

Operations Management Safety Plan

Document ID No.: 001-01-01.1#

Wavetech Helium, Inc. (Wavetech) Inc is committed to creating and maintaining a safe working environment for staff, contractors, visitors and the wider community.

Purpose:

The purpose of this document is to provide standards which Wavetech has set to handle safety rules and policies regarding visitor and contractor site visits, site orientation and training, Emergency Response Plans, Site Inspections and Management of Change.

1. Visitor and Contractor Site Visits

- 1.1. No unauthorized personnel allowed on location.
- 1.2. Sign in and sign out procedures for all site employees, contractors and visitors including detailed safety briefing relevant to the operations at the time of the visit.
- 1.3. Facilities will post signage for Minimum PPE for all site visitors.

2. Site Orientation and Training

- 2.1. All new employees, contractors and visitors will receive a site orientation to review:
 - 2.1.1. Emergency Response Plan.
 - 2.1.2. Current operations status.
 - 2.1.3. Site specific hazards or special requirements.
 - 2.1.4. Lockout/Tagout Program (LOTO).
 - 2.1.5. Stop Work Authority.

3. Emergency Response Plan

- 3.1. Local first responders will have reviewed and approved the Emergency Response Plan (ERP)
- 3.2. Approved ERP will be posted with local first responder and EMS contact phone numbers in common area or safety meeting room.
- 3.3. ERP will be reviewed annually by site manager.

4. Site Inspections

- 4.1. Site will have regular inspection for leaks or potential leaks.
- 4.2. Site management will sanction and conduct "Hazard Hunts" to reinforce the team's commitment to improving and maintain a safe work environment.

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5. Management of Change (MOC) Procedure

The MOC Procedure applies to changes in facilities, equipment, and procedures as well as changes in operating personnel. All changes, whether planned to be permanent, temporary or in the case of an emergency, shall be subject to the MOC Procedure.

5.1. MOC Procedure includes, but is not limited to:

- 5.1.1. Facility modifications resulting in changes to P&ID, structural support, layout or configuration.
- 5.1.2. New tie-ins to existing facilities.
- 5.1.3. Any facility modifications to increase capacity or accommodate different produced fluids.
- 5.1.4. Significant changes to operating conditions.
- 5.1.5. Equipment changes or replacements that are not “in kind”.
- 5.1.6. Bypass connections around equipment normally in service.
- 5.1.7. Changes to operating procedures, utility connections, process chemicals or agents.
- 5.1.8. Significant changes in qualifications, training and/or experience of site personnel.

5.2. MOC Procedure Initiation

- 5.2.1. Whenever these changes are planned or if they occur out of operational necessity, the MOC procedure is implemented prior to the change via the MOC Form. The MOC form will serve as the standard document of record for the Management of Change Procedure.
- 5.2.2. The initiator of the change describes the change requested and the reason for the change. Start and end dates (if applicable) and other details will be identified.
- 5.2.3. An assessment of the risks and hazards will be completed with input from personnel appropriate to the nature of the change requested. Management and mitigation actions where appropriate will be identified and recommended for approval along with the change request.
- 5.2.4. During the Initiation process, the type of change will be classified as:
 - 5.2.4.1. Emergency Change
 - 5.2.4.1.1. A change that should be implemented immediately.
 - 5.2.4.1.2. Without the change, harm to personnel, process or the environment is probable.
 - 5.2.4.2. Planned Change
 - 5.2.4.2.1. Any non-emergency and non-standard change.

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5.2.4.2.2. Requires scheduling and detailed planning.

5.2.4.3. Standard Change

5.2.4.3.1. Routine and common change.

5.2.4.3.2. Considered low/no risk or minimal impact.

5.3. Managing an Emergency MOC

5.3.1. An emergency MOC is any change that requires quick initiation and implementation for safety or environmental reasons if the Emergency Response Plan is in effect.

5.4. The onsite PIC has the authority to review and directly approve a change for implementation and startup in response to an Emergency. As soon as possible after the emergency response situation is under control, the MOC procedure will be completed.

MOC Form

Will be filled out by the initiator with the following guidelines:

5.4.1. Identify Proposed Change Type

5.4.1.1. **Process** – add, subtract, or alter order of operations.

5.4.1.2. **Equipment** – replacement does not function or operation the same as the original.

5.4.1.3. **Procedure** – steps or instructions have been revised.

5.4.1.4. **Facility** – combination of types is changing (such as equipment and procedure).

5.4.1.5. **Personnel** – Significant changes in qualifications, training and/or experience of site personnel.

