Appendix D

Summary of the Public Process for Development and Implementation of the High-Global Warming Potential Stationary Source Refrigerant Management Program (RMP)

Research Division

Release Date

October 23, 2009

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1. Background

The proposed Refrigerant Management Program (RMP) is an AB 32 early action measure designed to reduce the emissions of high global warming potential (GWP) greenhouse gases in California by requiring some best practices in the management of refrigerants by system owners/operators, repair technicians, wholesale distributors, and reclaimers. High-GWP refrigerants, including chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), and hydrofluorocarbons (HFC), typically have thousands of times greater global warming potency than carbon dioxide (CO2). High-GWP refrigerants are used in a broad array of sectors in California that use refrigeration and air conditioning systems. California Air Resources Board (ARB) staff estimate that approximately 26,000 businesses in California are applicable to the proposed RMP and use commercial refrigeration systems with more than 50 pounds high global warming potential (GWP) refrigerant. Because high-GWP refrigerants are used by many different business types ARB staff conducted extensive outreach efforts during the rule development process.

Throughout the rule development process ARB staff relied upon a diverse set of methods to distribute information about the proposed rule and solicit comments and feedback from potentially impacted industries. Pre-rule adoption outreach efforts included: technical work group meetings, statewide public workshop series, individual meetings with stakeholders, phone calls to trade associations, direct phone calls to individual businesses, e-mail list serves, and development of outreach materials. As an example of the extensive outreach efforts made during the rule development process ARB staff contacted 67 trade associations and 800 individual businesses. ARB staff has developed a comprehensive post-rule adoption outreach plan that utilizes the strength of the previous outreach efforts conducted and builds upon them to communicate with an even more extensive group of stakeholders.

2. Introduction

The RMP is a regulation proposed by the California ARB to reduce the emissions of high-GWP refrigerants used in stationary non-residential refrigeration systems. ARB staff estimate that greenhouse gas emissions in California could be reduced by approximately 8 million metric tons carbon dioxide equivalent annually through the facility registration, reporting, leak inspection, and maintenance requirements included in the RMP (see Appendix B for details). Appendix B provides a description of the methods used to estimate statewide emissions of high-GWP refrigerants from stationary non-residential refrigeration and air-conditioning systems.

As a part of the regulatory development process ARB staff established an inventory of the types and numbers of businesses in California that use

stationary non-residential refrigeration systems with more than 50 pounds of a high-GWP refrigerant. In developing this inventory staff estimated that approximately 26,000 facilities in California use applicable non-residential refrigeration systems in many different industries including supermarkets, convenience stores, food processing and wholesale, refrigerated warehouses, pharmacies, hospitals, petroleum, utilities and some manufacturing (Appendix B). Approximately 64% of these are small businesses with fewer than 100 employees. Because of the large number of facilities potentially impacted by the RMP, extensive outreach efforts were conducted to educate business owners and solicit comments on the proposed regulation during the rule development process.

ARB staff goals in conducting outreach during the rule development process were: 1) inform affected industries about the RMP, 2) solicit feedback from affected industries to develop an effective rule and better understand their concerns, and 3) use industry input to develop an effective outreach plan. To reach the widest possible audience several methods of outreach were used focusing on working in collaboration with six groups of stakeholders. The outreach efforts implemented during the development of the RMP were individually tailored to facilitate effective communication and dissemination of information to each group of contacts. The six targeted stakeholder groups are:

- Technical workgroup composed of equipment and refrigerant manufacturers, environmental groups, government agencies, repair technicians, refrigerant distributors, and business owner/operators with broad knowledge of the commercial refrigeration industry in California.
- Trade associations representing businesses using large non-residential refrigeration and air-conditioning systems with high-GWP refrigerants.
- Individual businesses likely to use non-residential refrigeration systems with high-GWP refrigerants.
- Small businesses groups, chambers of commerce, and local government agencies throughout California.
- Subscribers to ARB climate change and high-GWP sector e-mail list serves.
- Government Agencies including United States Environmental Protection Agency (U.S. EPA), California Air Pollution Control Officers Association (CAPCOA), South Coast Air Quality Management District (SCAQMD), air quality management districts and air pollution control districts (Air Districts), and the California Energy Commission.

Table 1 includes a comprehensive list of all outreach efforts conducted during the development of the Refrigerant Management Program.

Table 1. Refrigerant Management Program Outreach Activities	
Outreach Activities	**Month - Year**
Board Approves Early Action First Report (provided the concept for developing the RMP regulation)	April-07
Board Approves Early Action Final Report (provided the concept for developing the RMP regulation)	October-07
Refrigerant Management Program website and e-mail serves established	January-08
High-GWP Sector Statewide Public Workshop	February-08
Site Visit - UC Davis Lighting & Cooling Technology Center	March-08
Commercial Refrigeration Technical Work Group Meeting	April-08
Refrigerant Tracking/Reporting/Repair Work Group Meeting	May-08
Draft Scoping Plan Released (provided general description of the RMP)	June-08
First Draft Refrigerant Management Program Rule Released	July-08
Meeting with Hussman and Ingersoll Rand	July-08
Refrigerant Tracking/Reporting/Repair Work Group Meeting	July-08
Updated California Air Pollution Control Officers Association (CAPCOA) Climate Protection Committee	July-08 & Monthly After
Conducted Facility Surveys	July & August-08
Site Visit - Refrigeration Supplies Distributor	August-08
Site Visit - Office Building Property Management Maintenance Tour	August-08
Met with California Grocers Association (CGA) and California Retailers Association (CRA)	August-08
Site Visit - Supermarket Systems Tours	August-08
Met with Representatives of Agricultural Sector Trade Associations	September-08
Met with Hudson, Inc.	September-08
Second Draft Refrigerant Management Program Rule Released	September-08
Refrigerant Management Program Public Workshop – Fresno	September-08
Meeting with Heating, Air Conditioning, Refrigerant Distributors International	September-08
Refrigerant Management Program Public Workshop - El Monte	September-08
Refrigerant Management Program Public Workshop - Sacramento	September-08
Final Scoping Plan Released	October-08
Met with Verisae	November-08
Conducted Refrigeration and Air-conditioning Contractor and Technician Surveys	November & December-08
Met with Institute of Heating and Air Conditioning Industries, Inc. (IHACI)	November-08

