

Hazardous Air Pollutants (HAPs) Scoping Study (Year 2014 GWEI study)

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To assess the level of emissions of hazardous air pollutants (HAPs) from offshore oil production platforms in the Gulf of Mexico on the OCS, a scoping study was conducted as part of BOEM's *Year 2014 Gulfwide Emissions Inventory Study*. HAP emission estimates were developed for select oil and natural gas production platform emission sources using the GOADS-2014 activity data combined with HAP emission factors and speciation profiles.

HAP emission estimates were developed for 10 platforms with the highest volatile organic compound (VOC) and particulate matter (PM₁₀) emissions. The VOC estimates were used to select platforms to be included in this task because HAPs are often delineated as volatile gases in terms of their photochemical reactivity. The PM₁₀ estimates were used because combustion sources typically emit HAPs that are metals. The 14 HAPs included in the study were selected after a detailed literature search was conducted to identify key HAPs emitted from offshore production non-combustion and combustion sources.

The results indicate that the organic HAPs are driven in large part by the cold vents, which is consistent with the cold vent contribution to the VOC emissions estimates in the 2014 Gulfwide inventory. Metal HAPs (arsenic, beryllium, cadmium, chromium, and mercury) are driven by combustion equipment. BOEM will use the results of this study to include HAPs in the *Year 2017 Emissions Inventory Study*, which is currently underway. Non-platform sources will also be included.

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