1. Procedure summary

This procedure outlines the procedure to properly receive and unload bulk liquid chemical to the bulk storage systems in the Harvest area.

This procedure outlines the general practices and principles involved with bulk unloading. Specific handling procedures may be required by hazardous chemicals that require specific handling methods. Each material to be received shall be thoroughly reviewed by the local health and safety team for compatibility with this procedure.

It is recommended that specific procedures be drafted to address each chemical to be handled and/or unloaded.

This procedure applies to bulk liquid transport tankers unloading at the bulk chemical storage facility. These tankers must be equipped with self-unloading means; e.g. on-board pump or a plant supplied air-pressure push out connection.

1.1. Related Procedures

1.2. Procedure impacts and concerns

Safety	Bulk chemicals being received may be hazardous. Ensure that MSDS material is reviewed before placing an order and establish a proper PPE plan to address the hazards outlined in the MSDS.	
	All trucks must be properly bonded and grounded to prevent the possibility of a static charge from being accumulated and released. This applies to all materials, not just materials with flash points.	Static charge can accumulate on tankers during transport. Grounding the tanker truck before any other work prevents accidental discharge that may harm personnel.
Quality	Bulk shipments should be accompanied by a Certificate of Analysis which quantifies the material being received. This CA and the quantity received must be recorded and evaluated as part of the Quality Program in place.	
Delivery	Prompt receiving and unloading of the bulk transport tankers will prevent future shipping delays and penalty costs.	
Environmental	Bulk chemical transfers have the potential to create large spills. Transfer shall always be performed over containment. Transfers shall always be accomplished using transfer lines with secured connections. Transfer shall always be actively monitored and shall never be left unattended.	All hose connections shall have their release mechanisms secured using a secondary method such as cotter pins or zip ties to secure cam-lock levers.
Cost	Care shall be taken to not spill or waste material or overfill storage containers resulting in loss of product and associated replacement and clean-up costs.	
Compliance	A spill contingency plan must be in place prior to placing an order for bulk materials. This plan must address spill	The site environmental compliance officer shall

prevention, proper handling and response plans in the event of a contained release into secondary containment and a spill event.

approve these plans.

1.3. Responsibilities and owners

Document Owner	Manage content and distribution
Process Owner	Responsible for content and process validation
Site Manager	Responsible for implementation and conformance
Site Health and Safety Officer	Responsible for ensuring that MSDS are reviewed prior to placing orders and ensuring that proper specific handling procedures are in place.
Site Environmental Compliance Officer	Responsible for ensuring that a specific spill contingency plans are in place prior to bulk orders being placed.
Site Facility/Maintenance Manager	Responsible for ensuring that transfer equipment is properly inspected and maintained, and that records of such are in place, to prevent failure and possible spill or injury.

2. Process

2.1. Process description

-confirm spill kits and fire extinguishers are available
-confirm MSDS is available
-confirm spill response plan is available
-confirm that there is no smoking
-position truck to unload location
-confirm truck is properly in neutral with brakes applied
- chock truck
-bond and ground truck
-confirm bulk chemical manifest
-confirm target bulk tank
-verify bulk tank level
-verify amount to be received
-put on PPE
-inspect transfer hoses
-inspect bulk trailer/truck
-inspect piping and valve positions
-inspect containment vault for entrained material
-close secondary containment valve in vault

-make connections
-secure connections with secondary restraint
-verify hose is not kinked or otherwise improperly suspended or routed increasing stress on connections.
-complete initial transfer checklist

-verify tanker pump pressure relief setting is less than 45 psi
-walk piping and valve positions to verify positions and connections
-open bulk tank loading valve using local switch
-verify automatic valve is open (indicator on top of yellow actuator)

-open piping connection valve
-finalize transfer checklist

-start tanker transfer (either with on-board pump and valves or by connection of plant-air) – this is usually done by the bulk transporter

-monitor transfer – check for leaks, and verify bulk tank level through local read-out and visual tank level
-confirm transfer volume is the correct amount planned
-stop transfer from truck

-close tanker valves and blow-out transfer lines to push out remaining liquids or if equipped use the tanker on-board line purging system – the tanker may be equipped with a specific hose draining and purging system which should be used
-close tank transfer valve when line is purged
-break tanker transfer line at the truck over containment (e.g. bucket) and drain hose back toward tank piping by lifting and walking it back to the fixed piping
-close connection valve
-break hose connection at the transfer piping over containment (e.g. bucket)

-inspect secondary containment vaults to ensure no material has collected.
-clean hoses over containment

-verify truck valves are secure
-store truck hoses
-complete receiving paperwork
-remove bonding
-remove tire chocks
-release truck
-open containment vault valve and rinse containment to flush drain pipes

-dispose of any collected product drippings appropriately
-clean and store PPE and equipment
-file paperwork

3. Required documents

3.1. Input documents

3.2. Output documents

4. Document control

4.1. Revision history

R0 – Initial release	

4.2. Document approval

<Name>	<Approval date>

4.3. Document reviewers

<Name>	<Last reviewed date>
<Name>	<Last reviewed date>

5. Risk analysis

<Risk name>	<Mitigation plan>	<Owner>	<RPN>