



**California Air Resources Board
Refrigerant Management Program (RMP)
Refrigerant Registration and Reporting System (R3)
Updates and User Training**

January 20, 2016



Agenda

- Overview: Refrigerant Management Program (RMP)
- Overview: Refrigerant Registration and Reporting (R3) System
- Demonstration:
 - Registration
 - Service Records Data Entry
 - Annual Report Submittal and Fee Payment
- Questions

RMP program web page: www.arb.ca.gov/rmp
R3: www.arb.ca.gov/rmp-r3
RMP email help line: rmp@arb.ca.gov

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Commonly Used Terminology

- High-GWP refrigerant – those with a global warming potential greater than 150.
- Refrigeration systems
 - System size
 - Small – more than 50 lbs., but less than 200 lbs.
 - Medium – 200 lbs. or more, but less than 2,000 lbs.
 - Large – 2,000 lbs. or more
 - Facility size
 - Based on single largest refrigeration system on site

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Commonly Used Terminology



- ALD – Automatic Leak Detection system
- Facility type
 - Refrigeration Facility – facility that uses refrigeration systems (most common facility type)
 - Refrigerant Distributor/Wholesaler – sells refrigerant
 - Refrigerant Reclaimer – receives and reprocesses or disposes of used refrigerant

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Overview

Refrigerant Management Program (RMP)



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RMP Program Overview



- Regulation implements California Global Warming Solutions Act (AB 32)
- In effect since January 1, 2011
- Complements existing federal and local rules
 - U.S.EPA Rule 608 currently being amended
 - South Coast AQMD rule 1415.1 (must register with RMP now)
- Focuses on leak inspection & repair
- Repairing leaks can save businesses money

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RMP Program Overview

Applicability



- Facility with a refrigeration system
 - Stationary, non-residential
 - More than 50-lbs of a high-GWP refrigerant (GWP>150)
 - Excludes comfort cooling, ammonia systems
- Distributors, Wholesalers, Reclaimers
- Any person who installs, services, or repairs a high-GWP gas refrigeration or a/c system

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RMP Overview

Key Requirements



- Facilities with refrigeration systems
 - Repair leaks within 14 days of detection
 - Keep records of service and refrigerant transactions
 - Follow required service practices
 - Conduct periodic leak inspections
 - File annual report and pay fee (medium and large facilities)
- Distributors, wholesalers, reclaimers
 - Keep records of refrigerant transactions
 - File annual report

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RMP Overview

Phase-In Schedule



In effect for all Facilities	<ul style="list-style-type: none">- Periodic leak inspections or ALD- Prompt leak repairs- On-site recordkeeping- Required service practices
Due Annually By March 1	<ul style="list-style-type: none">- Large and Medium facilities (≥200 lbs.) report and pay fee- Distributors, wholesalers, reclaimers report
Due by March 1, 2016	<ul style="list-style-type: none">- Small facilities (50 to 200 lbs.) register

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Overview

Refrigerant Registration and Reporting System (R3)

<http://www.arb.ca.gov/rmp-r3>

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R3 Overview

New Features

- Progress status bar



- Small facilities register
 - Facilities whose largest refrigeration system is more than 50 lbs. but less than 200 lbs.

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R3 Overview

Registration Workflow

All Facility Sizes

Company with Refrigeration Systems
Registration Steps

Add Users
(Optional)

1a) Create User Profile

1b) Register Company

2a) Register Facility

2b) Register Refrigeration System

3) Register Automatic Leak Detection System (ALD)

Registration includes:

- Company,
- Facility,
- System,
- ALD (if applicable)

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R3 Overview

Service Records Data Entry Workflow

Large and Medium facilities



- Enter Service Records
 - Leak inspections, leak repairs, other maintenance
 - ALD audits, calibrations, repairs, etc.
- Batch upload data from refrigerant management software
- Enter at any time

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R3 Overview

Annual Reporting Workflow

Large and Medium facilities
Distributors/Wholesalers
Reclaimers



After January 1, but
No later than March 1

Facility with Refrigeration Systems
Annual Reporting Steps

- Review & Update Company Information
- Review & Update Facility Information
- Review & Update Refrigeration System Information
- Review & Update Automatic Leak Detection System (ALD) Information
- Review & Update Refrigeration System Service Records
- Enter Summary Refrigerant Usage

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R3 Overview

Annual Fee Payment Workflow

Large and Medium facilities



Company with Refrigeration Systems
Annual Payment Steps

- Select Facility
- Check that Annual Report is Filed
- Create & Print Invoice
- Pay with Check
- Pay Online using CreditCard