Table 1. Refrigerant Management Program Outreach Activities	
Outreach Activities	**Month - Year**
Met with Sheet Metal and Air Conditioning Contractor's National Association (SMACNA)	December-08
Refrigerant Management Program Work Group Meeting	January-09
Establish additional trade association contacts and update all previous contacts	January-09
Third Draft Refrigerant Management Program Rule Released	January-09
Refrigerant Management Program Public Workshop - Diamond Bar	February-09
Refrigerant Management Program Public Workshop - Modesto	February-09
Meeting with Heating, Air Conditioning, Refrigerant Distributors International (HARDI)	February-09
Refrigerant Management Program Public Workshop - Sacramento	February-09
Meeting with Western States Petroleum Association (WSPA)	February-09
Meeting with City of Los Angeles HVAC Technicians	February-09
Meeting with AB 32 Implementation Group	February-09
Field visit/inspection w/ U.S. EPA - Oakland Airport	February-09
Field visit/inspection w/ U.S. EPA - Richmond Wholesale Meats cold storage warehouse	February-09
Survey all local Air Districts regarding anticipated participation in the RMP after board adoption	February-09
Site Visit - Grand opening of Raley's in Petaluma	April-09
Site Visit - Tour of UC Davis chillers and refrigeration systems	April-09
Refrigerant Management Program Technical Workgroup Meeting	July-09
Update Trade Associations and Distribute Refrigerant Best Management Practices Brochure & Frequently Asked Questions (FAQ) Document	July -09
Released Refrigerant Management Best Practices Brochure & FAQ Document to Small Business Associations	July-09
Released Refrigerant Management Best Practices Brochure & FAQ Document to Small Business Development Centers	July-09
Teleconference meeting with Small Business Association with the help of the Governor's Office of the Small Business Advocate	July-09
Conducted direct business outreach pilot to contact all possible businesses in City of Industry and City of Merced to inform them of proposed rule and provide information.	July-August-09
Refrigerant Best Management Practices Brochure & FAQ Documents Distributed to Air Districts and Posted on Web Pages	August-09
Fourth Draft Refrigerant Management Program Rule Released	August-09
Public workshop in Sacramento (webcast)	August-09
Site Visit - Saticoy Lemon facility in Ventura, CA	August-09
Meeting with Western States Petroleum Association (WSPA)	August-09

3. Summary of Rule Development Outreach Process

In summary, ARB staff held 9 site visits to individual businesses, 13 meetings with individual stakeholders, 5 technical workgroup meetings, and 3 series of public workshops throughout the state of California. In addition to these meetings and workshops ARB staff conducted extensive outreach efforts via e-mail and phone to approximately 67 trade organizations, 800 individual businesses, 20 state and local government agencies, and 3 ARB e-mail list serves.

4. Components of Rule Development Outreach Plan

Throughout the process of developing the RMP ARB staff have used many different approaches in conducting outreach to industries likely to use large non-residential refrigeration and air-conditioning systems. Staff has used e-mail, direct phone calls, outreach documents, private meetings, public workshops, and technical working groups to distribute information throughout the rule development process and solicit feedback from stakeholders.

4.A Technical workgroup

Beginning in April 2008, a technical workgroup comprised of individual business, non-governmental organizations (NGO), and government representatives with expertise relevant to the stationary non-residential refrigeration and air-conditioning sector in California was assembled. Technical workgroup members included equipment and refrigerant manufacturers, environmental groups, government agencies, technicians, distributors, and individual business owners. The purpose of the technical working group was to provide a forum for ARB staff and experts in the non-residential refrigeration or air-conditioning field to discuss draft versions of the regulation. Comments received in technical work group meetings served to improve the quality of the regulation and its utility for affected businesses. Additionally, the technical workgroup meetings enabled industry groups potentially affected by the RMP to express their comments and concerns in a more detailed and targeted manner than a workshop may afford.

4.B Trade association outreach

Beginning in July 2008, trade associations with member businesses likely to use large non-residential refrigeration or air-conditioning systems with high-GWP refrigerant were contacted by phone. Trade association contacts were given updates by phone on the progress of the proposed rule in January and July 2009. In total 67 trade associations were contacted by phone throughout the process of developing the RMP (Attachment 1, provides a list of all trade associations contacted). To assist trade associations with distributing accurate and effective information to their member businesses they were provided with outreach documents in follow up e-mails after each update. Outreach documents

distributed to trade associations included a press release document, a refrigerant Best Management Practices (BMP) brochure (Attachment 2), and Frequently Asked Questions (FAQ) document (Attachment 3).

4.C Direct business outreach

In addition to the substantial "top down" outreach to trade associations, manufacturers, and distributors ARB staff contacted many individual businesses throughout California directly. ARB staff contacted individual businesses in two ways: 1) e-mail updates of all public workshops were sent to a list of approximately 800 individual businesses in the South Coast Air Quality Management District (SCAQMD) and 2) phone calls to individual businesses in two California cities.

i. E-mail contacts

E-mail addresses for approximately 800 individual businesses in California which use large non-residential refrigeration or air-conditioning systems with high-GWP refrigerant were obtained from reports submitted to the SCAQMD as a part of compliance with their Rule 1415. Regular updates on all public workshops and regulatory documents were sent, via e-mail, to all individual businesses reporting to the SCAQMD with a valid e-mail address. Because the proposed RMP represents an extension of the SCAQMD Rule 1415 these e-mails were specifically targeted to a relevant and active audience of individual business owners and operators.

ii. Phone contacts

ARB staff implemented a novel direct outreach campaign to inform individual businesses during the process of developing the proposed RMP. Two representative cities in California were selected based on their size and the distribution of business in industries relevant to the proposed RMP. The City of Industry and Merced were selected because they are located in geographically distinct regions of the state and contain a representative sample of businesses in the industries most likely to use non-residential refrigeration systems subject to the requirement of the proposed rule.

The primary goals of this outreach project were to 1) demonstrate a form of direct outreach that could be used in combination with other programs after the RMP is adopted, 2) communicate with businesses that would not otherwise be made aware of the RMP during the rule development process, 3) solicit comments from small businesses on the proposed RMP, and 4) identify a few businesses already implementing the best management practices outlined in the RMP who are willing to come forward and be recognized for these positive efforts.

The direct outreach project resulted in 187 total phone calls. The responses of individual businesses to the phone calls varied substantially. Thirty calls successfully identified a business using applicable refrigeration systems and provided them with outreach materials. Another 56 calls identified businesses with refrigeration systems that were not applicable to the rule (or used no applicable refrigeration systems). Seventy-five calls resulted in at least two voice mail messages with no reply. A smaller subset of contacts (26 total) were not viable or ended the call abruptly.

In general, this direct outreach effort was successful in contacting businesses that would otherwise not have heard of the RMP through traditional avenues. Some important lessons learned during the development of this project included: 1) encouraging staff to modify the "phone script" to better match their own conversational style, 2) the need for at least one or two bilingual staff in any future direct outreach efforts (Spanish and Mandarin speakers would be most valuable), and 3) a focused outreach effort in a small geographic area many not be as beneficial in cases where the proposed rule is anticipated to affect only a small proportion of businesses in a given industry statewide. Most of the businesses contacted were not affiliated with a trade association and therefore represented contacts that would otherwise not have been made aware of the proposed RMP using traditional outreach methods. This result provided an important demonstration of the success of this project and highlights the necessity of using direct outreach as a complement to top down outreach through trade associations. Attachment 4 provides more details on the direct outreach efforts to these two representative cities.

4.D Small Business and local government organizations

ARB staff estimate that approximately 64% of the businesses in California that use large non-residential refrigeration systems are small businesses (fewer than 100 employees). As a result, staff made extensive efforts to outreach to the small business communities in California to distribute information regarding the proposed RMP and solicit comments during the rule development process. In addition to contacting many individual businesses directly (see previous section) staff communicated with several small business associations in California, including the California Small Business Association, Small Business California, and the Merced and City of Industry chambers of commerce, as well as small business advocates such as the Governor's Office of the Small Business Advocate. Small business groups were contacted by phone and sent follow up e-mails with the refrigerant BMP brochure (Attachment 2), the FAQ document (Attachment 3), links to the RMP webpage, contact information, and the August 2009 public workshop notice.

