

## Letter Report - CARB Application

December 21, 2020

Intertek Report No.104467759CRT-001A

Intertek Project No.G104467759

Scientific Air Management LLC  
Randy Nobles  
1301West Copans Road  
Suite C6  
Pompano Beach, FL 33060  
USA

Phone: (305) 244-4894  
Email: Randy.Nobles@samairsystems.com

**Subject:** CARB Application for model: SAM400

Dear client;

This letter report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standard(s):

Electrostatic Air Cleaners, UL 867, Section 40, Fifth Edition, August 4, 2011 revision:  
August 7, 2018.

*For the purpose of meeting;*

*REGULATION FOR LIMITING OZONE EMISSIONS FROM INDOOR AIR CLEANING DEVICES, California Code of Regulations, Title 17. Public Health, Division 3. Air Resources, Chapter 1. Air Resources Board, Subchapter 8.7. Indoor Air Cleaning Devices, Article 1. Indoor Air Cleaning Devices.*



Intertek wishes to inform you that the applicable sections of the CARB application for the above-mentioned product has been completed by Intertek. The application form is ready for you to take the necessary actions for completion and submission to CARB.

Documents issued with this letter report:

- PDF of the CARB application, included in this letter report
- An editable version of the CARB application
- The Chain of Custody file for the CARB application

Please contact the California Air Resource Board for further inquiries related to the status of your application and the addition of your product to their directory. For any request regarding additional evaluation please contact you Intertek account manager.

Issuance of this letter report completes the evaluation and testing covered by Intertek Project No. G104467759. If there are any questions regarding the contents of this report, please do not hesitate to contact the undersigned.

Completed by:	Paul J. Comfort Jr. Senior Associate	Reviewed by:	Jacob Langenbacher
Title:	Engineer	Title:	Engineer
Signature:		Signature:	
Date:	December 17, 2020	Date:	December 21, 2020

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March 10, 2021

Randolph Nobles  
Scientific Air Management LLC  
1301 West Copans Road, Suite C6  
Pompano Beach, Florida 33060

Dear Mr. Nobles:

Thank you for submitting application number 2890 for certification of your indoor air cleaning device by the California Air Resources Board (CARB). CARB staff have reviewed the submitted application for completeness and concluded that the application is complete. CARB staff have also determined that your device, Scientific Air Management brand, model S400, model number 2017009911, complies with the State of California's testing, electrical safety, and ozone requirements specified in Title 17, California Code of Regulations, subchapter 8.7 "Indoor Air Cleaning Devices" (air cleaner regulation).

As part of the regulation, CARB issues Executive Orders for all devices that have been certified as meeting the requirements of the regulation. The enclosed Executive Order, number G-21-088, is a legal document that states that the indoor air cleaning device listed has completed the certification process required by the State of California.

Although your air cleaner has been certified by CARB, several further steps are required in order to ensure that it complies fully with the air cleaner regulation. The unit is required to display a label printed on the package that indicates CARB certification. The labeling requirements are found in Sections 94801(a)(20) and 94806 of the Final Regulation Order (at [ww2.arb.ca.gov/our-work/programs/air-cleaners-ozone-products/air-cleaner-regulation-ab-2276](http://ww2.arb.ca.gov/our-work/programs/air-cleaners-ozone-products/air-cleaner-regulation-ab-2276)). Please note that these include specifications regarding the size, content, and placement of the label indicating the device's compliance with the regulation on the device's packaging.

In addition to the package labeling requirements, the air cleaner must also carry the mark of the testing organization, per Section 94806(d) of the regulation. Also, please review the record keeping requirements regarding production, quality control, sales, and testing records, which are specified in Section 94808 of the regulation; such records must be maintained for as long as the air cleaning device is sold or in commerce, and make the records available to CARB upon request.

Manufacturers of CARB certified air cleaning devices are no longer required to implement the notification requirement for their certified devices. Manufacturers of uncertified ozone-generating air cleaning devices manufactured, sold, or distributed in

# INDOOR AIR CLEANING DEVICE CERTIFICATION APPLICATION

Please read the instructions carefully before completing this application.

