

Impact of unleaded gasoline in reducing emissions in Saudi Arabia. Hamid, S. Halim. Department of Chemical Engineering and Center for Refining and Petrochemicals Research Institute, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. *Energy Sources* (2001), 23(1), 37-44. Publisher: Taylor & Francis Ltd., CODEN: EGYSAO ISSN: 0090-8312. Journal written in English. CAN 134:197320 AN 2001:74026 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

Saudi Arabia is dealing progressively with tighter restrictions on refined product quality. Efforts to phase-out of Pb in gasoline and reducing S in diesel fuel are ongoing. Pb removal is the main characteristic of environment-friendly gasoline. Detrimental health effects of using leaded gasoline are many; Pb exposure can cause kidney failure, brain dysfunction, behavioral problems, and neurol. impairment. Saudi Arabia is moving towards using unleaded gasoline, and efforts are being put forward by research organizations to produce Pb-free gasoline in the Kingdom. A high severity fluid catalytic cracking process is being developed to convert vacuum gas oil into high-octane gasoline components. This process requires high temp. and pressure and low contact time vs. the conventional fluidized catalytic cracking process.