Casing Bleed-down into Plastic Drum Results in Fire on Platform

An operator was bleeding down casing fluids into a plastic 55-gallon DOT drum. Shortly after the bleed-down began, the drum caught fire. Despite the failure of several front-line fire systems, the fire was contained, the bleed valve was shut, and the area was cooled by direct water spray.

After an investigation, it was concluded that the ignition was possibly caused by a buildup of static electricity in the plastic drum. The plastic drum was used despite company requirements to use metal containers, fully grounded, in such operations.

The MMS recommends operators (1) be aware of the potential for static electricity buildup as an ignition source when filling plastic containers with hydrocarbons during offshore operations, (2) review their safety policies that address such operations, and (3) stress strict adherence to all safety policies.