



Lifting Equipment Operation in Adverse Weather Best Practice

OVERVIEW	
	<p>The Houston Business Roundtable’s Crane, Lifting, and Rigging committee composed of SME’s from both owners and contractors collaborated together to develop this “Best Practice that provides suggested minimums when operating lifting equipment in adverse weather. The challenge that owners and contractors have is to ensure that safety of their employees and equipment while maintaining a productive work environment.</p> <p>Houston Business Roundtable’s purpose is to educate participating companies, so every company represented will be better informed and can make its own individual decisions. <u>HBR members are not required to adopt the HBR recommendations or policies.</u></p> <p>Disclaimer – Discuss with client differences between owner / clients’ requirements and contract company’s requirements and decide which will be followed.</p>
PURPOSE	
	<p>Establish “Best Practice” guidance that will set an action plan in progress to eliminate: Possible damage to equipment, personnel, and monetary loss. Provide a Safety resource for employers and employees as well.</p>
OBJECTIVE	
	<p>Establish recommended “Best Practice” that would be proactively used by owners and lifting equipment vendors / contractors within our industry.</p>
RECOMMENDATION	
	<p>Establish Manufacturer’s Recommendation as minimum requirements</p>
	<p>Establish lightening process</p> <ul style="list-style-type: none"> • 15 miles to safe out / secure lifting equipment • Consider minimum 30 minute restart after last strike in “15 mile” area
	<p>Establish Stop Work Authority (SWA)</p>
	<p>Perform Job Hazard Analysis (JHA, JSA, JLA) – Hazard / Risk Assessment</p>
	<p>Establish competent person for lifting equipment process (i.e. lift supervisor, lift director, crane operator)</p>
COMMUNICATIONS	
	<p>Establish communication method / plan to informing employees of adverse weather</p>
	<p>Establish communications from Site to Lifting Equipment and / or Riggers</p> <ul style="list-style-type: none"> • Who is the focal point / designated person for notification??
	<p>Weather requirements reviewed as part of the lift planning / execution / assembly / disassembly</p> <ul style="list-style-type: none"> • When thunderstorms threaten, don’t start anything that you can’t quickly stop. • Communicate time required to secure lifting equipment and / or load



TRAINING		
	Adverse weather recognition training and when to take action to ensure safety included in employee training and / or orientation.	
REFERENCES		
	OSHA 40 CFR 1926 Crane Standard 1926 Subpart CC - Cranes & Derricks in Construction	
	National Oceanic and Atmospheric Administration (NOAA) www.lightningsafety.noaa.gov	
	National Weather Service (NWS) http://www.weather.gov/	
DEFINITIONS		
WIND SPEED AT CRANE BOOM TIP		Wind speed (sustained or gusts) must be addressed through site or manufacturers requirements. Consider review @ 20 mph, Suspend @ 25 mph, No Go @ 30 mph
WIND GUST		Is a sudden, brief increase in the speed of the wind followed by a lull.
ASSMEBLY & DISASSEMBLY (A & D)	1926.1404(h)	Addressing specific hazards. The A & D director supervising the assembly / disassembly operation must address the hazards associated with the operation, which include:
	1926.1404(h)(12)	Wind speed and weather. The effect of wind speed and weather on the equipment.
OPERATING INSIDE CLEARANCE ZONE	1926.1410(c)(1)	Minimum clearance distance. The power line owner / operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution determines the minimum clearance distance that must be maintained to prevent electrical contact in light of the on-site conditions. The factors that must be considered in making this determination include, but are not limited to: <ul style="list-style-type: none"> • Conditions affecting atmospheric conductivity; time necessary to bring the equipment, load line, and load (including rigging and lifting accessories) to a complete stop; • wind conditions; degree of sway in the power line; • lighting conditions, and other conditions affecting the ability to prevent electrical contact.

