



Safety Alert

From the International Association of Drilling Contractors

ALERT 00-08

MICROWAVE OVEN SAFETY

WHAT HAPPENED:

A rig worker heated a cup of water in a microwave oven. When he removed it from the oven, it "exploded" in his face, resulting in serious burns.

WHAT CAUSED IT:

Microwave ovens work differently than conventional ovens or ranges. Liquids heated in a microwave are very hot, even if the container they are heated in is cool. Also, liquids heated in a microwave may not turn into steam, even though they have been heated past the boiling point. Moving these containers of hot liquid -- or putting a utensil or other object into them -- creates a "steam bubble" and the hot liquid may splash out, causing a scald burn. There is a very strong possibility of this happening when heating water in a microwave. Numerous incidents similar to this have been reported on rigs, with injuries ranging from serious burns to loss of sight.

SAFETY TIPS:

1. When heating water or other liquids, run the microwave for a short time for several cycles to reach the desired temperature. Several short periods are preferable to one long period.
2. Other foods may also present hazards when cooked in a microwave. For example, eggs should never be cooked with their shells intact, as these may explode. Egg yolks may also explode unless the surrounding membrane is pierced to release pressure that may build up inside. The same may occur when cooking food with skins, such as potatoes. These should be cut open or pierced with a fork prior to cooking in a microwave. Caution should also be used with microwaveable popcorn bags and similar closed packages.
3. Food continues to cook after the microwave turns off, whether it is still in the oven or someplace else. Allow food to stand for at least one minute after cooking, or as the recipe directs.
4. Microwaves may heat food differently than conventional ovens, but there is nothing different about the scald burns they cause. Microwave-induced burns should be treated as any other type of burn.
5. Microwave safety is also important at home. Extreme caution should be used when heating baby bottles or baby food. Young children should not be permitted to use a microwave oven without adult supervision.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices.
Copyright © 2000 International Association of Drilling Contractors. All Rights Reserved

Issued March 2000