

South East Kowloon Development at Kai Tak Airport – Decontamination and Site Preparation

About 12 hectares of the apron area is contaminated mainly by jet fuel. The contaminants contain some substances e.g. benzene and methane, that are potentially hazardous to the health and safety of construction workers and occupants of the future development. Therefore, it is necessary to clean up Kai Tak for a hazard free future.

The technology uses a matrix of air extraction/injection wells to induce air stream underground, drawing out volatile contaminants to a plant for combustion. Air supply also activates bacteria to break down the less volatile fraction. After treatment the contaminants become water, carbon dioxide and harmless substances. The whole process takes about 2 years.

Contaminated soil at small isolated spots is simply excavated for treatment, as vapour emission can be put under control. The excavated soil is piled up with plastic cover at a designated location, where embedded air extraction pipes remove contaminants following the above principle.

The air quality is monitored to make sure vapour of contaminants does not reach built-up areas around Kai Tak. The workmen's exposure to harmful substances is also checked to ensure their health. Regular reports are submitted to Environmental Protection Department for checking compliance with all statutory requirements.

在啓德機場原址進行的九龍東南發展計劃 – 清理油污和地盤平整

在機場範圍內發現的污染物主要為飛機用燃油，污染土地面積約十二公頃。此等污染物包含苯及甲烷，對於將來重建時的建造工人以及重建後的用戶均可構成安全及健康上的威脅。因此，為確保將來有一個安全的環境，有必要把這些物質清除。

整個清理油污系統是由一連串泥土抽氣井和空氣噴注井組成的一個網絡。利用噴注井把空氣打到地下水位以下，把污染物揮發及提供足夠氧氣把剩餘的污染物分解。抽氣井可把氣化後的污染物抽走並引到催化器燒掉。經處理後之污染物會變成水、二氧化碳及其他無害物質。整個程序需時大約兩年。

其他面積較小的污染地點，由於氣體揮發問題較易控制，處理的方法則較為簡單。受污染的泥土將會被挖掘出來堆起。泥堆中並放置抽氣管道，應用上述原理，抽走污染物及提供有利環境將污染物分解。

工程進行期間，空氣質素受到嚴密監測，以確保由污染物釋放的氣體不會擴散至附近民居及地區。工人在處理有害物料時亦受到適當監測以確保他們的健康。有關報告並定期提交環境保護署以確保所有工序符合有關標準。