

# PRE-STARTUP SAFETY REVIEW

## Revision History

Rev. #	Description of Change	Date	Revised By
0	Initial Issue	July 2016	PSM RMP Solutions

## Purpose

The purpose of a pre-startup safety review is to help ensure that adequate safety measures are in place and are operational **BEFORE** a new chemical is stored or the current chemical inventory is modified. The pre-startup review confirms that prior to the introduction of a new chemical or a modification to the current hazardous chemical inventory:

- Construction of equipment is in accordance with design specifications;
- Safety, operating, maintenance, and emergency procedures are in place and adequate;
- For new chemicals, a PHA has been performed and recommendations have been resolved or implemented before the chemical arrives on-site;
- For modified processes, the Management of Change requirements have been met; and
- Training of each employee involved in handling the hazardous chemical has been completed.

As required by the CalARP regulation, this pre-startup safety review is a verification check, independent of the Management of Change process.

## Responsibilities

The General Manager, Operation is responsible for the pre-startup safety review plan at the facility. The General Manager, Operation ensures that pre-startup safety reviews are conducted for all new facilities and for all facility modifications that result in a change to the process safety information. The General Manager, Operation also ensures that appropriate pre-startup safety review documentation is maintained in the PSM/CalARP Program files.

## Scope

This document summarizes how General Manager, Operation complies with the pre-startup safety review requirements for the storage of hazardous chemicals at Inland Star Distribution Centers, Inc. Pre-startup safety reviews are required for all new facilities and for all facility modifications that result in a change to the process safety information. They may also be beneficial to use if a chemical has not been in storage for a prolonged period of time.

## Procedures for Conducting a Pre-Startup Safety Review

The steps involved in conducting a pre-startup safety review are:

- 1) Initiate the Pre-Startup Safety Review
- 2) Conduct the Pre-Startup Safety Review
- 3) Authorize the Addition of a Chemical
- 4) Complete Follow-Up Activities

Specific procedures that should be followed within each of these major steps are provided:

### 1) Initiate the Pre-Startup Safety Review

There are two major events which would cause the facility to initiate a pre-startup safety review:

- Construction of a new facility. A new facility would consist of a facility constructed on a worksite where there are no other facilities or a facility subsequently constructed such that it is physically separate from and otherwise independent from existing facilities.
- Modify an existing facility where the modifications are significant enough to require a change in the process safety information. The modifications would be connected to or otherwise dependent on an existing facility.

A pre-startup safety review must be performed before a new chemical is stored on-site at the new or modified facility or equipment.

The General Manager, Operations should be notified once the need for a pre-startup safety review is identified. It is his/her responsibility to ensure that the review is completed for the new or modified facility.

## 2) Conduct the Pre-Startup Safety Review

### New Facilities

For a new facility the following actions should be taken:

- Compile the process safety information for the new facility including information concerning the hazards of hazardous chemicals. The process safety information should be compiled before the process hazard analysis is performed.
- Perform a process hazard analysis that complies with the requirements of this PSM/CalARP Program. Refer to the Process Hazard Analysis section for more details.
- Resolve or implement all recommendations from the process hazard analysis prior to startup. Documentation should be established to verify completion of this activity.
- Ensure that all safety, operating, maintenance and emergency action and response procedures are written, implemented, and are adequate. Recognized standards or codes, manufacturers' instructions, and other applicable regulations may be considered in drafting procedures.
- Ensure that construction and equipment is in accordance with the design specifications. The construction codes and standards used should be documented in the process safety information.
- Ensure that training for each employee involved in handling hazardous chemicals has been completed. The modifications or additions reflected in the pre-startup safety review may create a need for additional training in other areas such as maintenance, emergency action and response, or hazard communication.
- Ensure that the changes or revisions to the PSM and CalARP Program documentation (e.g. process safety information, process hazard analysis, and material handling policies) are made available to facility employees.
- Ensure that any startup of new equipment is conducted in accordance with applicable industry standards, manufacturers' recommendations, or plant procedures.

### Modified Facilities

For modifications to an existing facility the following actions s be taken:

- Ensure that all process safety information is updated.
- Ensure that the requirements for a Management of Change have been completed. A safety and health review must be performed for a modified facility; the review may involve the completion of a formal Process Hazard Analysis (PHA) study or the completion

of a safety review checklist, depending on the significance of the modification. Refer to the Management of Change section of this PSM/CalARP Program for further details.

