

**THE DETERMINATION OF THE POLLUTION FREE AREAS  
DUE TO CHEMICAL RELEASE FROM OIL&GAS REFINERY  
PLANT, KERTEH, TERENGGANU**

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## DECLARATION BY CANDIDATE

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledge in accordance with the standard referring practices of the discipline.

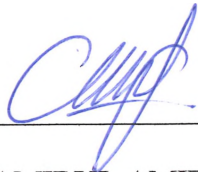


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## ABSTRACT

Living near at the high-risk industry place such as oil and gas refinery plant, citizens would be inevitably exposed to the chemical releases. Thus, this study is conducted to determine the best residential area that free from the chemical release by oil and gas refinery plants. This project will be focusing on the chosen area in Kerteh, Terengganu. This is because the citizens especially the children are having health problems due to the polluted area as there are three main refinery plants located there. Hence, optimization is used to identify the chemical release free areas. Using the combination of binary integer programming and simplex method, this paper explores the selected area in finding the best location for residential and accommodations. Thus, MATLAB software is significant to use in order to solve this binary integer programming model. Finally, if it shows that the location 0, the area that free from the chemical release is being determined.

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