

# A Plot of Land Worth A Fortune?

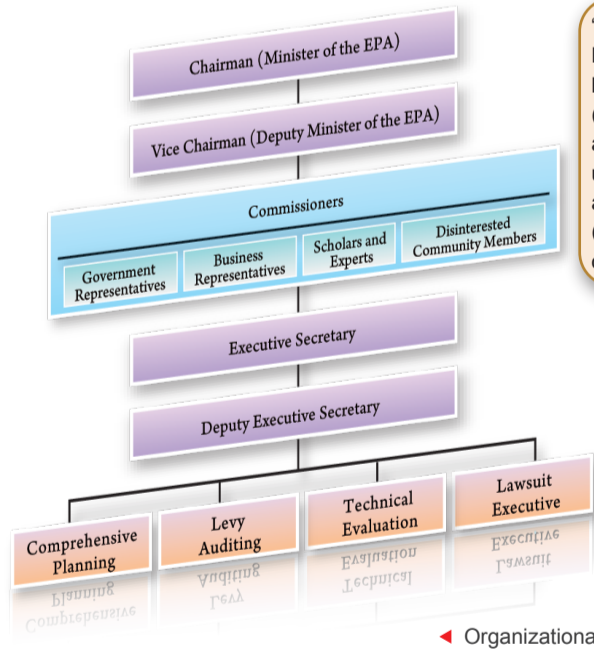


Our Legacy:  
**Asset** or **Liability**

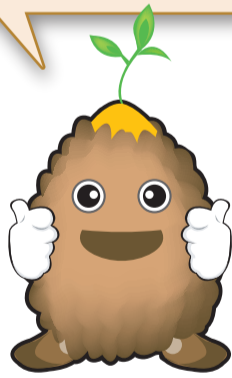


- According to the condition, the following measures will be taken when pollution occurs:
- Request for suspension of action, operations, or partial or complete suspension of work.
  - Investigation of groundwater pollution status and accountability; restriction of use of the groundwater or other polluted water sources.
  - Alternative drinking water supply.
  - Erection of warning sign or fencing.
  - Inspection of potentially contaminated agricultural and fishery products in conjunction with pertinent authorities.
- Restrictions on crop cultivation or incineration of the polluted products are undertaken whenever necessary. Compensation for product loss is offered.
- Resident evacuation or activity restriction.
  - Pollution removal or cleanup.
  - Other necessary response measures.

## Do you know the guardian angel of land and groundwater in Taiwan?



"Soil and Groundwater Pollution Remediation Fund Management Board" (the Board) was established by the Environmental Protection Administration (EPA), Executive Yuan in 2001 to: (1) review and audit the revenues, expenditures, safekeeping, and utilization of the Fund; (2) review and audit the annual budget and final accounts of the Fund; (3) examine the use of the Fund; and, (4) attend to other Fund-related matters.



▲ Organizational Structure of the Board

## In Constant Pursuit of Six Objectives

The focus of soil and groundwater pollution remediation has gradually shifted from pollution verification to impact assessment, control, and remediation. However, prevention precedes remediation. The Board will work to enhance pollution prevention education and guidance to reduce pollution incidents.



▲ Policy Objectives of the Board

## "Soil and Groundwater Pollution Remediation Act" Safeguarding the Land We Grow on

1981	1991	1996	1998	1999	2000	2003	2007	2010
Many soil pollution incidents occurred.	The Soil Pollution Prevention Act was drafted.	The draft bill was withdrawn from the Legislative Yuan for modification and amendment.	The draft was renamed Soil Pollution Remediation Act. (Draft)	The act was renamed for the last time Soil and Groundwater Pollution Remediation Act.	The Act was promulgated by the President on February.	The Act was amended on Jan. pursuant to the Administrative Procedure Act.	The draft amendments were submitted to the Legislative Yuan for review.	The amendment was promulgated by the President on Feb. 3.

▲ Development of the Act



▲ Workshops on the Act

There have been many twists and turns in the path of developing the "Soil and Groundwater Pollution Remediation Act" (the Act). The "Soil Pollution Prevention Act" was first drafted in 1991. Considering the inseparability of soil and groundwater, groundwater pollution remediation was later incorporated into the bill that was renamed "Soil and Groundwater Pollution Remediation Act", promulgated and enforced on February 2000, and amended in 2010 in accordance with practical law enforcement needs.



## Each fund is handled with discretion

in hope of making every dollar count.