5.4.2. Classification of Change

5.4.2.1. Emergency Change

5.4.2.1.1. A change that should be implemented immediately.

5.4.2.1.2. Without the change, harm to personnel, process or the environment is probable.

5.4.2.2. Planned Change

5.4.2.2.1. Any non-emergency or non-standard change.

5.4.2.2.2. Required scheduling and detailed planning.

5.4.2.3. Standard Change

5.4.2.3.1. Routine and common change.

5.4.2.3.2. Considered low/no risk or minimal impact.

5.4.3. Risk Assessment

5.4.3.1. The MOC Risk assessment must be completed by at least 2 persons with training and experience appropriate to the change being requested.

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5.4.3.1.1. Performing risk assessment is essential to determine any potential hazards/impacts that the change may directly or indirectly cause to public health, safety, welfare, or the environment.

5.4.3.1.2. All hazards are to be evaluated.

5.4.4. Hazard & Risk Control

5.4.4.1. Determine if risks are preventable.

5.4.4.2. Risks deemed manageable will require a hazard control classification.

5.4.5. Evaluate Making the Change

5.4.5.1. Analyze the change by weighing the benefits to any increase in safety and hazard risk.

5.4.5.2. Any proposed change may be approved or rejected on this evaluation.

5.4.6. Approval Process

5.4.6.1. Before a change is implemented (other than in an emergency), approvals must be given by the change initiator and both operations and technical functions - the Operations Manager and either the Facilities or Planning Engineer (as appropriate).

5.5. Implementation

5.5.1. Once a MOC has been approved, the Operations Manager will undertake a PSSR for any non-standard change.

5.5.2. The onsite PIC will ensure the PSSR checklist is completed prior to implementing the change (other than in an emergency). This checklist will include making affected personnel aware of the change and completing any necessary training.

5.5.3. If the change is temporary, the PSSR checklist will be completed when the temporary change is scheduled to return to original conditions. If the temporary change is to be made permanent, the MOC process must be restarted.

5.6. MOC Recordkeeping

5.6.1. A copy of the MOC Form and the PSSR checklist will be kept onsite at the facility for 2 years from the date of completion.

5.6.2. Written request for records, by regulatory agencies, will be complied or addressed in 5 business days.

Management of Change

Wavetech
Helium, Inc.

I. General Information

Change Title: Submission Date:

Change
Description

Reason for
Change

II. Responsible Parties

Change Initiator: Tech Rep: Ops Leader:

III. Change Details

Change Type: Change Class:

Change Duration:

Facility Affected:

Equipment or
System Affected

IV. Hazard Analysis

Lead By: Tech Rep 1: Tech Rep 2:

Analysis
Overview

V. Start-Up/Rollout Plan

Created By: Approved By:

Plan
Overview

VI. Final Disposition

MOC Disposition: Disposition Date:

Comments or
Conditions

Final Approver:

Signature: _____

Management of Change Checklist

- | | |
|--|------------------------------------|
| 1 Does the change require safety information to be gathered or updated?
<i>If yes, why?</i> | <input type="button" value="Yes"/> |
| 2 Does the change require a process hazard analysis to be performed? | <input type="button" value="No"/> |
| 3 Does the change require operations procedures to be created or updated? | <input type="button" value=""/> |
| 4 Does the change require different PPE to be used in this area? | <input type="button" value=""/> |
| 5 Does the change require employees to be trained? | <input type="button" value=""/> |
| 6 Does the change require contractors, vendors, or service providers to be trained? | <input type="button" value=""/> |
| 7 Does the change require the training policy to be updated? | <input type="button" value=""/> |
| 8 Does the change require the LOTO policy to be updated? | <input type="button" value=""/> |
| 9 Does the change require a mechanical integrity inspection to be performed? | <input type="button" value=""/> |
| 10 Does the change require a compliance audit to be performed? | <input type="button" value=""/> |

Change Type	Change Class	Disposition	Duration	Checklist
Process	Emergency	Waiting on Information	Permanent	Yes
Equipment	Planned	Approved	Temporary	No
Procedure	Standard	Approved w/ Conditions		N/A
Facility		Rejected		
Duration				
Days				
Weeks				
Months				
Years				

Pre-Start-up Safety Review (PSSR)

Document ID No.: 001-02-01.1#

Wavetech Helium, Inc. (Wavetech) is committed to creating and maintaining a safe working environment. This document provides the standards that Wavetech has set to start up new or modified equipment.

