



**UNC**  
ENVIRONMENT,  
HEALTH & SAFETY

# Job Safety Analysis

Safety Information for The University of North Carolina at Chapel Hill


**ITEM THAT JSA IS BEING WRITTEN FOR: Energy Services**

**CoGeneration Facility Plant Operations**

Operations Auxiliary Operators: Adding dry waste water treatment chemicals briquettes to the Nalco system tank at the Cooling Tower Shed



Title	Work Task	Hazards	Controls
	1. Prepare for job and obtain bulk container of chemical briquettes to add to the system.	1a. None	1a. Personal Protective Equipment: Long sleeve work shirts, leather gloves/and or disposable chemical gloves, safety glasses, and a N95 filtering face piece respirator.  1b. Review Material Safety Data Sheet for treatment chemical briquettes upon initial assignment to the job.
	<b>Work Task</b>	<b>Hazards</b>	<b>Controls</b>
	2. Arrive at the Waste Water Cooling Tower Shed, open door, and prepare to pour dry chemical briquettes to system.	2a. Slips, Trips, and Falls	2a. Ensure you have a good grip on the container when transferring it and watch for trip hazards when entering and moving within the Cooling Tower Shed.

	<b>Work Task</b>	<b>Hazards</b>	<b>Controls</b>
	<p>3. Remove the lid to the containers and add the briquettes from product containers into a Nalco chemical container.</p> <p>(Picture of tank where briquettes are added is on the right hand side of the large steel tank with the white lid as illustrated below).</p>	<p>3a. Skin, eye, and respiratory irritation to water treatment chemicals dust when pouring briquettes.</p> <p>3b. Chemical &amp; Physical Hazard (it is an Oxidizer): Unwanted chemical reaction if mixed with the wrong type of incompatible materials.</p>	<p>3a. Keep the cooling tower shed door open when pouring the container if possible. This will ensure adequate natural ventilation is provided.</p> <p>Ensure PPE from task #1 is used.</p> <p>Ensure that access to the plumbed emergency eyewash/shower unit is not blocked.</p> <p>3b. Do not pour chemical materials near petroleum based materials (such as fuel and solvents).</p>
<b>Training</b>	<p>Only trained Operations Auxiliary Operators are to perform this work task;</p> <p>Hazard Communication Standard Requirements: review material safety data sheet for treatment chemical briquettes.</p> <p>Complete the EHS online self-study unit: using N95 for respiratory protection:  <a href="http://www.ehs.unc.edu/training/self_study/n95">http://www.ehs.unc.edu/training/self_study/n95</a></p>		
<b>Created</b>	JSA Created by Daniel Gilleski, 11-7-2008		
<b>Referenced Material</b>	Material Safety Data Sheet for Trichloroisocyanuric Acid		
<b>Contact Info</b>	<p>For more information about this JSA and other JSAs, contact:  <i>Department of Environment, Health and Safety</i>            UNC-CH, 1120 Estes Drive Extension, Chapel Hill NC 27599 CB# 1650            (919) 962-5507 <a href="http://ehs.unc.edu">http://ehs.unc.edu</a></p>		