MMS Safety Alert

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

Notice No.159

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Welder Burned in Pipeline Accident

In repairing a pipeline, a welder was using a torch to cut a bevel on a 6-inch riser section of pipe. A handset pipe stopple (plumber's plug) was inserted and vented prior to the cutting procedure. With 1 inch remaining on the cut, the pipe stopple blew out and a flash fire occurred. The welder received third-degree burns to his face and arms.

This accident, along with many others in which a pipe stopple was used to isolate hydrocarbons during a cutting or welding procedure, has come to the attention of the Minerals Management Service (MMS). The MMS recommends the following practices and procedures be enacted during repairs of pipelines and process piping:

1. Piping must be purged with water prior to performing repairs. Special attention should be paid in order to effect the complete displacement of hydrocarbons in the line.

2. A handset pipe stopple is only to be utilized on water or air service pipelines or piping. Consideration should also be given to pressure limitations of this type of plug.

3. Repairs conducted on piping that is or has been in hydrocarbon service and that require pipe plugs should utilize a mechanically set (hydraulic, pneumatic, etc.) plug to effect a more positive seal. These plugs should also be vented to a safe location.