Purpose:

The purpose of this document is to provide a final review process to confirm the safety management process has adequately addressed changes made to a facility prior to start-up or restart of the facility. Review of the design changes and actual construction must be included in this process. A PSSR is not a Management of Change (**MOC**), it is the verification that the MOC was completed as prescribed, and the facility or process is safe to start-up and operable.

A PSSR provides the last opportunity for the team associated with a project to ensure the possibility of an unsafe condition does not exist before the process goes into operation and/or potentially hazardous chemicals are introduced. In addition, it enables the team responsible for the design, operation and maintenance of the process, including facility management, to check — before starting up — that effective procedures have been written and the operators and maintenance personnel have been trained on the process.

- 1. When needed** – a PSSR is a step in the MOC process and is required for most MOC projects. Additionally, a PSSR can be required even if an MOC was not required. PSSRs should be conducted for the following triggering events:
 - 1.1. New Capital Projects
 - 1.2. Modifying or Upgrading Process Equipment and Valves
 - 1.3. New or Modified Control System
 - 1.4. After an emergency shut-down due to an investigable event
 - 1.5. After a prolonged period of equipment outage
 - 1.6. Any other instance determined by the Operations Manager or Site Supervisor
- 2. Who should conduct** – a PSSR will be executed by a multi-disciplined team. This team should be led by the Operations Manager (or delegate) and include individuals with authority and experience in relevant engineering, operations, construction, and safety. Use third-party contractors if necessary, for specialist expertise or advice on the equipment or process under review.
- 3. Steps of the PSSR Process** – after the need for a PSSR is established and the PSSR team has been created, the team should:
 - 3.1. Meet to review the following:
 - 3.1.1. Project Design Plans & Scope

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3.1.2. Construction Reports & Inspection Documents

3.1.3. Approved MOC Form & Checklist (Document ID No.:001-02-01.2#)

3.2. Each team member is required to have detailed knowledge of and/or visit the facility.

3.3. Create the PSSR Checklist

3.3.1. Create a “punch list” for items identified as needing further action using the construction procedures and MOC form.

3.3.1.1. Before the facility is ready for start-up

3.3.1.2. After start-up has taken place

3.3.2. Punch list will be created utilizing operational procedures as a guide and will include, but not limited to:

3.3.2.1. Function test requirements

3.3.2.2. Pressure test requirements

3.3.2.3. Field calibration

3.3.2.4. Installation of required signage and safety guards

3.3.2.5. Operational and Safety Training requirements

3.3.3. Punch list will identify the person(s) responsible for action.

3.3.4. PSSR Team is responsible for tracking and verifying action status on punch list.

3.3.5. Final Approval – PSSR approval should be made by the Operations Manager (or delegate).

Recordkeeping

4.1 A copy of the PSSR checklist (Document ID No.:001-02-01.2#) will be kept onsite at the facility for 2 years.

4.2 Records will be produced upon request in 3-5 business days.

Wavetech Helium, Inc. Document ID No.: 001-02-01.2#
Pre-Startup Safety Review Verification Form

Facility Information:

Name: Wavetech	
Address:	Modified Facility:
<div style="border: 1px solid black; width: 30px; height: 15px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 30px; height: 15px; margin: 0 auto;"></div>
New Facility: If modified facility, reference MOC #:	
If new facility, assign PSSR #:	

Scope of Work:

Verification Sign-Off:

Requirement	YES	NO	N/A	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.						
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.						
3) All safety procedures have been developed, or modified and are implemented, Mechanical guards are in place and LOTO procedures						
4) All operators and personnel for facilities trained informed of general operations for whole facility.						
5) All maintenance procedures have been						
6) All emergency action procedures have been developed, or modified, and are implemented.						
7) Construction and equipment is in accordance with the design specifications. All safety equipment is in place.						
8) Has all equipment been pressure tested and calibrated. Have all emergency shut down valves been tested and are operational						
9) Training has been completed for all employees that are required to respond to emergencies involved in the process.						

Approval to Startup Process:

Signature indicated 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 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

Lock Out Tag Out Policy (LOTO)

Document ID No.: 001-03-01.1#

2.3. Isolate the energy source.

2.3.1. Ensure the energy source is deenergized.

2.4. Lock and tag energy source(s)

2.4.1. Install lock or suitable method to ensure energy source cannot be reenergized without removal of the lock or clear signs of tampering.

2.4.2. Securely fix a tag to communicate the equipment or machinery is not to be operated.

2.5. Test effectiveness of lock out.

2.5.1. Intentionally attempt to start or engage equipment or machinery, by normal means, to ensure alternate energy supply or trapped energy cannot cause inadvertent equipment startup or release of energy.