In collaboration with the Office of the Small Business Advocate a notice and invitation to a conference call to discuss the proposed RMP was sent to a network of up to 120,000 small businesses statewide. The invitation was sent

from the Office of the Small Business Advocate to an e-mail distribution of approximately 700 small businesses and associations, which sent out the invitation to their e-mail network including 120,000 small business contacts. During the conference call individual businesses were provided a summary of the proposed RMP and encouraged to ask questions and voice concerns about the proposed rule.

ARB staff conducted a survey of city and county governments in collaboration with the California State Association of Counties and the Institute for Local Government to estimate the number of cities and counties using refrigeration or air-conditioning systems with more than 50 pounds of a high-GWP refrigerant. In addition to the survey, updates on the proposed RMP were distributed to all California counties and cities in February 2009 and August 2009. The refrigerant BMP brochure (Attachment 2) and FAQ document (Attachment 3) were distributed to cities and counties and posted on the League of California Cities website in August 2009.

4.E Local Air Districts

Throughout the rule development process ARB staff conducted regular outreach efforts to local Air Districts and solicited comments on the draft regulation and implementation plans. ARB staff provided monthly updates to the California Air Pollution Control Officers Association (CAPCOA) Climate Protection Committee on the status of the RMP throughout the rule development process.

In addition to regular updates to CAPCOA, ARB staff also conducted outreach to individual local Air Districts in California. ARB staff has worked closely with staff at the SCAQMD to obtain insights from the implementation of Rule 1415, obtain facility level data from all reports submitted as a part of Rule 1415, and received comments and suggestions on the proposed rule. ARB staff surveyed all local air districts to asses the feasibility of collaboration on the implementation and enforcement of the RMP and distributed outreach materials to the local air districts (Attachments 2 and 3).

4.F E-mail list serves

ARB staff distributed updates to the proposed RMP and public workshop announcements to a broad audience via three e-mail list serves. All updates were distributed to the Climate Change (“cc”, 6,561 contacts), Commercial Refrigeration Specifications (“commref”, 915 contacts), and High-GWP Refrigerant Tracking, Reporting and Recovery (“ref track”, 853 contacts) e-mail list serves. Combined, these list serves represent approximately 6,700 unique contacts interested in tracking the progress of climate change and refrigerant related regulations in California.

4.G Outreach materials

To complement the substantial phone and e-mail outreach efforts made to trade associations, local government, and individual businesses ARB staff developed several outreach documents providing information about the proposed rule and refrigerant best management practices. During the process of rule development a succinct press release was developed and distributed to individual businesses and trade organizations for broader distribution to their members. Subsequently, a refrigerant BMP brochure (Attachment 2) and Frequently Asked Questions (FAQ) document (Attachment 3) were developed for distribution to local Air Districts, trade associations, and individual businesses.

5. Components of Post Rule Adoption Plan

ARB staff will develop an outreach plan to ensure that facilities subject to the requirements of the RMP are aware of the regulation and have access to information that streamlines their ability to comply (examples include an online refrigerant leak inspection video and online guide to use self-reporting database). Given the number of facilities subject to the proposed regulation, the effort will be a significant focus for several years followed by ongoing maintenance by staff. Throughout the extensive outreach efforts conducted during the development of the RMP ARB staff were able to test and refine several novel outreach projects. As a result of the wide array of outreach methods used staff developed an understanding of how to conduct the most effective outreach to communicate with the diverse set of industries affected by the RMP after rule adoption. Staff will continue to refine and improve upon these aspects of the rule development outreach project, in addition to adding new outreach and training projects after the RMP is adopted.

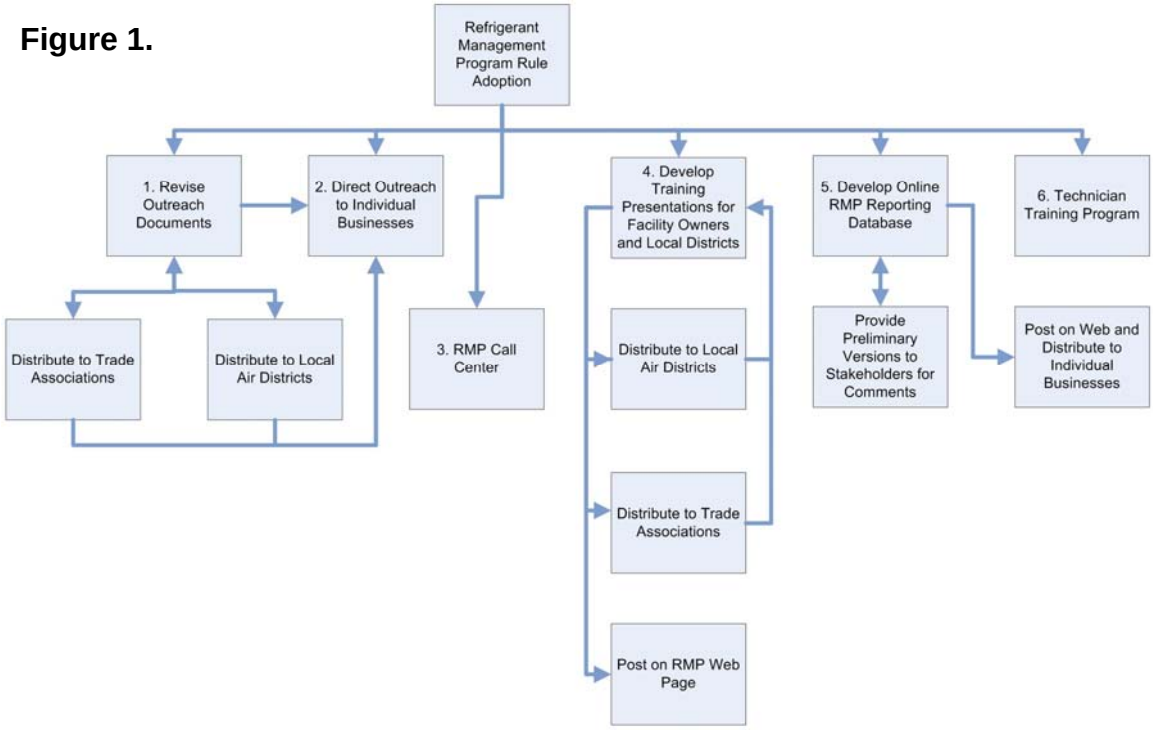
The focus of the outreach plan will be based on the final rule approved, but the goal will be to share clear and concise information on the applicability of the rule and how to comply, as well as how to most effectively reduce refrigerant emissions. The primary outreach topics anticipated include:

- How to determine the refrigeration system full charge
- How to comply with rule provisions applicable to your facility
- How to effectively conduct leak inspections
- How to benefit from use of refrigerant best management practices for all high-GWP appliances

A summary of key elements that are expected to be drawn on for the outreach during the implementation phase of the RMP follow.

Figure 1 depicts the planned outreach efforts to be conducted after the Refrigerant Management Program is adopted.

Figure 1.



5.A Facility Outreach Plan

i. Direct outreach to businesses

During the process of developing the RMP ARB staff conducted a novel direct outreach project which included calling all facilities in two sample cities likely to use large non-residential refrigeration systems. Because this direct outreach was successful in refining available data on the type of industries applicable to the RMP and in contacting businesses not affiliated with any trade associations ARB will obtain statewide address and contact information for businesses based on the Standard Industrial Code (SIC) or North American Industry Classification System (NAICS) code for business categories likely to be impacted by the RMP.