- Ensure that the relevant safety, operating, maintenance and emergency evacuation procedures are in place, have been changed to reflect the modifications or additions if necessary, and are adequate. All procedures should follow, where applicable, recognized standards and/or codes, manufacturers' instructions, and other applicable regulations.
- Ensure that construction and equipment is in accordance with the design specifications. The construction codes and standards used should be documented in the process safety information.
- Ensure that training for each employee involved in handling the hazardous chemicals has been completed including a review of any changes to relevant procedures. The modifications reflected in the pre-startup safety review may create a need for additional training in other areas such as maintenance, emergency response, or hazard communication.
- Ensure that the changes or revisions to the PSM/CalARP Program documentation (e.g. process safety information, process hazard analysis, and material handling policies) are made available to facility employees.
- Ensure that any startup of new equipment is conducted in accordance with applicable industry standards, manufacturers' recommendations, or facility procedures.

#### Documenting the Pre-Startup Safety Review

Attachment A contains a Pre-Startup Safety Review Verification Form which can be used to document completion of the pre-startup safety review. The Pre-Startup Safety Review Verification Form should be routed to the individuals responsible for each of the listed requirements. Signatures and dates should be gathered on the form after satisfactory completion of the listed requirement such as updating all written process safety information, conducting a process hazard analysis, and completing the requirements of the management of change procedures.

The pre-start up safety review involves employees with expertise in chemical inventory and storage requirement. The employees are selected based upon their experience and understanding of the process systems being evaluated. The following personnel are typically involved in verifying the requirements on the Pre-Startup Safety Review Verification Form:

- Director of EHS<sup>3</sup>
- General Manager, Operations
- Director Customer Service & Compliance
- Warehouse Coordinator

### 3) Authorize the Startup of the Process

The Pre-Startup Safety Review Verification Form provides a sign-off acceptance of the pre-startup safety review requirements. The last step of the process is to authorize startup of the process by signing and dating the approval lines on the Pre-Startup Safety Review Verification Form. Once these approval signatures and dates have been gathered on the form a new chemical may be added to storage to the new or modified facility or equipment.

The following personnel are authorized to approve the start-up of the process:

- Director of EHS<sup>3</sup>
- General Manager, Operations
- Director Customer Service & Compliance
- Warehouse Coordinator

### 4) Complete Follow-Up Activities

Occasionally, some action items may not be completed before the startup of the modified system. The follow-up section of the Pre-Startup Safety Review Verification Form should be used to document the resolution of any open items that were not completed before the system startup. Each open item should be documented in this table along with a due date, the completion date and an explanation describing why the item was not completed prior to startup. The individuals who are authorized to approve the startup (i.e. those who sign the Verification Form) should ensure that the modified system is safe to startup even though these items have not been completed, i.e. the follow-up items should have no impact on system safety.

**Attachment A**

Pre-Startup Safety Review Verification Form

**Inland Star Distribution Centers, Inc.**  
**Pre-Startup Safety Review Verification Form**

**Facility Information:**

Name: Inland Star Distribution Centers, Inc.	
Address: 2132A East Dominquez Street, Carson, CA 90810	
New Facility: <input type="checkbox"/>	Modified Facility: <input type="checkbox"/>
If new facility, assign PSSR #:	If modified facility, reference MOC #:

**Scope of Work:**


**Verification Sign-Off:**

Requirement	Name / Title	Signature	Date
1) All process safety information has been compiled and is complete, current, and accurate. The information is accessible to the employees. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
2) The process hazard analysis is complete for all new facilities, and the management of change has been completed for all modified facilities. The specific requirements of these elements have been completed satisfactorily. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
3) All safety procedures have been developed, or modified, and are implemented. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
4) All chemical handling procedures have been developed, or modified, and are implemented. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
5) All maintenance procedures have been developed, or modified, and are implemented. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
6) All emergency action procedures have been developed, or modified, and are implemented. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
7) Construction and equipment is in accordance with the design specifications. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
8) Training has been completed for all employees involved in handling hazardous chemicals. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			

**Inland Star Distribution Centers, Inc.**  
**Pre-Startup Safety Review Verification Form**

Requirement	Name / Title	Signature	Date
10) Training has been completed for all employees that are required to respond to emergencies involved in the process. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			

**Approval to Startup Process:**

Signature indicates that all pre-startup safety review items are completed. The approval for startup must be on or before the new or modified system was placed in service.

Name:	Date:
Title:	
Signature:	
Name:	Date:
Title:	
Signature:	

**Follow-up Items:**

List any follow-up items which were not completed prior to system startup, the reason that the item has not been completed (in the Comment column) and fill in due date and the date that they are completed. The individuals who are authorized to approve the startup should ensure that the modified system is safe to startup even though these items have not been completed, i.e. the follow-up items should have no impact on system safety.

Follow-Up Items	Comment	Due Date	Date Completed