## A. APPLICANT INFORMATION

### 1. Manufacturer/Entity Submitting Application

Contact Person

First

Last

Mailing Address

City

State/Province

Zip

Country

Phone

Fax

Email

Website

### 2. Model Manufactured For

Contact Person

First

Last

Mailing Address

City

State/Province

Zip

Country

Phone

Email

If manufactured for multiple brand name retailers, please attach contact information for all other such retailers.

### 3. Company/Plant Where Manufactured (if different from 1.)

Contact Person

First

Last

Mailing Address

City

State/Province

Zip

Country

Phone

Email

☐ Please check this box if Section A contains proprietary information that you wish not to be made public

## B. MANUFACTURER REPRESENTATIVE INFORMATION

(Complete if application is being submitted by a professional association or certification organization on behalf of the manufacturer.)

### Organization

Contact Person

First

Last

Mailing Address

City

State/Province

Zip

Country

Phone

Email

Relationship to Manufacturer

☐ Please check this box if Section B contains proprietary information that you wish not to be made public

# INDOOR AIR CLEANING DEVICE CERTIFICATION APPLICATION

## C. INDOOR AIR CLEANING DEVICE INFORMATION

**1. Device Details:** Please provide complete information for the model to be certified. The information given below will determine how the device is listed on ARB's webpage upon certification.

Brand Name		Model Number	
Model Name		Variation (see below)	

Is this model part of a model group that has previously been certified? ☐ Yes ☐ No

If **"yes"**, please enter the application number of the model already certified, enter the model variations from the previously certified model in section C.1 above, and complete section C. 2 below. \_\_\_\_\_

If **"no"**, skip section C. 2 and proceed to section C.3 below.

**2. Brand and model information for the previously certified air cleaner, if applicable.**

Brand Name		Model Number	
Model Name		Model Group	

**3. Additional Models.** Please list all additional models that you wish to add to this model group in the box below. If you have more than 8 additional models, please obtain a separate application number and complete another application form.

**Include all differences from the model tested.**

Brand Name	Model Name and Number	List all differences from model tested

☐ Please check this box if Section C contains proprietary information that you wish not to be made public

*I have reviewed ARB's definition of "model group" in the instructions for this application, and have determined that the models listed meet ARB's definition of "model group."*

Signature \_\_\_\_\_

(Manufacturer or representative of the manufacturer)

Date \_\_\_\_\_

Print Name \_\_\_\_\_

Title \_\_\_\_\_

## INDOOR AIR CLEANING DEVICE CERTIFICATION APPLICATION

### D. DEVICE DESIGN AND OPERATION

**1. Principles of Design and Operation.** DESCRIBE THE BASIC DESIGN AND FUNCTIONAL CHARACTERISTICS OF THE AIR CLEANER BELOW. Attach schematics and additional documentation sufficient to verify the design and operation principles. Also attach schematics for all additional models listed in Section C that have any mechanical or electronic differences from the tested device model, and highlight those mechanical or electronic differences. PLEASE LIST RELEVANT ATTACHMENTS AND SPECIFY PERTINENT PAGE NUMBERS BELOW.

**2. Maintenance Requirements.** Describe all maintenance requirements. Attach additional documentation as appropriate. PLEASE LIST ALL RELEVANT ATTACHMENTS AND SPECIFY PERTINENT PAGE NUMBERS BELOW.

**3. Documentation of meeting appropriate electrical safety test requirements for mechanical-filtration devices tested before October 18, 2008.** Please indicate here the title of any such documentation that you are submitting with this application. Documentation must demonstrate the device's compliance with ANSI/UL Standard 507, or for multifunction devices, the appropriate electrical safety standard. Completion of Sections E and F of the application by the laboratory that completed the testing is considered adequate documentation and will expedite the review of your application. For other acceptable forms of documentation please see the certification application instructions.

**4. Available marketing materials, owner's manuals, listing reports, and a copy of the listing directory are enclosed.** ☐

If the listing directory is not enclosed, enter the web address to the electrical safety listing page in section G.

