

	JOB / TASK DESCRIPTION:	TITLE OF PERSON WHO PERFORMS JOB:	JSA PERFORMED BY:
JOB SAFETY ANALYSIS (JSA) Chemical 001	Carbon Dioxide Delivery and Unloading	O & M SPECIALIST	John Doe
PROJECT NAME: Water Plant # 1	PROJECT LOCATION: Watertown MO	DEPARTMENT: Operations	REVIEWED BY: John Doe
		NEW <input type="checkbox"/> REVISED <input checked="" type="checkbox"/>	DATE: DATE: 9/21/09
PPE REQUIRED: Hard hat, safety boots, face shield, hi-vis vest, hearing protection, chemical gloves			
EQUIPMENT REQUIRED:			
JOB TASKS	POTENTIAL HAZARDS	RECOMMENDED ACTION/PROCEDURE	REQUIRED PPE
Log company, chemical, driver and truck information on the chemical delivery log sheet	Slips, trips, falls, possible moving equipment	Make certain driver is aware of your location while positioning truck	Hard hat, hi-vis vest, eye protection, safety boots
Inspect the Certificate of Analysis to make sure the carbon dioxide meets specifications	NA		Hard hat, hi-vis vest, eye protection, safety boots
Verify that all seals are in place and that connectors are correct	NA		Hard hat, hi-vis vest, eye protection, safety boots
Verify the current supply level and available capacity	NA		Hard hat, hi-vis vest, eye protection, safety boots
Check the carbon dioxide container for proper operation	NA		Hard hat, hi-vis vest, eye protection, safety boots
Be sure the delivery driver has all safety equipment and apparel in place	NA		Hard hat, hi-vis vest, eye protection, safety boots
Remove the caps from the liquid supply and vapor balance	Pressurized lines and chemical contact	Use caution to avoid dripping chemical or trapped pressure	Hard hat, hi-vis vest, eye protection, hearing protection, safety boots, gloves
Have the driver make all required connections for unloading and install safety chains on the lines	Pressurized lines and chemical contact	Inspect connections and wrap	Hard hat, hi-vis vest, eye protection, hearing protection, safety boots, gloves
Open the correct valves for liquid supply and vapor balance	Slips, trips, falls, head bump, strain, chemical contact		Hard hat, hi-vis vest, eye protection, hearing protection, safety boots, gloves
Monitor the delivery lines and container pressure during unloading	Pressurized lines and chemical contact	Stand clear of the connection lines	Hard hat, hi-vis vest, eye protection, hearing protection, safety boots, gloves
Verify that the truck is empty and that the fill lines have been cleared of product and pressure	Pressurized lines and chemical contact	Stand very clear as driver blows off pressure from his lines	Hard hat, hi-vis vest, eye protection, hearing protection, safety boots, gloves
Have the driver close the fill valves, remove his connections and properly store his fill line	Pressurized lines and chemical contact	Stand clear of the connection lines	Hard hat, hi-vis vest, eye protection, hearing protection, safety boots, gloves
Replace the liquid supply and vapor balance line caps	Slips, trips, falls, head bump, strain, chemical contact	Use caution on short ladder and catwalk	Hard hat, hi-vis vest, eye protection, hearing protection, safety boots, gloves
Complete the chemical delivery log sheet with the drivers signature	NA		Hard hat, hi-vis vest, eye protection, safety boots
Observe the final container level and pressure	NA		Hard hat, hi-vis vest, eye protection, safety boots