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R3 Overview
User Reports



- Reports can be printed from the R3
 - Facility and system leak rates
 - Refrigerant losses
 - Facility and system leak repair history
 - Inspections by enforcement agencies

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R3 Overview
Common Mistakes and Solutions



- **Incomplete registration**
 - Enter all facility information
 - All refrigeration system information
 - All ALD system information
- **Service records not entered**
 - Required leak inspections
 - Annual for Small systems - same time each year
 - Quarterly for Medium systems - every 90 days (+/- 20 days)
 - When additional refrigerant added
 - Leak repairs
 - ALD servicing
 - Other maintenance affecting refrigerant

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R3 Overview
Common Mistakes and Solutions



- **Incorrect refrigerant usage on the Annual Report**
 - Report the annual summary of refrigerant purchased, used, disposed of
- **Invoice not created and/or sent with payment**
 - Print and send a copy of the invoice along with the check to ARB at the address on the invoice

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Company Registration Information

Terms and Conditions



Payment Responsibility (if applicable) ?

Who is responsible for making payments? Company Facility

Terms and Conditions

Thank you for using ARS's Refrigerant Management Program (RMP) Refrigerant Registration and Reporting (R2) system. By using the R2 system, you agree to be bound by the following terms and conditions. By creating your company's account for the R2 system, you certify that you are authorized to agree to the following terms and conditions on your company's behalf and do in fact agree to these terms and conditions. As your company's Administrator you will be able to assign additional users (Delegates) to view and edit your company's account information. As the Administrator of your company's profile, you agree that these terms and conditions are also binding on your Delegates.

NON-COMMERCIAL USE

I accept Terms and Conditions

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Dashboard



ARS RMP Home Page

BRL Profile | Logout

ARS Resources Board

Logged in as: Ken Bowers
(Company Admin)
(Welcome 2015)

Home | Registration | Annual Reporting | Payments | Reports | Inspection

Welcome "Ken Bowers" to Refrigerant Management Program

Welcome to the Refrigerant Registration and Reporting System (R2). You are logged in as a Company Admin type user. The quick links on the left side of this page show activities available for users of your role type. Select an activity from the quick links or from the menus on the red tab bar above.

Quick Links

- [Manage Library](#)
- [Manage Facility](#)
- [File Annual Report](#)
- [Make Payments](#)
- [Reports](#)

Facility | Refrigeration Systems | AED | Service Record | Annual Report | Payment | Inspection

No facility is registered yet, please [click here](#) to register a facility.

Back to Top | All ARS Contacts | A-Z Index

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Facility Registration



New Facility Details Mandatory ? Help

Company Name:

Facility Name:

Date of Operation:

Facility Contact Person Information

Facility contact person is same as company contact person.

Solution: First Name: Last Name:

Position: Phone: Email:

Mailing Address Information

Facility mailing address is same as company mailing address.

Street Address 1:

Street Address 2:

City: State: Zip:

Location Address Information

Facility location address is same as facility mailing address.

Street Address 1:

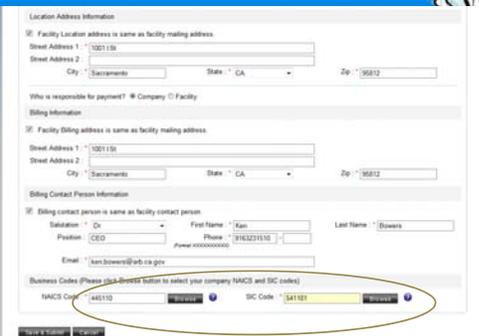
Street Address 2:

City: State: Zip:

Who is responsible for payment? Company Facility

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Facility Registration



Location Address Information

Facility Location address is same as facility mailing address

Street Address 1: 1001150
Street Address 2:
City: Sacramento State: CA Zip: 95812

Who is responsible for payment? Facility Company

Billing Information

Facility Billing address is same as facility mailing address

Street Address 1: 1001150
Street Address 2:
City: Sacramento State: CA Zip: 95812

Billing Contact Person Information

Billing contact person is same as facility contact person

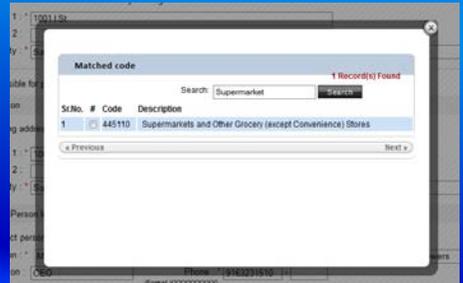
Salutation: Dr First Name: Ken Last Name: Bowers
Position: CEO Phone: (916)3231510
Email: ken.bowers@arb.ca.gov