The contact information purchased will be used in two ways, 1) to conduct a limited set of direct calls to businesses likely to use large non-residential refrigerant systems and 2) to distribute direct mailings of outreach documents to all businesses on a statewide contact list. Staff will continue to make some calls to individual businesses likely to be affected by the RMP. Because it is not feasible to call all businesses in the affected industries statewide the remaining contacts will be made via direct mail from ARB or by including outreach documents in utility bills as a part of a collaborative effort with local utilities. In

addition information will be distributed via HVAC technicians and contractors who visit these facilities to service the refrigeration and air-conditioning systems.

ii. Trade associations

During the rule development process ARB staff has established contacts with 67 state and national trade associations with member businesses likely to use large non-residential refrigeration systems. In general trade association contacts were engaged and willing to distribute information regarding the RMP to their member businesses. Staff will to continue to work with these contacts to distribute information about the RMP after it is adopted in two ways: 1) provide them with updated outreach documents for electronic distribution and 2) press releases to be included in monthly publications. Staff will also work with trade associations to give presentations, training sessions, or booths at trade conferences to provide training and assistance to member businesses.

iii. Reporting database

An online database will be developed by ARB staff to facilitate reporting and recordkeeping for businesses using non-residential refrigeration systems with more than 50 pounds of a high-GWP refrigerant. The online database will facilitate outreach to individual businesses by providing a place where they can easily and quickly submit required reports and learn about the requirements of the RMP that apply to their business based on the size of the refrigeration systems they use. The automated annual reporting will allow facilities to keep track of their refrigeration systems and refrigerant usage. This will enable them to make decisions to replace less efficient and leaky systems which will save money and the environment. Additionally, the database will enable rapid data collection and analysis by ARB and facilitate all training and enforcement efforts made by ARB and local Air Districts.

iv. RMP call center

Once the RMP comes into effect approximately one year after adoption ARB staff will establish a call center for facilities with questions about the requirements of the RMP and reporting using the online database. The call center hotline number and a general e-mail address (ex. RMP@arb.ca.gov) will be included on all outreach documents and provide a simple way for businesses to get basic information about the rule from trained staff. The call center will enable ARB to communicate directly with the large number and diversity of facilities expected to be impacted by the RMP, and effectively educate businesses about the regulation and requirements for compliance. Additionally, ARB staff participating in the call center will facilitate processing and entering any hard copy reports submitted by facilities outside the online reporting database provided.

v. Post-implementation outreach documents

Following board adoption of the RMP ARB staff will begin to assemble additional documents to be used in the subsequent outreach process. Staff will revise the refrigerant BMP brochure, develop a RMP fact sheet, and write a brief press release document in collaboration with the ARB Public Information Office (PIO). These documents will provide information about the rule in a simple format suitable for the general public and contact information for ARB staff, similar to the brochure and FAQ documents (Attachments 2 and 3) produced during the rule development process. Additionally, these revised outreach documents will be translated into other languages including Spanish to reach a broader audience. The revised outreach documents will be distributed to all previously established individual business and trade association contacts, local Air Districts, technicians, local chambers of commerce, and technician training centers.

5.B Facility Compliance Training and Assistance

i. Local Air Districts

After receiving the Board approval of the proposed RMP ARB staff will continue to work with representatives from local Air Districts and CAPCOA during the process of revising outreach documents and formulating the post rule adoption plan. Staff will work closely with representatives from local Air Districts when developing facility training presentations to ensure that the material reaches the broadest possible audience of facility owners using non-residential refrigeration systems, and is communicated in a simple and clear format. Because local Air Districts generally have enforcement personnel familiar with some of the facility types impacted by the proposed rule (e.g., supermarkets) their feedback during the process of planning the post rule adoption outreach plan will be helpful.

ii. Training presentations

In collaboration with staff in the enforcement division presentations which provide a clear and concise description of the requirements of the RMP and the types of systems and facilities that are applicable will be developed. ARB staff will collaborate with established contacts from trade associations, refrigeration system manufacturers, small business advocacy groups, and local chambers of commerce to give presentations at organized meetings and conferences. Additionally, staff could present information that streamlines the ability of businesses to comply with the rule including, for example an instructional video describing how to conduct a refrigerant leak inspection for facility owner/operators.

iii. Best Practices Certified Technician Outreach

Training for technicians has been identified as a key component for the effective implementation of the program. The quality of the work by these personnel will

be the ultimate determinant of the quantity of emissions reduced by this program. Training needs have been discussed in detail with trade associations representing heating and air-conditioning equipment distributors and refrigeration and air-conditioning service contractors as well as several technician training institutions.

The general concept of a potential Best Practices Certified Technician Outreach plan specific to the Refrigerant Management Program would be based on developing a mechanism to ensure certified technicians are trained to understand best practices to reduce refrigerant emissions as outlined in ANSI/ASHRAE Guide 147 (Reducing Release of Halogenated Refrigerants from Refrigeration and Air-Conditioning Equipment and Systems), or similar standards or guidelines.

ARB staff will work with industry associations and training institutions to develop a full inventory of training opportunities and provide information during presentations to support the training opportunities currently available. ARB will also consider working with these organizations to develop specific training modules on methods to reduce emissions of refrigerants and comply with the Refrigerant Management Program. This training can be used to help reduce GHG emissions and potentially provide an advantage to those companies that have all employees completed the training.

The Best Practices Certified Technician Outreach Plan would be developed for implementation in harmony with any future plans to work towards regulatory and/or voluntary programs specific to requirements for a Best Practices Certified Technician Program as outlined in the Plans for the Future section of the staff report.

6. Summary

ARB staff conducted a comprehensive and extensive outreach campaign to a vast majority of industries likely to use and service non-residential refrigeration and air-conditioning systems during the process of developing the Refrigerant Management Program. The outreach efforts used by ARB staff involved 1) direct communication in workgroup and individual meetings, 2) top-down information distribution through an extensive network of trade association contacts and advocacy groups, and 3) direct phone call and e-mail outreach to many individual businesses throughout the state. In all cases ARB staff solicited comments on the proposed rule and technical appendices and sought to actively involve stakeholders in the process of rule development.

Immediately following rule adoption ARB staff will implement a comprehensive outreach plan similar to that used in the process of developing the RMP. Staff will use both direct contacts with businesses and top down outreach through trade

associations, trade publications, chambers of commerce, and local Air Districts to distribute information and outreach documents. Additionally, ARB staff will develop training materials and presentations to educate affected business owners and technicians. Ongoing discussions with stakeholders throughout the rule development phase have played a significant role in the formation of the proposed RMP. ARB staff will continue to work closely with affected businesses and trade associations to, whenever necessary, adapt based on their input to ensure effective implementation.

