

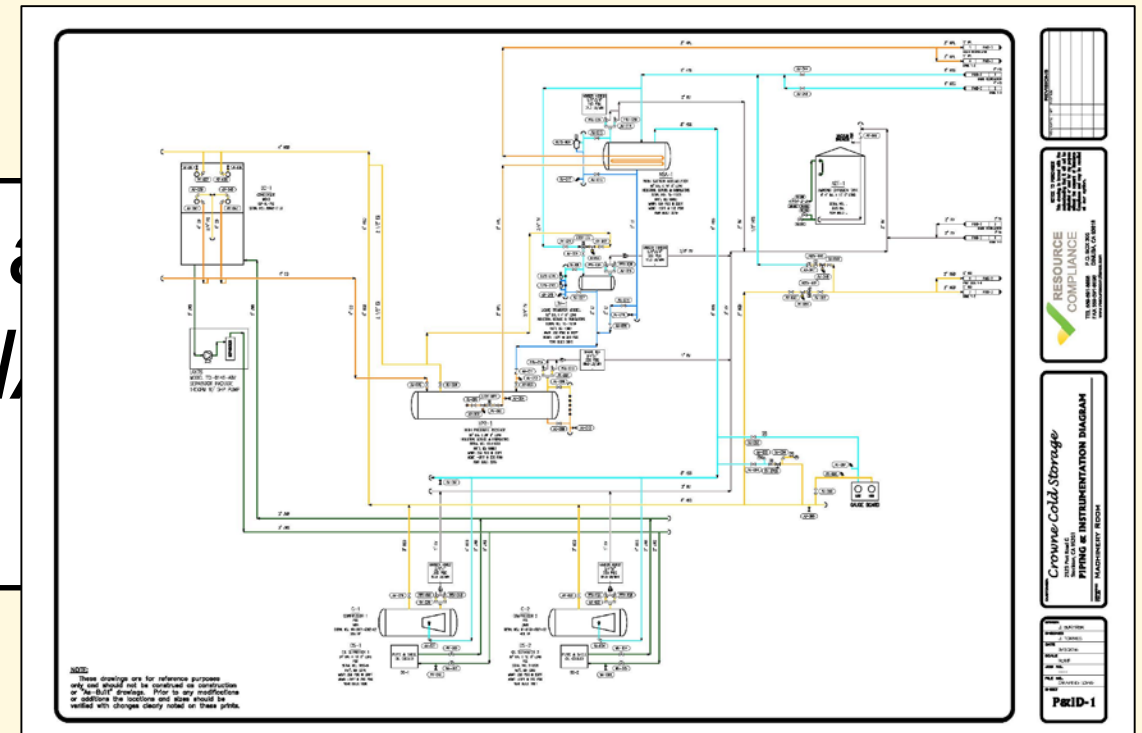


# RESOURCE COMPLIANCE

**MOC/PSSR**

*Management of Change/Pre-Startup Safety Review*

# What's the goal?



# Takeaways

- 1. Understand when is an MOC/PSSR needed*
- 2. Understand the requirements of MOC/PSSR*
- 3. Look at the nuances within CalARP MOC/PSSR*
- 4. Sample MOC/PSSR checklists and scenarios*

# When is an *MOC/PSSR* needed?

## **Simple Questions:**

1. Will new equipment or new models be installed (vs. 'replacement in kind')?
2. Would the P&IDs change?
- 3.\*Would any RMP/PSM/CalARP elements change?

# Requirements of *Management of Change*

## **CalARP §2760.6**

(a) The owner or operator shall establish and implement written procedures to manage changes (except for “replacements in kind”) to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process.

# Requirements of *Management of Change*

## *Continued (paraphrased)*

- Prior to any change, assure:
  1. The technical basis for the change;
  2. Impact of change on safety and health;
  3. Modifications and/or development of operating and maintenance procedures;
  4. Necessary time period for the change; and,
  5. Authorization requirements for the proposed change.
- Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up.
- Process safety information shall be updated.
- Operating procedures shall be updated prior to start-up of the process.

# Requirements of *Pre-Startup Safety Review*

## CalARP §2760.7

(a) The owner or operator shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.

