTO ID	% Acute Risk Contribution	Reduction Measure Proposed
Chem Mill Sandblast	APCD2003-PTO-006657	68%	Immediately incorporate site specific District approved EF; Long term phase out of permit
Thermal Spray Booths #1 #2 #4	APCD2007-PTO-870207, APCD2007-PTO-910006, APCD2007-PTO-981058	20% (total)	Relocate metal spray with nickel use to improved location; Maintain HEPA controls
Alum Oxide Blast Booth (6)	APCD2003-PTO-973604	4%	Immediately incorporate site specific District approved EF; Replace equipment to include improved dust collection and control system
Diesel Emergency Engine	APCD2010-PTO-000401	3%	No measures proposed at this time – required for emergency use only
Alum Oxide Blast Booths (4) and (2)	APCD2003-PTO-973606	2%	Immediately incorporate site specific District approved EF; Long term replace Booth 4 Empire
Weld	NA	1%	No measures proposed at this time – small usage needs, small contribution to risks

2.0 FACILITY INFORMATION

2.1 Address and Contacts

GKN Chem-tronics, Inc.
SDAPCD Facility #00031
1150 West Bradley Avenue
El Cajon, CA 92020

Facility Contact:

Mr. Tony Brentnall
1150 West Bradley Avenue
El Cajon, CA 92020
Work Phone: (619) 258-5069

RRAP Preparer Contact:

Mr. James Westbrook
BlueScape Environmental
16870 W. Bernardo Drive, Ste. 400
San Diego, CA 92127
Cell Phone: (858) 774-2009

2.2 Description of Operations

The GKN facility manufactures and repairs aerospace components using a variety of surface treatment techniques. Typical activities at the GKN facility include physical and chemical milling processes and surface coating operations. Heavy metal particulates containing Toxic Air Contaminants (TACs) may be released during metal coating and blasting operations.

Equipment at the facility includes thermal spray and welding equipment, chemical etch and pickling tanks, blasting equipment, and coating booths. The facility is located in a mostly industrial setting approximately 90 meters west of the Gillespie Field Airport. The nearest off-site worker location is Veridiam, which is located between the fence lines of the north and south portions of the GKN facility. The property fence line of Veridiam is approximately 3 meters from the closest GKN facility building. The equipment to move to a new location off-site are three thermal coating booths (Devices 870207, 910006, and 981058) and the equipment to be replaced includes aluminum oxide blast booth (Device #973604). The location of the facility and the location of these pieces of equipment, along with Device #6657, the largest contributor to acute risk at the worker location for the 2016 HRA are shown in Figure 1 below.