☐ Please check this box if Section D, and attachments listed therein, contains proprietary information that you wish not to be made public

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*The information provided in Sections A through D on this form is true and correct to the best of my knowledge.*

Signature \_\_\_\_\_

Date \_\_\_\_\_

(Manufacturer or representative of the manufacturer)

Print Name \_\_\_\_\_

Title \_\_\_\_\_

**Sections E and F to be Completed by the Testing Laboratory Only****INDOOR AIR CLEANING DEVICE CERTIFICATION APPLICATION****E. AIR CLEANER TEST INFORMATION** (To be Completed by the Testing Laboratory Only)

Testing Organization Intertek

Facility ID Cortland Rt 11 Chamber ID CRT-OZONE01

Test Document 104467759CRT-001

Mailing Address 3933 US Route 11

Cortland NY 13045  
City State Zip

Contact Person Michael Hudon  
First Last

Phone 607-753-6711 Fax 607-753-7560

Email michael.hudon@intertek.com Website www.intertek.com

**F. AIR CLEANER TEST RESULTS** (To be Completed by the Testing Laboratory Only)

1. This device meets the requirements of the ANSI/UL standard indicated below, **in its entirety**. Mark the applicable standard(s).

☐ 507 ☐ All of 867 ☒ Only Section 40 - Ozone Test ☐ Other Standard (if not listed) \_\_\_\_\_

If OSHA Supplemental Programs were used to conduct electrical safety testing, indicate which programs were used.

☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 10 (SNAP) ☐ Other (specify): \_\_\_\_\_

2. **Ozone test results** following procedures of Section 37 of ANSI/UL 867, 4th Edition, published December 21, 2007, and subsequent UL Certification Requirement Decisions.

Unit	Manufacture Date	Date Ozone Test Completed	Model Name and Number	Serial Number, Unique Manufacture Date Code or Lab Sample Number
Unit 1	Oct 12, 2020	Dec 16, 2020	SAM400	G400-00-02160 (CRT2012091007-001)
Unit 2	Oct 12, 2020	NA	SAM400	G400-00-02158(CRT2012091007-002)

a. Can the device be operated with the fan(s) not functioning? If yes, must test. ☐ Yes ☒ No

b. Can the device be operated with filters removed? ☒ Yes ☐ No

c. Is the device designed for use with multiple filter technologies? ☐ Yes ☒ No

d. Was the device tested with all filter(s) removed? (Please explain below). ☒ Yes ☐ No

e. **Filter Removal:** If answering "no" to either (b) or (d), then briefly explain how the ozone emissions test was conducted in accordance with ANSI/UL Standard 867, Sections 37.4.6A and 37.4.7. Attach additional sheets if necessary.

f. Did any transitory measurements exceed 0.050 ppm? ☐ Yes ☒ No

## INDOOR AIR CLEANING DEVICE CERTIFICATION APPLICATION

**Report ozone test results below as the maximum concentration minus the background concentration. If the device is provided with multiple speeds/output levels, please provide the ozone test results for all settings for which the device was tested. Attach additional sheets if necessary.**

List Setting	Concentration (ppm)	Test Length (hrs)	Concentration (ppm)	Test Length (hrs)
High fan speed (24 light bars lit). HEPA and Carbon Filters installed. UV Light on.	0	8		
Low fan speed (1 light bar lit). HEPA and Carbon filters removed. UV light on	0.001	8		
Low fan speed (1 light bar lit). HEPA and Carbon filters installed. UV light on	0.001	8		

**Please describe any test failures, transitory exceedances, and other related information.** Relevant information includes excess transitory excursions, motor failure during the test, devices not received with packaging intact, stopping the test due to electrical parts overheating, etc. Attach additional sheets, if necessary. List all relevant attachments and specify pertinent sections/page numbers from all attachments below.


**Please also list any ATM, listing report number or other relevant information, if available, below.**

Electrical Safety evaluation underway at Intertek: Project G104500098.