Attachments

This Attachments section contains the following supporting documents:

1) List of trade association contacts
2) Refrigerant Best Management Practices brochure
3) Frequently Asked Questions outreach document
4) Direct Outreach Project Summary

Attachment 1. Trade associations contacted during development of the Refrigerant Management Program.	
Industry type	**Trade Association**
Cold storage/ Food processing	Fresh Produce Association of America
	CA Grape and Tree Fruit League
	CA League of Food Processors
	Western Growers Association (WGA)
	Ventura County Agriculture Association
	California Beer and Beverage
	International Association of Refrigerated Warehouses
	International Dairy Foods Association
	California Cheese and Butter Association
	Western United Dairymen
	California Association of Meat Processors
	US Poultry and Egg Association
	Refrigerated Foods Association
	International Foodservice Distributors Association
	National Frozen and Refrigerated Foods Association
	CA Citrus
	Nisei Farmers League
	California Strawberry Commission
	World Food Logistics Organization
	Dairy Institute
Medical	Cemetery and Mortuary Association of California
	California Children's Hospital Association
	Alliance of Catholic Health Care
	California Association of Health Facilities (long term care)
	California Hospital Association
State and local government	California State Association of Counties
	League of California Cities
	Institute for Local Government
	California Department of General Services
	California Department of Corrections
	California Department of Education

Attachment 1. Trade associations contacted during development of the Refrigerant Management Program.	
Industry type	**Trade Association**
State and local government	Administrative Office of the Courts
	Office of Statewide Health Planning and Development (OSHPD)
Manufacturing	The Association of Electrical and Medical Imaging Equipment Manufacturers
	California Manufacturers and Technology Association
	National Association of Manufacturers
	Pharmaceutical Research and Manufacturers of America
Petroleum	Intermodal Association of North America
	California Independent Oil Marketers Association
	California Independent Petroleum Association
	Western States Petroleum Association
Retail groups	Grocery Manufacturers of America
	CA Independent Grocers
	California Grocers Association
	Dairy-Deli-Bakery Council of Southern California
	National community pharmacists association
	National association of chain drug stores
	National Association of Convenience Stores
	Retail Industry Leaders Association
Property Management/ Lodging	Apartment Association of California Southern Cities
	National Association of Industrial and Office Properties (NAIOP)
	California Business Properties Association
	California Hotel and Lodging Association
	California Lodging Industry Association
Education	Coalition for Adequate School Housing (CASH)
	Collaborative for High Performing Schools
	University of California - Office of the President
	California State Universities
Small business	California Small Business Association
	Small Business California
	Governor's Office of Small Business Advocate
Miscellaneous	National Association of Theater Owners
	Motion Picture Association of America
	Telecommunications Industry Association
	International Association of Amusement Parks and Attractions
	Los Angeles World Airports (LAWA)
	American Association of Airport Executives

What Types of Facilities Should Consider Implementing Refrigerant Best Management Practices?

Facilities with refrigeration and air-conditioning systems using Chlorofluorocarbon (CFC), Hydrofluorocarbon (HFC), or Hydrochlorofluorocarbon (HCFC) refrigerant including:

- Supermarkets
- Convenience stores
- Food processing and wholesale
- Refrigerated warehouses
- Pharmacies
- Hospitals
- Manufacturing
- Office buildings
- Institutions

Additional Information Sources for Commercial Refrigeration and Air-Conditioning Systems

U.S. EPA Regulations:
www.epa.gov/ozone/title6/608/index.html

South Coast Air Quality Management District Rule 1415:
www.arb.ca.gov/drdb/sc/cur.htm

Proposed Regulations

California Air Resources Board's Refrigerant Management Program:

The Refrigerant Management Program is a regulatory proposal to require specific refrigerant best management practices to reduce emissions of refrigerant from non-residential refrigeration systems.

Program Information:
www.arb.ca.gov/cc/reftrack/reftrack.htm

Frequently Asked Questions:
www.arb.ca.gov/cc/facts/facts.htm

7/21/2009

California Environmental Protection Agency AIR RESOURCES BOARD

Refrigerant Best Management Practices

Commercial Refrigeration and Air-Conditioning Equipment

California Air Resources Board
1001 I Street, P.O. Box 2815
Sacramento, CA 95812

Contact: Chuck Seidler
cseidler@arb.ca.gov
(916) 327-8493

FACTS ABOUT Refrigerant Best Management Practices

What are common Refrigerant Best Management Practices currently used?

- Designate one employee as a Refrigerant Manager
- Develop a Refrigerant Management Plan and Mission Statement
- Conduct an inventory of all systems that use refrigerant and their refrigerant charge
- Check for leaks regularly
  - Use automatic leak detection equipment
  - Conduct monthly manual leak inspections
- Repair refrigerant leaks promptly
- Do not "top off" refrigerant
- Use U.S. EPA certified technicians to conduct repairs
- Keep records of all refrigerant leaks, repairs, storage, and disposal

How do Best Management Practices help the environment?

CFC, HFC, and HCFC refrigerants are greenhouse gases typically thousands of times more potent than carbon dioxide (CO_2). Commercial refrigeration systems are the fastest growing source of greenhouse gas emissions in California.

Reducing refrigerant leaks will reduce greenhouse gas emissions.

Is your facility a model of Refrigerant Best Management Practices?

The California Air Resources Board wants to highlight businesses that are already effectively conserving and properly managing refrigerants.

If you would like to have your business considered as an example to highlight refrigerant best management practices please contact ARB staff listed in this brochure.

How do Best Management Practices save money?

Facilities using commercial refrigeration and air-conditioning equipment that implement Refrigerant Best Management Practices reduce consumption of refrigerant.

Examples of savings from reaching a 10% annual leak rate with best management practices include:

1. A store with four refrigeration systems with a total charge of 1,000 pounds of refrigerant that leaked 30% per year could ***save*** $8,800 on refrigerant.

2. A food distribution facility with one refrigeration system with a total charge of 3,000 pounds of refrigerant that leaked 30% per year could ***save*** $6,600 on refrigerant.

What are the benefits of using Best Management Practices?

- Save $ annually on refrigerant
- Save energy
- Help comply with the law
  - Federal Clean Air Act, Section 608
  - South Coast Air Quality Management District Rule 1415
  - Proposed: Air Resources Board Refrigerant Management Program

FREQUENTLY ASKED QUESTIONS

Refrigerant Management Program

What is the Refrigerant Management Program?

The Refrigerant Management Program is a regulatory proposal to require specific best management practices to reduce emissions of refrigerant from non-residential refrigeration systems. The proposal includes provisions similar to current federal and local regulations in effect specific to ozone-depleting substances (ODS) refrigerants and extends requirements to ODS refrigerants substitutes.

Why is the Refrigerant Management Program proposed?

- It is a board approved AB 32 Early Action Measure developed to help meet the goals of reducing CA greenhouse gas emissions to 1990 levels by 2020.
- Addresses stationary source non-residential refrigeration, which is characterized by high leak rates and minimal oversight.
- Reduces emissions of Chlorofluorocarbon (CFC), Hydrofluorocarbon (HFC), and Hydrochlorofluorocarbon (HCFC) refrigerants, which are greenhouse gases typically thousands of times more potent than carbon dioxide (CO_2).

Who must comply with the proposed regulation?

The proposed regulation will affect any person who owns or operates a facility with a stationary, non-residential refrigeration system using more than 50 pounds of a high-global warming potential (GWP) refrigerant, services any appliance using a high-GWP refrigerant, or distributes or reclaims a high-GWP refrigerant.

What is a high-global warming potential refrigerant?

High-global warming potential, or high GWP, refrigerants include CFC, HCFC, and HFC refrigerants. Refrigerants that are not high-GWP include ammonia and carbon dioxide (CO_2).

What is a refrigeration system and what types of facilities use them?