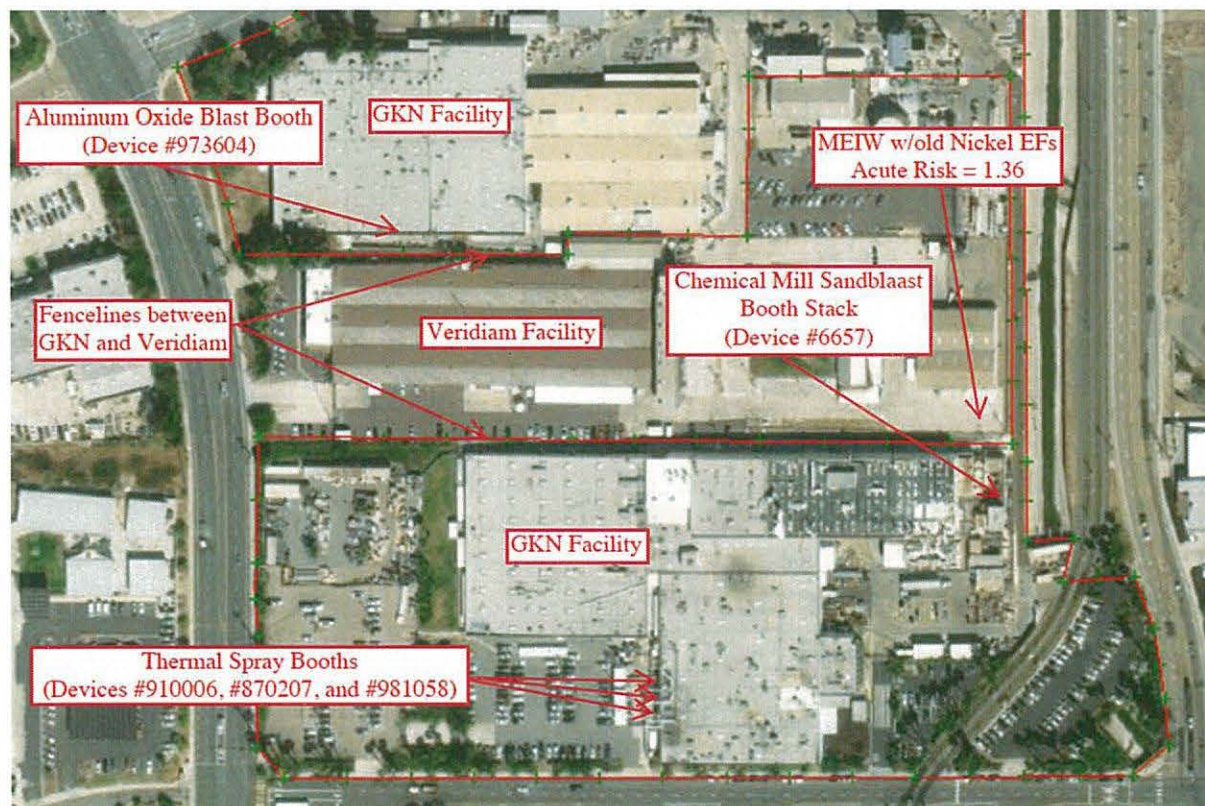


FIGURE 1 GKN CHEM-TRONICS WITH STACK LOCATIONS OF SOURCES WITH NICKEL EMISSIONS

3.0 RISK REDUCTION AUDIT AND PLAN

To reduce risks below the Rule 1210 thresholds, the following Plan is proposed:

Chemical Mill Sandblast Operations (Devices 6657, 973603, 973604, 973605, and 973606)

Device #6657 (Chemical Mill Sandblast Booth) contributed 68% of acute risk impacts at the MEIW in the 2016 HRA. In August 2022, after the 2016 HRA had been submitted, SDAPCD approved the use of site-specific emission factors for nickel emissions from the sandblast booths for the HRA that BlueScape was preparing for TEIR year 2020. The 2020 HRA analyzed the same devices that the 2016 HRA did, using the maximum hourly emissions for each device, and the newly approved emission factors for nickel from blasting. Results for acute risk in the 2020 HRA were below the Rule 1210 threshold of 1.0 HHI. Because the potential to emit (PTE) hourly emissions were analyzed in the 2020 HRA, the conclusion is that the 2016 acute risk impacts have already been reduced to below the 1.0 HHI threshold. It is additionally proposed to improve sandblast operations as part of a business decision to include better emission controls and usage reductions over a 5-year timeline phase out. New abrasive blast systems will replace existing units, a schedule for preparing and submittal of Permit modification applications is shown in Section 5.0 Risk Reduction Schedule.

Metal Spray Operations (Devices 870207, 910006 and 981058)

There are three permitted metal spray operations that include application of nickel containing powder. This equipment complies with federal NESHAP 6W and California ATCM for thermal spray standards and includes HEPA emission controls. The combined acute impacts from these sources tally approximately 20% of the total acute score. It is proposed to relocate these sources away from current operations so the offsite acute risk contributions are significantly lower than existing contributions. A SDAPCD Engineering Evaluation Job will be requested to perform HRA analysis for the new proposed locations. Once determined feasible, permit relocation modifications will be submitted to relocate the equipment to the new location. Implementation schedule is shown in Section 5.0.

4.0 RISK REDUCTION DEMONSTRATION

Because risk reduction below reporting levels is demonstrated in the 2020 HRA, a risk reduction demonstration can be shown comparing the two results. Table 2 lists the acute risk impacts from the 2016 HRA and from the 2020 HRA.

TABLE 2 GKN CHEM-TRONICS ACUTE RISK COMPARISON - 2016 HRA VS. 2020 HRA		
Receptor	2016 HRA Acute Risk Impact (HHI)	2020 HRA Acute Risk Impact (HHI)
PMI	1.45	0.67
MEIW	1.36	0.62
MEIR	0.38	0.21
Sensitive (MERIT Academy)	0.50	0.37
Sensitive (Home of Guiding Hands)	0.21	0.13

5.0 RISK REDUCTION SCHEDULE

The following schedule for implementing the proposed change to the five blast booth permits is proposed:

TABLE 3 SCHEDULE OF RISK REDUCTION MEASURES IMPLEMENTATION			
Source	PTO ID	% Acute Risk Contribution	Reduction Measure Implementation Date(s)
Chem Mill Sandblast	APCD2003- PTO-006657	68%	Immediately incorporate site specific District approved EF; Reduce use for (Ni-containing) tubes by December 2023; Retire or modify permit App by September 2026
Thermal Spray Booths #1 #2 #4	APCD2007- PTO-870207, APCD2007- PTO-910006, APCD2007- PTO-981058	20% (total)	Relocate metal spray to new location not contiguous with current facility (1756 Weld Boulevard) Evaluate Toxics New Source Review compliance for new location 2023; Submit permit Relocation Modification Applications September 2024. Source maintain HEPA controls, new risk location evaluations required
Alum Oxide Blast Booth (6)	APCD2003- PTO-973604	4%	Immediately incorporate site specific District approved EF; Submit Permit upgrade modification application by September 2023
Alum Oxide Blast Booths (4) and (2)	APCD2003- PTO-973606	2%	Immediately incorporate site specific District approved EF; Develop replacement plan by December 2023; Replace Booth 4 Empire by September 2024

6.0 CONCLUSIONS

This report includes the required information from Rule 1210(e) regarding the RRAP required content. Offsite acute risk impacts have been reduced to below the Rule 1210 threshold as of the 2020 TEI and HRA, the proposed risk reduction activities detailed in this plan demonstrate GKN is taking necessary steps to maintain health

risk reductions from expected current and future facility operations at below threshold levels.