

**FEASIBILITY OF GASIFICATION OF SECONDARY OIL-BEARING  
HAZARDOUS MATERIALS AT SMALL REFINERIES**

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Refineries gain significant environmental and economic benefits from the gasification of oil-bearing hazardous secondary materials. This paper presents a discussion of the opportunities available to small refineries (with "small" defined as refineries processing 25000 – 50000 barrels of crude oil per day). Small refineries have feedstocks available in quantities of the order of 10 - 20 tons per day (they have the option of combining feedstocks generated by other refineries). The paper first presents a brief overview of the gasification process as it relates to the recycling of refinery oil-bearing hazardous secondary materials. The paper then reviews the gasification technologies available for systems that operate at the feedstock availability scales likely to occur at small refineries. Finally, we consider the environmental and economic advantages for small refineries of recycling oil-bearing hazardous secondary materials through gasification. The paper estimates the cost savings possible from the generation of power, from the generation of process heat that could be used for steam generation, and the reductions in costs for the transport and disposal of the oil-bearing secondary hazardous materials

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