Business Codes (Please click Browse button to select your company NAICS and SIC codes)

NAICS Code: 445110 SIC Code: 541101

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NAICS and SIC Code Lookup



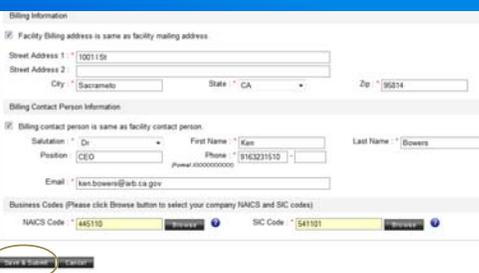
Matched code

Search: Supermarket Search

Sl.No.	#	Code	Description
1		445110	Supermarkets and Other Grocery (except Convenience) Stores

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Facility Registration



Billing Information

Facility Billing address is same as facility mailing address

Street Address 1: 1001150
Street Address 2:
City: Sacramento State: CA Zip: 95812

Who is responsible for payment? Facility Company

Billing Information

Facility Billing address is same as facility mailing address

Street Address 1: 1001150
Street Address 2:
City: Sacramento State: CA Zip: 95812

Billing Contact Person Information

Billing contact person is same as facility contact person

Salutation: Dr First Name: Ken Last Name: Bowers
Position: CEO Phone: (916)3231510
Email: ken.bowers@arb.ca.gov

Business Codes (Please click Browse button to select your company NAICS and SIC codes)

NAICS Code: 445110 SIC Code: 541101

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Facility List Page

Webinar 2015 Test Facility

Facility Name	Company Name	Address	City	Refrigeration Type	ALD	Status	Print
Webinar 2015 Test Facility	RIR Reg Test Company	10011 St.	Sacramento	1 ALD	1 ALD	Active	Print

Refrigeration Systems

Manage Facility

Welcome "Ken Bowers" to Refrigerant Management Program

- Quick Links
 - Manage Users
 - Manage Facility
 - Facility Details
 - Manage Facilities
 - Reports

Progress Status Bar

Facility Information | Refrigeration System | ALD System | Leak Insp. & Service | File Annual Report | Annual Fee Payment | Analytics

Edit Facility Details

Company Name: RIR Reg Test Company

Facility Name: Webinar 2015 Test Facility

AP ID: SACRAMENTO METROPOLITAN AGMS

Type of ownership: Company with refrigeration facility

Edit information button

Refrigeration Systems

ASB RMP Home Page

Facility Information | **Refrigeration Systems** | Add System | Leak Check & Service | File Annual Report | Annual Fee Payment | Analytics

Refrigeration System ID	Operational Status	Manufacturer	Full charge Amt.	Installation Date	Refrigerant Type	Price
18-123456	Normal Operation	F108	3600.00	10/16/2008	R-407C	

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Add a Refrigeration System

Add New Refrigeration System

Refrigeration System ID: KB Medical 2010 Facility System 1

Installation Date: 10/16/2008

Model Year: 2007

Manufacturer: F108

Model or Description: Front cooler model 10845

Equipment Type: Freezer

Serial Number: 02688401048

Location - Description: West wing outside of building

Attach floor plan: refrigerants.pdf

Temperature Class: Low

Operational Status: Normal Operation

Refrigerant Full Charge Amount: 3600

Refrigerant Type: R-407C

Means by which Charge Amount Determined: Name plate

Does this system have an ALO?: Direct ALO used

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ALD Systems

SHERLOCK MODEL 492

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ALD Systems

ARB Home | Registration | Annual Reporting | Payments | Reports | Inspection

Facility Information | Registration Info | **ALD Systems** | Alarms & Service | Site Annual Report | Annual Fee Payment | Analytics

Equipment ID	Equipment Type	Sensor Type	Number of Sensors	Manufacturer
System 1 ALD	Concentration Monitor...	NDH6	5	Emerson

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Add an ALD System

Add New Leak Detection Equipment (if Applicable)

ALD System ID: System 1 ALD

Installation Date: 11/18/2015

System Type: Concentration Monitor (Direct System)

Detection Limit: 100

Alarm Set Point: 100

Concentration Monitor Type: Distributed inlets or sensors with comp.