A refrigeration system is any appliance that is, 1) used in the retail food and cold storage warehouse sectors, 2) used in manufacturing industries directly linked to an industrial process, or 3) used for any purpose other than comfort cooling that requires requires more than 50 pounds of a high-GWP refrigerant.

What are the estimated emission reductions of the proposed regulation?

The proposed regulation is estimated to reduce high-GWP refrigerant emissions by 8 million metric tonnes of carbon dioxide equivalent ($MMTCO_2E$). This reduction has an equivalent climate impact of removing 1.4 million cars and light trucks from the road each year.

What are the estimated costs?

On average the proposed regulation results in a cost savings of $2 per metric tonne of carbon dioxide equivalent ($MTCO_2E$) in emissions reduced. The cost savings is a direct result of reduced consumption of refrigerant through the use of best management practices.

What does the proposed regulation require?

The proposed regulation requires facility registration, leak detection and monitoring, leak repair, retrofit and retirement, reporting, and recordkeeping for any person who owns or operates a facility with a stationary, non-residential refrigeration system using more than 50 pounds of a high-GWP refrigerant. Required service practices for refrigerant management are applicable to any person who services an appliance using a high-GWP refrigerant. Reporting and recordkeeping requirements are also applicable to distributors, wholesalers, and reclaimers of high-GWP refrigerants.

When does the regulation take effect?

The proposed regulation has requirements that are phased in over time depending on the largest refrigeration system used at a facility.

Refrigeration systems are categorized as:

- **Large**: Refrigeration systems using 2,000 pounds or more of a high-GWP refrigerant
  - Systems typically used in cold storage warehouses, manufacturing, and some supermarkets
- **Medium**: Refrigeration systems using 200 pounds or more, but less than 2,000 pounds, of a high-GWP refrigerant
  - Systems typically used in smaller warehouses and many supermarkets
- **Small**: Refrigeration systems using more than 50 pounds, but less than 200 pounds, of a high-GWP refrigerant
  - Systems typically used in some pharmacies and small grocery stores

The following requirements for facilities using applicable refrigeration systems, refrigerant distributors and refrigerant reclaimers will apply on the effective date of the rule or January 1st, 2011:

- Required Service Practices applicable to the service of any high-GWP appliance
- Leak detection, monitoring, and recordkeeping
- Retrofit and retirement plans
- Refrigerant distributor, wholesaler, and reclaimer prohibitions

Refrigerant distributor, wholesaler, and reclaimer annual reporting requirements will become effective in 2012.

Requirements for facilities using applicable refrigeration systems that are phased in include:

- Annual Registration for Operation: Large in 2012, Medium in 2014, Small in 2016.
- Annual Implementation Fee: Paid upon initial Registration for Operation and annual renewals - Large ($370) and Medium ($170). There is no fee for Small.
- Annual Facility Reporting: Large in 2012 and Medium in 2014. No required reporting for Small.

How will the Refrigerant Management Program be enforced?

- Air Districts may adopt a rule of equivalent emission reduction benefit under local authority.
- Air Districts may enforce statewide rule under agreements with the ARB with funding provided through fees paid by facilities subject to the rule.

Will there be other regulations to reduce refrigerant emissions?

Yes. ARB is developing additional regulations or other measures to address emissions of refrigerants used for other stationary applications and motor vehicle air conditioning including: new commercial refrigeration specifications; residential refrigeration management; foam recovery and destruction; use of refrigerants with a lower global warming impact in new cars, buses, trucks, and equipment in California; recovery of refrigerant from decommissioned refrigerated shipping containers; enforcement of a federal ban on refrigerant release during servicing and dismantling; and emission reductions during professional servicing.

Where can I find out more information about the proposed regulation?

For the regulation and accompanying documents see: *www.arb.ca.gov/cc/reftrack/reftrack.htm*.
For further information contact: Mr. Chuck Seidler, cseidler@arb.ca.gov, (916) 327-8493

Refrigerant Management Program
Direct Outreach Project Report
July – August 2009

INTRODUCTION

The Refrigerant Management Program (RMP) is a regulation proposed by the California Air Resources Board (ARB) to reduce the emissions of high global warming potential (GWP) refrigerants from large stationary non-residential refrigeration systems and help meet the greenhouse gas reduction goals of California's Global Warming Solutions Act of 2006 (AB32). High GWP refrigerants include chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), and hydrofluorocarbons (HFC). ARB staff estimate that by 2020 greenhouse gas (GHG) emissions from stationary refrigeration systems in California could be reduced by approximately 8 million metric tons carbon dioxide equivalent (MMTCO2E) annually through the facility registration, reporting, leak inspection, and maintenance requirements included in the RMP.

In the process of developing the RMP, ARB staff developed an inventory of the types and numbers of businesses in California that use stationary commercial and industrial refrigeration systems with 50 pounds or more of a high GWP refrigerant. In developing this inventory staff estimated that approximately 26,000 facilities in California use applicable refrigeration systems. These facilities represent many different industries including supermarkets, convenience stores, food processing and wholesale, refrigerated warehouses, pharmacies, hospitals, petroleum, utilities, and some manufacturing. ARB staff estimate that almost 65% of these are small businesses with fewer than 100 employees. Because of the large number of small businesses potentially impacted by the RMP, an extensive and diverse outreach was conducted to educate business owners about refrigerant best management practices and solicit comments on the proposed regulation during the rule development process.

Throughout the rule development process, staff conducted several different outreach activities including: 1) contacting a total of 60 different trade associations representing businesses likely to use large commercial and industrial refrigeration systems, 2) distributing information to small business development centers, 3) distributing information to all 35 air quality districts, 4) hosting 5 technical workgroup meetings, 5) hosting 3 statewide public workshop series throughout California, and 6) e-mail list serves to ~6,700 contacts. All contacts were provided press releases, brochures, and FAQ documents for further distribution.

In addition to this substantial "top down" outreach ARB staff elected to conduct a novel direct outreach campaign to a comprehensive sample of businesses likely to use commercial and/or industrial refrigeration systems with

high GWP refrigerants in two cites in California. The primary goals of this direct outreach project were:

1) To serve as a pilot study to determine the effectiveness of conducting a direct outreach to affected facilities/businesses.
2) Demonstrate a form of direct outreach that could be used in other programs or regulations that the ARB develops.
3) Communicate with small businesses that would not otherwise be made aware of the RMP during the rule development process.
4) Solicit comments from small businesses on the proposed RMP.
5) Identify businesses willing to be recognized for voluntarily using refrigerant best management practices outlined in the proposed RMP.
6) Gain information that informs the implementation phase of the RMP to ensure that small businesses are fully aware of its requirements as well as tools to assist with compliance.

DIRECT OUTREACH EFFORT - RESULTS

The direct outreach pilot project resulted in 187 total phone calls to individual businesses. The responses of individual businesses to the phone calls varied substantially. Thirty calls successfully identified a business using applicable refrigeration systems and provided them with outreach materials. Another 56 calls identified businesses with refrigeration systems that were not applicable to the rule (or used no commercial refrigeration). Seventy-five calls resulted in at least two voice mail messages with no reply. A smaller subset of contacts (26 total) were not viable or ended the call abruptly. Most of the businesses contacted were not affiliated with a trade association and therefore represented contacts that would otherwise not have been made aware of the proposed RMP using traditional outreach methods.

Table 1. Summary of calls by industry type.