3. Lock Out

3.1. Lockout devices

3.1.1. Must be approved by facility manager as a suitable lockout device and standardize whenever possible.

3.1.2. Must be placed on the energy isolation device by an LOTO trained Enterprise employee or authorized contractor.

3.1.3. When installed, must ensure the energy isolation device physically cannot be engaged.

3.1.4. Can only be removed by the person which installed it after completion of the maintenance or service, or upon being relieved of those duties.

3.2. Installation of lockout device(s)

3.2.1. Should be installed by each authorized person working on the locked-out equipment or machinery prior to servicing or maintenance of machines and equipment.

3.2.2. If the multiple devices are required on the energy isolation device, a group locking device must be used. This special device should ensure that the energy isolation device cannot be reenergized until all locking devices have been removed independently.

3.2.3. When relieving an employee from their duties, the relieved employee's lock should be replaced with the lock of the relieving employee's.

3.3. Removal of lockout device(s)

3.3.1. Each lockout device should be removed by the authorized employee or contractor who installed the lockout device.

3.3.2. When relieving an employee from their duties, the relieved employee's lock should be replaced with the lock of the relieving employee's.

3.4. Removal of other authorized employee(s) lockout device(s)

Lock Out Tag Out Policy (LOTO)

Document ID No.: 001-03-01.1#

- 3.4.1. The facility manager must verify that the authorized employee, who installed the lockout device, is not at the facility.
- 3.4.2. The facility manager must make a reasonable effort to contact the authorized employee to inform them that their lockout device is planned to be removed and discuss any concerns.
- 3.4.3. Steps must be taken to ensure safe startup of equipment or machinery by means of:
 - 3.4.3.1. Equipment or machinery process review
 - 3.4.3.2. Testing of equipment or machinery in a controlled environment
- 3.4.4. The facility manager must ensure that the authorized employee has been informed that their lockout device has been removed before the employee resumes work at that facility.

4. Tag Out

4.1. Tagout devices

- 4.1.1. Must be approved by facility manager as a suitable tagout device.
- 4.1.2. Must be filled out and placed on the energy isolation device by an LOTO trained Enterprise employee or authorized contractor.
- 4.1.3. Can only be removed by the person which installed it after completion of the maintenance or service, or upon being relieved of those duties.

4.2. Filling out the tag

- 4.2.1. The information written on the tag must be legible and should include:
 - 4.2.1.1. Name of Authorized Employee or Contractor
 - 4.2.1.2. Title of Authorized Employee or Contractor
 - 4.2.1.3. Signature of Authorized Employee or Contractor
 - 4.2.1.4. Estimated completion date
 - 4.2.1.5. Brief explanation of the reason the tag out is required.

4.3. Installation of tagout device

- 4.3.1. Should be installed by each authorized person working on the tagged-out equipment or machinery prior to servicing or maintenance of machines and equipment.
- 4.3.2. When relieving an employee from their duties, the relieved employee's tag should be replaced with the tag of the relieving employee's.

4.4. Removal of tagout device(s)

- 4.4.1. Each tagout device should be removed by the authorized employee or contractor who installed the tagout device.
- 4.4.2. When relieving an employee from their duties, the relieved employee's tag should be replaced with the tag of the relieving employee's.

Lock Out Tag Out Policy (LOTO)

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4.5. Removal of other authorized employee(s) tagout device(s)

- 4.5.1. The facility manager must verify that the authorized employee, who installed the tagout device, is not at the facility.
- 4.5.2. The facility manager must make a reasonable effort to contact the authorized employee to inform them that their tagout device is planned to be removed and discuss any concerns.
- 4.5.3. The facility manager must ensure that the authorized employee has been informed that their tagout device has been removed before the employees resumes work at that facility.

5. Lock Out Tag Out Training

- 5.1. Trainers – Enterprise shall ensure that trainers have been trained and made available to conduct various levels of LOTO training.
- 5.2. Authorized Employee and Contractor training
 - 5.2.1. Company LOTO Policy
 - 5.2.2. Facility specific LOTO Procedures which will detail the unique energy isolation and communication requirements.
- 5.3. Affected Employee and Contractor training
 - 5.3.1. Company LOTO Policy
- 5.4. Visitor training
 - 5.4.1. A visitor to a facility is not required to complete LOTO training. However, the facility orientation should review the LOTO program and any active LOTOs.
- 5.5. Facility manager is required to ensure that the training guidelines are met.

6. Policy Audit

- 6.1. All LOTO procedures must be reviewed every 12 months by the Operations Manager and Facility Manager.
- 6.2. Authorized Employees and Contractors must review procedures every 12 months.