Concentration Monitor Manufacturer: Emerson

Number of Sensors: 5

Sensor Type: NDH6

Sensor Manufacturer: Emerson

Location of Sensors/Inlets: Near compressor, evaporator, and condenser

Refrigerant System: R410A

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Leak Inspection and Service Records

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Leak Repair Service Records



Leak Repair

Cause of refrigerant leak: Evaporator - Coil

Date leak detected: 09/08/2015

Date leak repaired: 09/09/2015

Days to repair: 1 Days

Initial verification test date: 09/09/2015

Follow-up verification test date: 09/09/2015

Description of leak repair: brazing leaking coil

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Leak Inspections and Service



Date of Service: 09/09/2015

Type of service: Leak repair

Leak(s) detected: No leaks detected

New Refrigerant Added amount: 500 pounds

Refrigerant Removed But Not Returned to System amount: 400 pounds

Net refrigerant amount: 100.00 pounds

Refrigerant type: R-407c

Leak detection method: Calibrated leak detection device

Purpose of added or removed charge: Leak Repair

Extra time for retribeament plan needed: Days

Leak Repair

Cause of refrigerant leak: Evaporator - Coil

Date leak detected: 09/08/2015

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Leak Inspections and Service



Service Record has been added successfully.

1 2 3 4 5 6

Facility Information Refrigeration System A/D System Leak Insp. & Service File Annual Report Annual Fee Payment Analytics

Refrigerant System: Please Select. Service Type: Please Select.

From: To: Search Reset Search Print Results

Refrigeration System Servicing						2 Record(s) Found
Service Date	Refrigeration ID	Refrigeration Type	Refrigerant Amt.	Service Type	Leak(s)	Print
08/11/2015	89 Webster 2015	R-407c	-250.00	Monthly leak inspection	Yes	
09/14/2015	89 Webster 2015	R-407c	+250.00	Leak repair	Yes	

1 2 3 4 5 6

Leak Detection System Servicing

1 Record(s) Found

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ALD Service Records



Leak Detection System Servicing 1 Record(s) Found

Service Date	ALD system ID	Service Type
01-05-2015	System 1 ALD	Audit

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ALD Service Records



Choose System type for Servicing Help for this Page

Facility Name:

System Type:

ALD System:

Date of Service:

Type of service:

Detection limit indicated after service:
 Alarm set point after service:
 Description of service:

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Annual Reports



Annual Report

Facility Name:

System Type:

ALD System:

Date of Service:

Type of service:

Detection limit indicated after service:
 Alarm set point after service:
 Description of service:

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Online Credit Card Payment



The screenshot shows a web form for making a credit card payment. At the top, it says "California Environmental Protection Agency Air Resources Board" with contact information. The form is titled "Make Payment" and includes a "Bill To" section with fields for Invoice Number, Name On Credit Card, Company Address, Credit Card Number, Expiration Date (MM/YY), Amount, and CVV2. Below this is a "Billing Address" section with fields for Company, First Name, Last Name, Address1, Address2, City, State/Province, Postal Code, Country, Phone, and Email Address. A "Process" button is at the bottom.

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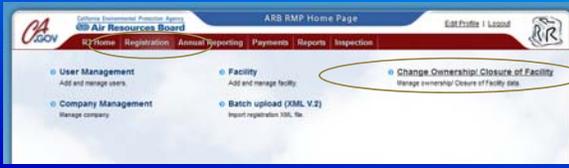
Other Features



A blue gradient box with the text "Other Features" and a small icon of a cube with "RR" on it.

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Sale or Closure of a Facility



The screenshot shows the "ARB RMP Home Page" navigation menu. The menu items are: Home, Registration, Annual Reporting, Payments, Reports, Inspection, User Management (Add and manage users), Facility (Add and manage facility), Change Ownership/Closure of Facility (Manage ownership/Closure of facility data), and Batch upload (XML V.2) (Input registration XML file).

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Finished!



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Reminders



- Facilities whose largest refrigeration system is a **small system (50 to 200 pounds)** register by **March 1, 2016**
- Medium and Large facilities submit Annual Report and pay annual fee by March 1, 2016

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Resources



- Registration Video
 - <https://youtu.be/n-SZ4IOcO10>
- Website
 - R3 tool website: www.arb.ca.gov/rmp-r3
 - RMP Program website: www.arb.ca.gov/rmp
- Hotline
(916) 324-2517
- Email
rmp@arb.ca.gov
- Listserve
Sign up on website

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ARB Contacts



- Erin Szelagowski
916.327.8543
erin.szelagowski@arb.ca.gov
- Ken Bowers
916.323.1510
ken.bowers@arb.ca.gov

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QUESTIONS?



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