Industry type	Successful contacts	Systems n/a	Voicemail only	Not viable contact	Total
Cold storage/ Food processing	13	13	33	11	**70**
Grocery store/ Supermarket	9	1	12	5	**27**
Convenience store	0	9	4	1	**14**
Pharmacy	3	5	3	1	**12**
Medical	2	12	4	3	**21**
Manufacturing/ Petroleum	3	16	19	5	**43**
	30	**56**	**75**	**26**	**187**

A secondary goal of this direct outreach project was to find individual businesses already following the refrigerant best management practices required in the RMP and interested in receiving public recognition for their efforts. Although several businesses were identified which claimed to employ very stringent refrigerant best management practices none volunteered to be publically recognized.

DIRECT OUTREACH EFFORT - DESCRIPTION OF INDIVIDUAL TASK COMPONENTS

a. Selection of cities to be used for the direct outreach project

The facility inventory developed for the Refrigerant Management Program estimated that approximately 26,000 facilities statewide use refrigeration systems with more than 50lbs of high GWP refrigerant (see Appendix B for more details). Because it would not be feasible to contact such a large number of facilities directly by phone two moderately sized cities in Northern and Southern California were selected to serve as samples of all affected industries statewide. Merced and City of Industry were selected based on several criteria including; geographic location, broad representation of all affected industry types, and less than 250 businesses contacts for both cities combined.

b. Development and distribution of contact list

Before planning a substantial phone based outreach effort to individual businesses in California the types and numbers of businesses likely to use large commercial/industrial refrigeration systems with high GWP refrigerants was estimated. The facility inventory developed for the proposed RMP identified specific industries and NAICS codes that were likely to apply to the proposed rule (see Appendix B for more information on methods and inventory). These NAICS codes were used, in conjunction with a subscription to a marketing firm Directories USA, to obtain contact information for approximately 26,000 individual facilities statewide that could be affected by the proposed RMP. The contact information provided by Directories USA included the following fields:

- Business description
    - Business name
    - NAICS code
    - NAICS code description

- Business data
    - Estimated number of employees
    - Estimated annual sales
    - Estimated square footage
    - Business status (single location or branch)

- Contact information

- Address
- Phone number
- Website URL (when available)

All individual business contacts (187 total) in the selected cities, Merced and the City of Industry, were assigned to participating ARB staff. Contacts were assigned so that each individual staff would be interacting with facilities in the same industry. By assigning contacts from only one or two industry types to each staff it would allow them to focus and specialize on the specific issues unique to each industry (ex. cold storage, food processing, manufacturing, medical facilities). For example calls to cold storage warehouses would initially focus on determining the type of refrigerant used in a facility because many facilities in California use low GWP refrigerants like ammonia. Additionally, calls to small grocery and convenience stores would initially focus on determining the size of the system used because many facilities are likely to have systems with less than 50lbs refrigerant.

c. Development of phone script, follow up form e-mail, and contact database

A standard phone script (Attachment 1) was drafted and used by staff to help ensure consistency in the information conveyed to stakeholders and responses provided to questions asked during phone calls. The script included several questions that were to be asked in all calls and subsequent questions to be asked during successful calls. Although it was assumed, when compiling the facility inventory, that only a small proportion of some industries use commercial refrigeration systems with more than 50lbs high GWP refrigerant (ex. manufacturing and cold storage) contact information for all businesses in each industry were obtained. As a result information regarding the presence and size of refrigeration systems used in a business was requested early in the phone call. Additionally, at the end of the script, ARB staff anticipated possible questions stakeholders could ask and provided sample answers.

After developing a first draft, the script was refined substantially based on comments and observations gleaned from a practice session where staff tested the script in a role playing scenario. After this practice session the script was changed to include more questions at the beginning of the call to engage the stakeholder promptly. As a result most of the description of the proposed rule was moved to the end of the call as a follow up to questions asked. After ARB staff completed several calls they adapted the script to better match their own individual speaking style and make the script sound more conversational.

Participating staff were provided with a contact database containing their assigned list of businesses contacts. The contact database also contained empty cells where staff could track the status of a contact (for example “follow-up required” or “not viable contact”), the name and e-mail of a contact person at each business, and answers to questions included in the call script (see

Attachment 2 for full list of fields included). After completing calls with a facility with applicable refrigeration systems, staff sent a form e-mail and several outreach documents (Frequently Asked Questions sheet and Refrigerant Best Management Practices brochure) to the business to provide additional information about refrigerant best management practices and the proposed RMP.

d. Observations and lessons learned

This project represents one of the first comprehensive effort to contact a substantial number of individual businesses by phone during the process of developing a broad regulation affecting many different facilities and industry types. Participating ARB staff made some valuable observations during this process that could provide useful guidance for any similar outreach projects.

Refrigeration systems not applicable to RMP: ARB staff noted that this type of outreach effort is less effective in industries where only a small proportion of the total facilities statewide are expected to be applicable to the rule. If less than 30% of the facilities in a given industry are likely to be applicable to the proposed rule then it is likely that, in a limited statewide sample, none of the calls made will result in successful contacts with applicable businesses.

Language barrier: In some cases the business owners/operators contacted did not speak English as their primary language. When conducting substantial phone based outreach efforts in the future making a few bilingual staff available could dramatically increase the effectiveness of the outreach to individual businesses.

Incorrect data: The data purchased from DirectoriesUSA, the marketing company used to obtain contact lists, was occasionally mis-categorized. In several cases business contacts listed under a specific NAICS code claimed that their primary business activities were very different from their reported NAICS code. This mis-categorization is possibly due to the fact that most businesses and marketing companies still use SIC codes for classification while the US Census bureau uses NAICS codes. Some accuracy in categorizing business types is lost when mapping from less specific SIC codes to more refined NAICS codes. Future outreach efforts of this kind might consider organizing businesses by SIC codes to reduce the number of calls made to mis-categorized businesses.

Phone call script modifications: Several important changes were made to the phone script by staff as they made more calls. Changes included asking to speak to the appropriate person in the company immediately after stating their name and affiliation (ARB). In many cases the person answering the phone knew nothing about the facility or refrigeration systems used there and staff found this expedited calls. Another change suggested by staff was to clearly state that the purpose for the call was not sales, but instead to solicit feedback on a government regulation being developed that may affect their business.

Importance of direct calls in outreach process: None of the businesses contacted with applicable refrigeration systems had heard of the proposed Refrigerant Management Program or were affiliated with a trade association. This highlights the importance of calling individual businesses in addition to the substantial "top down" outreach efforts used in the development of the RMP in contacting manufacturers, distributors, trade associations, and local chambers of commerce. The fact that all of the small businesses contacted were not aware of the proposed RMP and were not affiliated with trade organizations is an important result of this direct outreach project. This provides a strong indication that the most effective way to outreach to small businesses is by direct calls or mailings. Although some of the businesses contacted had more than 100 employees, most of them were small businesses.

Overall, staff agreed that assigning 30-40 calls per person over a 1 ½ week time span was not overly burdensome and that this form of outreach was effective in distributing information to individual businesses. After implementing this ambitious direct outreach project staff will work to incorporate a similar approach to subsets of the total facilities estimated to be affected by the rule (26,000 statewide). The experience obtained from conducting this outreach project will be vital in forming the development of a successful and comprehensive post-rule adoption outreach plan. Additionally, the information obtained from this direct outreach project will provide a useful comparison to the data used to establish the facility inventory.

