

# Introduction to Soil and Groundwater Pollution Remediation Fee

## 1、Origin

Remediation of soil and groundwater pollution is not only time consuming but also requires a huge expenditure. To make remediation work more time effective, Taiwan established a Soil and Groundwater Pollution Remediation Fund following the example of Superfund in the U.S. There are 8 major income resources of the fund, and Soil and Groundwater Pollution Remediation Fee is currently contributes most to it. The remediation fee collection is based on Article 28 of Soil and Groundwater Pollution Remediation Law, "Central governmental organization may collect soil and groundwater pollution remediation fee from the pollution producer and importer by the produced and imported amount of announced substances in order to remediate soil and groundwater pollution."

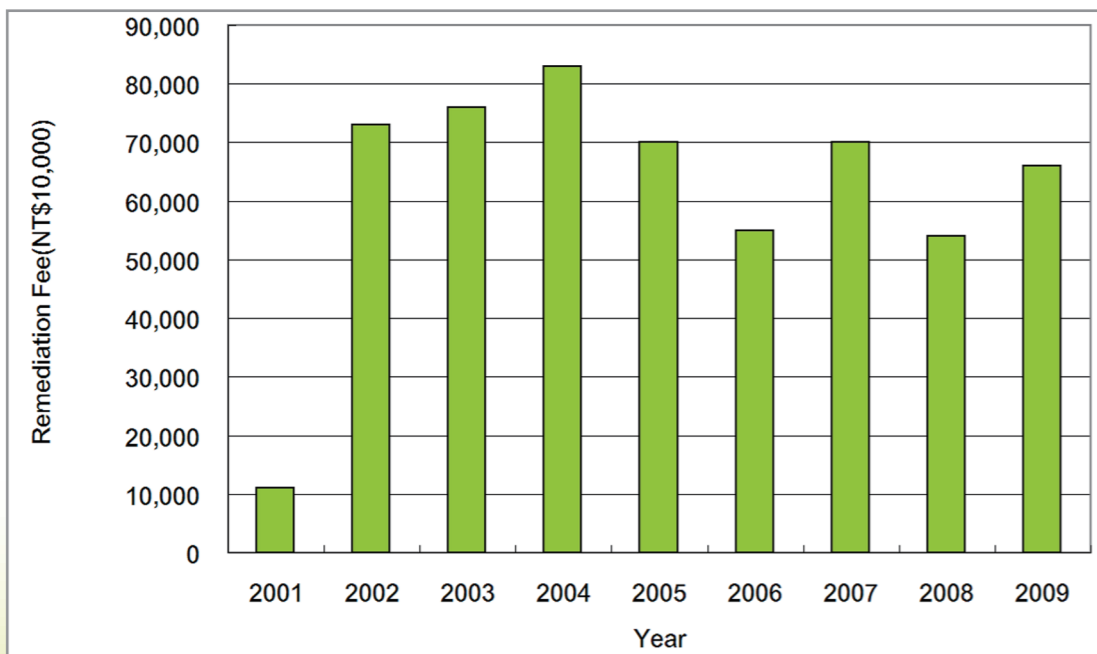
## 2、Objectives

The remediation fee has officially collected since November 2001, focused on 6 categories and 125 chemical substances. The target size of the remediation fee is estimated to be 30 billion NT dollars (938 million US dollars). It is mainly spent on investigation and remediation of unclear sites and continuously promotion of soil and groundwater investigation, verification and remediation work in Taiwan. However, the target size will be adjusted and discussed in accordance with the number of unclear sites to be investigated and changes of the law.

## 3、Results

Currently, the business owners pay remediation fee every 3 months according to their produced and imported amount of announced substances. The size of the fee is already 5.69 billion NT dollars (178 million US dollars). The petrochemical industry contributes most (above 90%) to the remediation fee. With the interest income, the fund size is around 5.99 billion NT dollars (187 million US dollars). The major remediation category is petroleum organic compounds, and the major substances are gasoline, diesel oil and fuel oil. The remediation fee has a reward method to the business owner for better pollution prevention measures. For example, when the business owner has environment damage responsibility insurance or has invested for better soil and groundwater pollution prevention facilities or construction, the business owner may require Environmental Protection Administration (EPA) return part of the paid remediation fee.

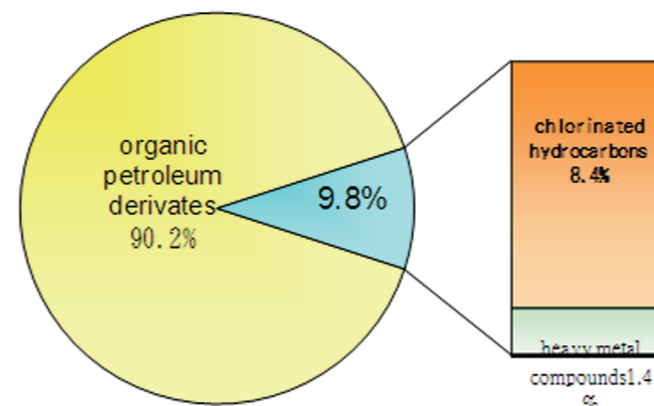
The total amount of NT\$ 2.02 billion dollars (63 million US dollars) soil and groundwater pollution fee has been used since December 2009, which the expenditure of pollution remediation was around 83.9% (NT\$ 1.69 billion dollars, 53 million US dollars). The total amount of 1,499 pollution sites had cleaned up (695 pollution sites still on the pollution sites lists). The rest of remediation fee will continuously used in pollution remediation.



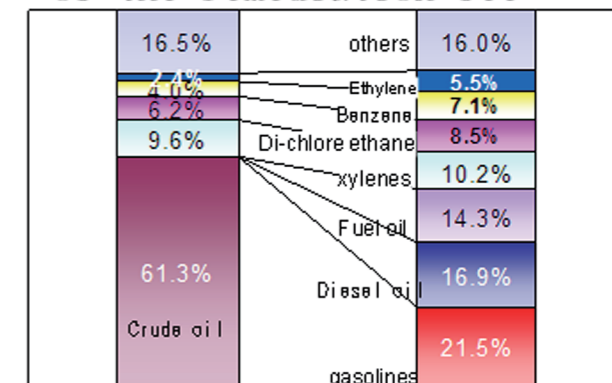
## 4、Prospect

The petrochemical industry contributes most to the remediation fee in Taiwan currently and the petrochemical industry often asks for fairness of the fund resources. With the starting soil and groundwater pollution remediation work, the proportion of 8 major fund resources will be discussed comprehensively. The objects of the remediation fee will be expanded and the collection system will be reasonably planned and discussed to diversify fund resources.

- Analysis of category
  - 6 Categories: The petrochemical industry contributes above 90% of the remediation fee.



- 125 Chemical substances: crude oil, gasoline, diesel oil, fuel oil are the major chemical substances which contributes more than 50% of the remediation fee



Before the crude oil fee adjustment      After the crude oil fee adjustment