☒ **A copy of the chain of custody sheet for the device(s) tested is attached.**

*I personally tested this device, or am the representative who is responsible for the tests; the information provided in Sections E and F of this application is true and correct to the best of my knowledge.*

Signature



Date

Dec 17, 2020

(Test facility or test organization representative)

Print Name

Paul J. Comfort Jr.

Title

Senior Associate Engineer

## **INDOOR AIR CLEANING DEVICE CERTIFICATION APPLICATION**

### **G. ADDITIONAL COMMENTS (attach additional sheets if necessary)**

Signature \_\_\_\_\_

Date \_\_\_\_\_

(A signature is only necessary here if Section G is filled in.)

Print Name \_\_\_\_\_

Title \_\_\_\_\_

#### **Manufacturer Checklist for Submission of Air Cleaner Application.**

Before submitting your application please make sure that you have completed all of the following:

- ☐ Include the application number that was assigned to you by ARB on each page of the application
- ☐ Sign the application on page 3. If applicable, sign the form on page 2 and 6.
- ☐ Have the testing laboratory complete Sections E and F and obtain the required signature from the testing laboratory on page 5.
- ☐ Include device schematics depicting operation, such as a wiring diagram or block diagram, for all devices listed in Section C.
- ☐ Attach a chain of custody form for devices receiving the ozone test.
- ☐ Include operations manuals and marketing materials, as available.
- ☐ Include documentation of meeting the current electrical safety requirements, e.g. testing report, listing number and link to the listing directory web page. Mechanical-filtration only devices certified to the appropriate electrical safety standard prior to October 18, 2008 only require submission of documentation of previously successful electrical safety testing.



# Chain of Custody Form

## Ozone Testing Facility



As of: 12/16/2020 8:00AM

Control Number: CRT2012091007-001 Client: Scientific Air Management

Model Number: SAM400 Project Number: G104467759

Serial Number: G400-00-02160 Sample Selection: 1 / 2

Notes:

Name	Purpose	Location	Date	Notes
Shipping	Received	Warehouse	12/09/2020	
Joe Hartley	Move	Fan Lab	12/12/2020	
Joe Hartley	48 Hr. run-in	Fan Lab	12/12/2020	Start run-in 2:15PM
Joe Hartley	Move	Ozone	12/14/2020	Stop run-in 2:25PM
Paul Comfort	Half-life	Ozone	12/14/2020	
Paul Comfort	Peak O3	Ozone	12/14/2020	
Paul Comfort	Max O3	Ozone	12/14/2020	
Paul Comfort	Peak O3	Ozone	12/15/2020	
Paul Comfort	Max O3	Ozone	12/15/2020	
Paul Comfort	Max O3	Ozone	12/15/2020	

# Chain of Custody Form

## Ozone Testing Facility



As of: 12/16/2020 8:00AM

Control Number: CRT2012091007-002 Client: Scientific Air Management

Model Number: SAM400 Project Number: G104467759

Serial Number: G400-00-02158 Sample Selection: 2 / 2

Notes:

Name	Purpose	Location	Date	Notes
Shipping	Received	Warehouse	12/09/2020	

Randolph Nobles  
March 10, 2021  
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California are required to submit documentation that they have notified their distributors, retailers, and sellers about this regulation and have provided a copy of the regulation to them. Information about the notification requirement may be found in Section 94807 of the regulation located at <https://ww2.arb.ca.gov/our-work/programs/air-cleaners-ozoneproducts/air-cleaner-regulation-ab-2276>.

Please note that we have an email address that we ask you to use for submittal of all new applications, requests for application numbers, and any general questions you may have about the regulation. The email address is [aircleaners@arb.ca.gov](mailto:aircleaners@arb.ca.gov). Note that you will normally receive confirmation that we have received your application or request within 1-2 business days of receipt. If you have not received an email from us confirming receipt of your request within 5 days of submittal, please contact us directly.