ATTACHMENT 1: PHONE SCRIPT

Hi, my name is Jane Doe and I'm calling from the California Air Resources Board to talk to you about the refrigeration systems used in your business. I'm calling all local businesses in the area, including (convenience/grocery/warehouse/food processing/dairy/manufacturing) businesses like yours, that use large commercial refrigeration systems with high global warming potential refrigerants, for example Freon type refrigerants like R-22 or R404a. I'm not selling anything, I'd just like to talk to you about a regulation we developing called the Refrigerant Management Program which focuses on changes that can reduce leaks of refrigerant and save money.

Are you the right person to talk to?

When calling food warehouse or processing facilities may need to ask this question at the beginning: Do you know if your business uses ammonia or CO2 as a refrigerant in your cooling systems?

Have you heard about this program before?

If you don't mind I have a few quick questions and I'd like to give you a little more information about the proposed rule. It shouldn't take more than 5 minutes. The

information that you and other businesses provide will help us make sure that the rule is effective, and has the least possible impact on your business.

1. Can you describe your business and the refrigeration/freezer systems you use?

2. Do you know if you have any refrigeration systems with more than 50 pounds of refrigerant?

    a. Alternate question for convenience stores or pharmacies: Do you plug all your refrigerated cases into a wall outlet or do they have a walk in area in the back where you stock the shelves?

3. Do you contract with a company to do all the maintenance and repairs, or do you use onsite staff?

4. How often do you usually inspect your refrigeration systems?

5. What trade associations are you affiliated with?

Thank you, this is very helpful.

The rule were developing is designed to reduce the emissions of refrigerant from large commercial refrigeration systems by requiring some Best Management Practices. Many businesses are already using these practices because they are also generally seen as good business.

Some examples of Best Management Practices include:

- Keeping records of all repairs made to refrigeration systems and all refrigerant added and lost from refrigeration systems
- Checking for refrigerant leaks regularly and repairing them as soon as they are found
- Using automatic leak detection equipment on very large systems (>2,000 lbs)

Based on many conversations I have had with business owners and technicians I've found that these practices can often help SAVE money on refrigerant each year.

* At this point – if the call is going well and you think they may be interested in working with us see the additional list of questions at the end.

Can I send you some additional information about our proposed rule by e-mail?

What is your e-mail address?

Please feel free to call me with any questions you have about the information I send you, or if you have comments or concerns about this proposed rule.

Thank you for taking time to talk to me today, I know you are very busy and I sincerely appreciate your attention.

If the call goes well:

I'm interested in finding some businesses that already use Best Management Practices and highlighting them as positive examples for other business owners because they not only save money but also help the environment.

Would you be willing to let myself and a few of my coworkers visit your business to learn more about your operation? We are interested in finding ways to highlight local businesses that already use Refrigerant Best Management Practices and would appreciate the chance to talk to you further.

Additional questions for "good" players:

1. Do you use an automatic leak detection system to monitor your refrigeration system?
2. What is the name of your service company?
3. How quickly are you able to fix a leak after it is detected?

Possible questions and suggested answers:

For example:

1. How do I know what the refrigerant charge in my equipment is?
   There are several ways to determine the full refrigerant charge in a system. These include:
   - The full charge may be listed on the equipment name plate which includes the make/model number, refrigerant type, and manufacturer information.
   - The full charge could also be included in documentation about the system provided by the manufacturer after installation.
   - The full charge could be determined by looking back at old service records from when a leak repair was conducted. By looking at the amount of refrigerant removed from the system before the repair and the amount added back after the repair was complete you can estimate the full charge.
   - If you have none of this information available you can contact the refrigeration system manufacturer.

2. Why is the RMP needed? Isn't there already enough regulation for refrigeration systems?

- Many refrigerants are very potent global warming chemicals. What this means is that, on average, a single pound of HFC, CFC, of HCFC refrigerant has the same global warming impact as 4,000lbs of carbon dioxide.
- Because they are so potent releases of even small amount of high global warming potential refrigerant can have contribute substantially to the greenhouse gas emissions in California.
- High global warming potential refrigerants represent the fastest growing source of greenhouse gas emissions in California.
- By using best management practices in dealing with refrigeration systems business owners can save money on refrigerant purchased every year and help reduce greenhouse gas emissions.

3. My business is barely managing to keep a float in these tough times. Why is ARB imposing yet another burdensome and costly regulation?
    - Our goal in developing the proposed refrigerant management program has been to reduce emission of greenhouse gases in a way that can also help businesses SAVE money every year.
    - Our research indicates that this proposed regulation will actually achieve emissions reductions at an average cost SAVINGS.
    - After many discussions with refrigeration system manufacturers and business owners we think that refrigerant best management practices will actually help typical businesses save money every year by spending less money on refrigerant
4. Will I be inspected by my local air district or by the Cal EPA? Is the local air district working with you on this rule?
    - We have been working closely with all local air districts in California including the **South Coast Air Quality Management District/San Joaquin Air Pollution Control District**.
    - After the rule is passed by our board we will work with local air districts to administer the program.
    - You will not have to send reports to multiple locations. We plan to have one statewide online database where you can submit your annual reports.

5. What will this rule cost me?
    - Our research indicates that many facilities which use Refrigerant Best Management Practices will save money every year on refrigerant.
    - The proposed refrigerant management program includes minimal annual fees for facilities that have at least one refrigeration systems with more than 200lbs refrigerant.
        - At least one system with 200-2,000lbs: $170 annual fee
        - At least one system with >2,000lbs: $370 annual fee
    - These fees will be used solely to pay for maintenance of the online reporting database and for enforcement.

- There would be cost for requirements such as regular leak inspections and keeping records of refrigerant leaks and repairs, but the money saved on refrigerant can be used to pay for these types of expenses.

Two examples of annual savings possible using refrigerant best management practices:

- A store with four refrigeration systems containing 1,000 pounds of refrigerant that leaked 30% per year could SAVE $8,800 every year on refrigerant.
- A food distribution warehouse with one refrigeration system containing 3,000lbs refrigerant that leaks 30% per year could SAVE $6,600 per year on refrigerant.

6. What are you doing with the information you asked me about my business and our refrigeration systems?
    - The information you gave me will help us learn more about the types of businesses in California that use large commercial refrigeration systems with high GWP refrigerants.
    - It will also help us get an idea of how commonly refrigerant best management practices are used in businesses and how aware most facilities are about these practices.

ATTACHMENT 2: LIST OF FIELDS INCLUDED IN OUTREACH DATABASE

A contact database was provided to all participating ARB staff and was intended to be filled in after each call made. The information recorded in the database was used to provide a summary of the effectiveness of the direct outreach project.

Fields included:

- Contact outcome (follow up required/successful contact/possible collaboration/not viable contact/refrigeration systems not applicable)
- City
- Business name (from DirectoriesUSA)
- Sales (from DirectoriesUSA)
- NAICS code description (from DirectoriesUSA)
- # employees (from DirectoriesUSA)
- Last name
- First name
- Title of contact person
- Phone number (from DirectoriesUSA)
- E-mail address
- Business type
- Date last contacted

- Contacted by phone? (yes/voicemail)
- Received outreach documents? (yes/follow-up)
- Received workshop notice? (yes/follow-up)
- Affiliated associations
- Notes