(b) The pre-startup safety review shall confirm, as a verification check, independent of the management of change process, that prior to the introduction of regulated substances to a process:

- 1) Construction and equipment is in accordance with design specifications;
- 2) Safety, operating, maintenance, and emergency procedures are in place and are adequate;
- 3) For new stationary sources, a PHA has been performed and recommendations have been resolved or implemented before startup, and modified stationary sources meet the requirements contained in management of change, Section 2760.6; and,
- 4) Training of each employee involved in operating a process has been completed.

# Requirements of *Pre-Startup Safety Review*

## **Cal PSM**

The Pre-Start Up Safety Review shall involve employees with expertise in process operations and engineering. The employees will be selected based upon their experience and understanding of the process systems being evaluated.



# Comparison: CalARP Program 2 & Program 3

Program 2	Program 3
<b>Prevention Program Element</b>	
Safety Information	Process Safety Information
Hazard Review	Process Hazard Analysis
Operating Procedures	Operating Procedures
Training	Training
Maintenance	Mechanical Integrity
Incident Investigation	Incident Investigation
Compliance Audit	Compliance Audit
	Management of Change
	Pre-Startup Safety Review
	Contractors
	Employee Participation
	Hot Work Permits

# MOC: CalARP Program 2 vs. Program 3

## P3: Management of Change - §2760.6

- P2: Safety information must be updated when a change occurs - §2755.1(c)
- P2: Operating procedures must be updated when a change occurs - §2755.3(c)
- P2: Training is required for all employees - §2755.4

Program 2	Program 3
<b>Prevention Program Element</b>	
Safety Information	Process Safety Information
Hazard Review	Process Hazard Analysis
Operating Procedures	Operating Procedures
Training	Training
Maintenance	Mechanical Integrity
Incident Investigation	Incident Investigation
Compliance Audit	Compliance Audit
	Management of Change
	Pre-Startup Safety Review
	Contractors
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# PSSR: CalARP Program 2 vs. Program 3

## P3: Pre-Startup Review - §2760.7

- P2: Safety information must be updated when a change occurs - §2755.1(c)
- P2: Training is required for all employees - §2755.4

Program 2	Program 3
<b>Prevention Program Element</b>	
Safety Information	Process Safety Information
Hazard Review	Process Hazard Analysis
Operating Procedures	Operating Procedures
Training	Training
Maintenance	Mechanical Integrity
Incident Investigation	Incident Investigation
Compliance Audit	Compliance Audit
	Management of Change
	Pre-Startup Safety Review
	Contractors
	Employee Participation
	Hot Work Permits

# CUPA Coordination

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## MOC | Facility Name

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**Chad Collin** <ccollin@resourcecompliance.com>  
Draft

Thu, May 10, 2018 at 11:35 AM

Good afternoon,

In accordance with CalARP §2745.11(1), I'm writing to inform you about **IQF Freezer Upgrade** at *Facility Name*.

**Project Scope:**

Facility Name has purchased a larger Individual Quick Freeze (IQF) unit. OctoFrost Model 12/2 increases production from 5,000 lbs/hr to 16,000 lbs/hr. The new unit will run at 60% capacity with the existing compressor/condenser system. Facility may update refrigeration later (compressor, condenser). Facility personnel will position the IQF unit. Refrigeration contractor has been hired to tie in ammonia lines and start up.

I have already initiated the MOC and will be coordinating with all parties to ensure all necessary documentation is on file and tracked to completion.

If you have any questions, let me know.

that the procedures have been established.