For questions regarding the regulation, please view CARB's responses to frequently asked questions (FAQ), available at [ww2.arb.ca.gov/resources/fact-sheets/complying-air-cleaner-regulation](http://ww2.arb.ca.gov/resources/fact-sheets/complying-air-cleaner-regulation). If your question is not answered in the FAQ, or you have questions regarding this application, Executive Order, or testing and certification in the future, please contact Julia Gress at [Julia.Gress@arb.ca.gov](mailto:Julia.Gress@arb.ca.gov) or (916) 324-9233. For any general questions, you may also contact me directly at [Elizabeth.Scheehle@arb.ca.gov](mailto:Elizabeth.Scheehle@arb.ca.gov) or at (916) 323-4519.

Sincerely,

*Elizabeth Scheehle* (Electronically Signed 3/10/2021)

Elizabeth Scheehle  
Chief, Research Division

Enclosure

cc: Randolph Nobles (by email)  
Scientific Air Management LLC  
[randy.nobles@samairsystems.com](mailto:randy.nobles@samairsystems.com)

Julia Gress  
Research Division

**State of California  
AIR RESOURCES BOARD**

**EXECUTIVE ORDER G-21-088**

**Relating to Certification of Indoor Air Cleaning Devices**

**Scientific Air Management LLC**

**Brand: Scientific Air Management  
Model: 2017009911**

WHEREAS, the California Air Resources Board (CARB) was given authority under California Health and Safety Code (HSC) sections 41985 and 41986 to develop and adopt regulations to protect public health from ozone emitted by indoor air cleaning devices used in occupied spaces;

WHEREAS, sections 41986(b)(2) and 41986(b)(3) of the HSC require CARB to include in its regulation testing and certification procedures that enable the Board to verify that an indoor air cleaning device meets the applicable emission concentration standard;

WHEREAS, CARB adopted sections 94800 through 94810, title 17, California Code of Regulations (CCR) on September 27, 2007 which include testing and certification requirements and specify the necessary information required in any application for certification;

WHEREAS, CARB has specified in CCR section 94805 that all indoor air cleaning devices, unless exempted, must be tested following ANSI/UL Standard 867, or ANSI/UL Standard 507 for mechanical filtration devices, to assure that the ozone emission concentration limit of 0.050 ppm and the electrical safety requirements have been met;

WHEREAS, Scientific Air Management LLC has submitted an application for certification of the following Scientific Air Management brand indoor air cleaning device: Model 2017009911;

WHEREAS, Scientific Air Management LLC has submitted the required documentation of testing results from a Nationally Recognized Testing Laboratory as required in CCR section 94804;

WHEREAS, the Scientific Air Management LLC application for certification of its air cleaning device has been evaluated, and its air cleaner has been found to comply with the criteria for issuance of an executive order;

NOW THEREFORE, pursuant to the authority vested in CARB by sections 39600 and 39601 of the HSC, and pursuant to the authority vested in the undersigned by sections 39515 and 39516 of the HSC;

IT IS ORDERED AND RESOLVED that the indoor air cleaner produced by Scientific Air Management LLC as described in its application for certification of said device is hereby certified as meeting the performance standards applicable to indoor air cleaning devices.

IT IS FURTHER ORDERED that Scientific Air Management LLC must comply with the additional requirements specified in title 17, CCR sections 94806 and 94808, regarding labeling and recordkeeping, respectively;

IT IS FURTHER ORDERED that any alteration of the components or design of the certified indoor air cleaning model is prohibited and is inconsistent with this certification, unless said alteration has been approved by the Executive Officer or his designee;

IT IS FURTHER ORDERED that pursuant to CCR section 94809, if the Executive Officer determines a violation has occurred, he or she may order that the product involved in or affected by the violation be recalled and replaced with a complying product. He or she may also assess penalties authorized by law, or revoke or modify this certification as provided in CCR section 94804(f).

Executed at Sacramento, California this 10<sup>th</sup> day of March 2021.

*Elizabeth Scheehle* (Electronically Signed 3/10/2021)

Elizabeth Scheehle  
Chief, Research Division

cc: Richard W. Corey  
Executive Officer