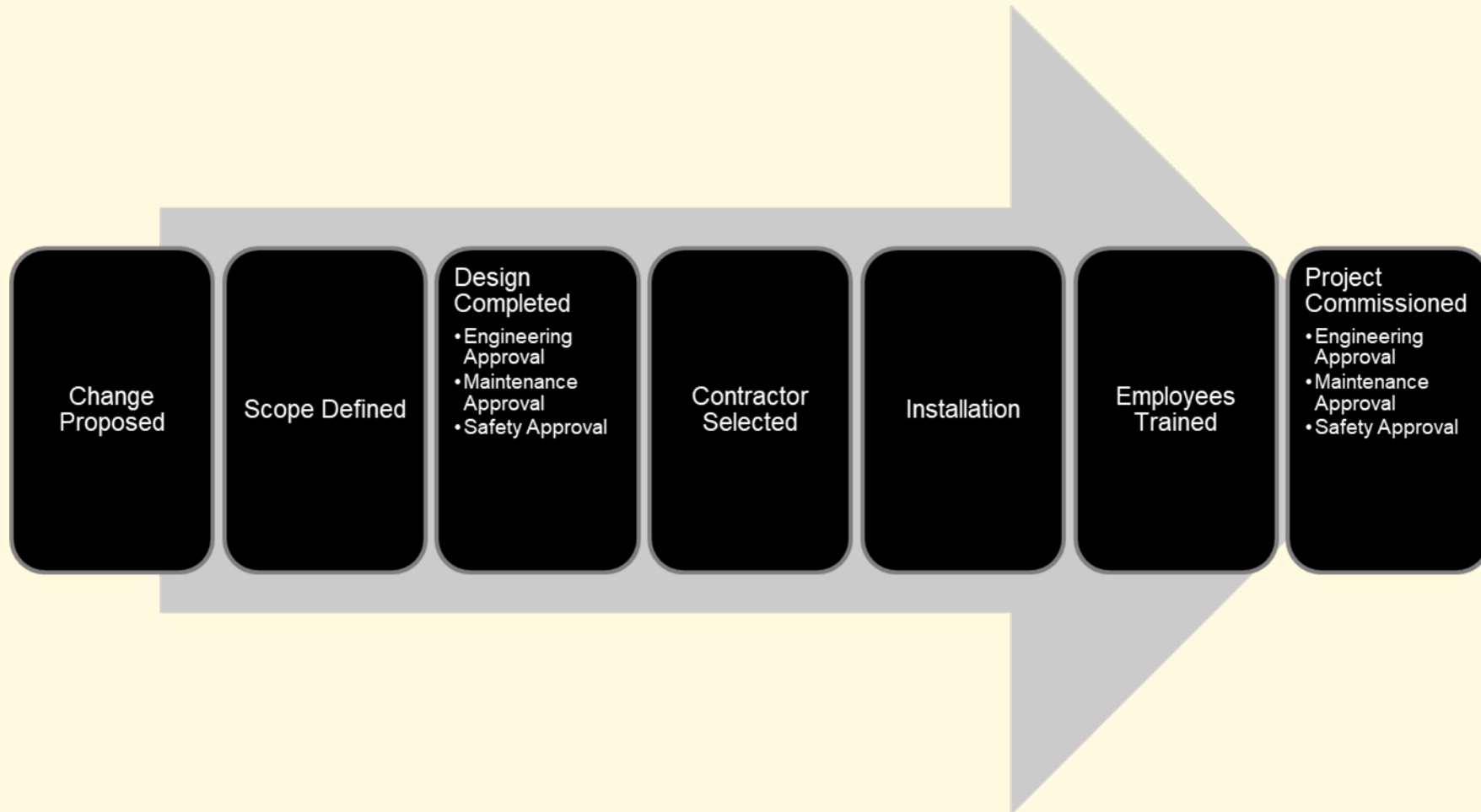
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# How is the *MOC/PSSR* completed?

1. Procedures & checklists
2. Coordination between:
  - Safety team
  - Operators
  - Installing contractor
  - Engineer
  - Consultant
  - CUPA



# How is the *MOC/PSSR* completed?



Section #  Section Name

Description

The purpose of this section is to determine which RMP-PSM elements are affected by the change.

Instructions

Mark each question below as 'Yes', 'No', or 'N/A'. Any RMP-PSM elements affected by the change must be updated before this section can be approved.

Approved By:

Date:

Add new question

Toggle Unanswered

Show Questions

- |                          |  |                                    |                                   |                                    |
|--------------------------|--|------------------------------------|-----------------------------------|------------------------------------|
| <input type="checkbox"/> | 1. Does the change require process safety information to be gathered or updated? | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 2. Does the change require a process hazard analysis to be performed?            | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 3. Does the change require the process hazard analysis policy to be updated?     | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 4. Does the change require operating procedures to be created or updated?        | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 5. Does the change require employees to be trained?                              | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 6. Does the change require the training policy to be updated?                    | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 7. Does the change require the mechanical integrity policy to be updated?        | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 8. Does the change require a mechanical integrity inspection to be performed?    | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 9. Does the change require the incident investigation policy to be updated?      | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 10. Does the change require the compliance audit policy to be updated?           | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |
| <input type="checkbox"/> | 11. Does the change require a compliance audit be performed?                     | <input type="button" value="YES"/> | <input type="button" value="NO"/> | <input type="button" value="N/A"/> |



▼ Category 1 - To be

Category # 1

1. Was the who by re tasks? [A

Question # 1

Question Note


Note: Such perso  
- experienced refi  
- property insuranc  
- in-house design  
- consulting engin  
- refrigeration equ

Comments

10/21/16 JB - Cal  
the engineering s

ANSI/IIAR 5-2013

### American National Standard for Start-up and Commissioning of Closed Circuit Ammonia Refrigeration Systems



Approved by  
the American National  
Standards Institute  
July 31, 2013

**iiar**  
International Institute of  
Ammonia Refrigeration

COMPRESSOR CONTROL

STOP SHUT-DOWNS PWR FAIL RESET AUTO

OIL ALARMS HOLD

15.8°

NO N/A

pection agency or

and piping under  
1142.



*To change the process in a safe manner and update the RMP/PSM/CalARP Program as needed.*

**Simple Questions:**

1. Will new equipment or new models be installed (vs. 'replacement in kind')?
2. Would the P&IDs change?
3. \*Would any RMP/PSM/CalARP elements change?

# Scenario 1: New Cold Room & Equipment



# Scenario 2: Pressure Relief Valve Replacement





## Scenario 3: Increasing the *Maximum Intended Inventory*



# Scenario 4: New PSM/CalARP Coordinator


**Emergency Response  
Program**

For

**Arctic Cold Storage**

12582 Avenue 384  
Cutler, CA 93661

Prepared by:



EPA FACILITY ID: 100000 Current 08/10/2016 00:45:27

**Section 1. Registration Information**

<b>1.1 Source Identification</b>	
1.1.a. Facility Name	Facility Name Inc.
1.1.b. Parent Company #1 Name	
1.1.c. Parent Company #2 Name	
1.2. EPA Facility Identifier	100000
1.3. Other EPA Systems Facility Identifier	
<b>1.4 Dun and Bradstreet Numbers (DUNS)</b>	
1.4.a. Facility DUNS	
1.4.b. Parent Company #1 DUNS	
1.4.c. Parent Company #2 DUNS	
<b>1.5 Facility Location</b>	
1.5.a. Street - Line 1	11111 Avenue 101
1.5.b. Street - Line 2	
1.5.c. City	Cutler
1.5.d. State	CA
1.5.e. Zip Code - Zip +4 Code	93661
1.5.f. County	TULARE
1.5.g. Facility Latitude (in decimal degrees)	22.487487
1.5.h. Facility Longitude (in decimal degrees)	-120.281934
1.5.i. Method for determining Lat/Long	Interpolation - Photo
1.5.j. Description of location identified by Lat/Long	Process Unit
1.5.k. Horizontal Accuracy Measure (meters)	25
1.5.l. Horizontal Reference Datum Code	North American Datum of 1983
1.5.m. Source Map Scale Number	24000
<b>1.6 Owner or Operator</b>	
1.6.a. Name	Facility Name Inc.
1.6.b. Phone	(559) 800-1111
1.6.c. Street - Line 1	11111 Avenue 101
1.6.d. Street - Line 2	
1.6.e. City	Cutler
1.6.f. State	CA
1.6.g. Zip Code - Zip +4 Code	93661
Foreign Country	
Foreign State/Province	
Foreign Zip/Postal Code	
<b>1.7 Name, title and email address of person or position responsible for RMP (part 68) implementation</b>	
1.7.a. Name of person	Manager/Accountant
1.7.b. Title of person or position	Manager/Accountant
1.7.c. Email address of person or position	name@company.com

RMPeSubmit PTHOMAS2 Page 1

# Takeaways

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**Questions/Comments?**