Soil and groundwater remediation fees

Accrued interest of the Fund

Payments from polluters, potential polluters, or the interest parties of the polluted land

Payments from land developers

Funding from the central competent authority through the budget process

Partial appropriations from relevant environmental protection funds

Partial appropriations from criminal and administrative fines for environmental pollution

Other related revenues

sources

Soil and Groundwater Pollution Remediation Fund

Derived from 8 sources, the Fund in the early years was mainly used in such aspects as the planning of relevant management systems, coordination, organizational establishment, formulation of regulations, as well as investigation and verification of potential pollutants. With the focus shifted to the status of polluted sites and impact on human and the environment, the Fund is redirected to works involving remediation priority ranking, necessary response measures, regulation, investigation and assessment, control, remediation, and supervision, and request for reimbursement from polluters pursuant to law.



▲ Eight Major Sources of the Fund

## Equity and Justice Remediation-Fee-Levying

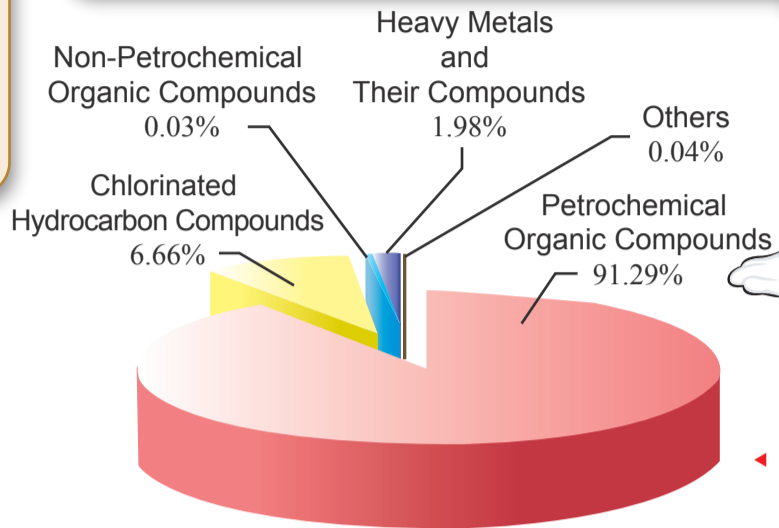
Soil and groundwater pollution remediation fees come from the following two sources:

I. Official budget

The budget is used to establish comprehensive prevention mechanisms for soil and groundwater pollution and to provide compensation for the loss of harvesting suspension.

II. Fund budget

Soil and groundwater pollution remediation fees are currently levied on the manufacturer and importer of 125 chemicals in 6 categories in terms of the amount manufactured and imported.

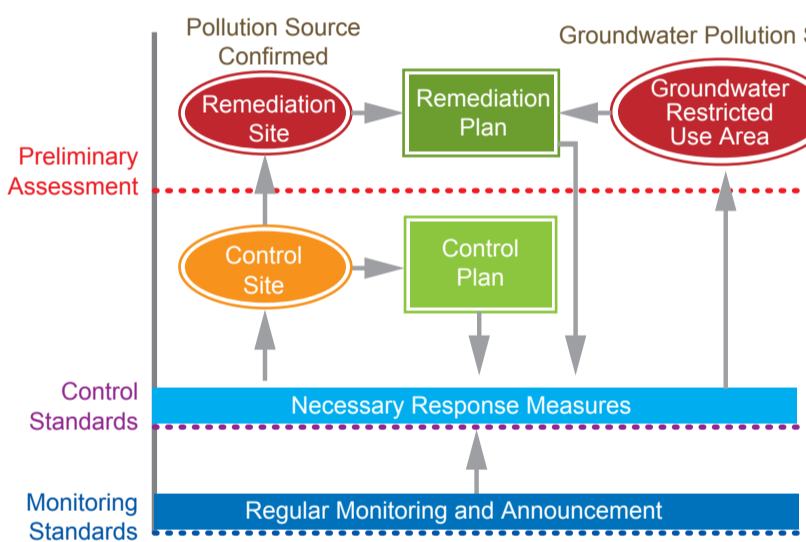


▲ Categories of the Substances Levied for Remediation Fees

## Effective Management of Polluted Sites

Control measures will be applied to contaminated lands in compliance with the Act:

(1) Control site (2) Remediation site (3) Pollution control area (4) Polluted groundwater restricted use area



▲ Polluted Site Determination Procedure



▲ Types of Listed Sites

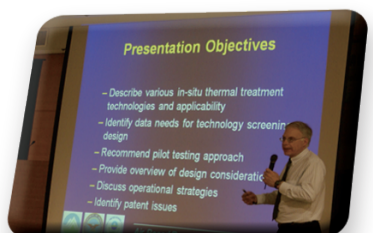


## Education and Publicity

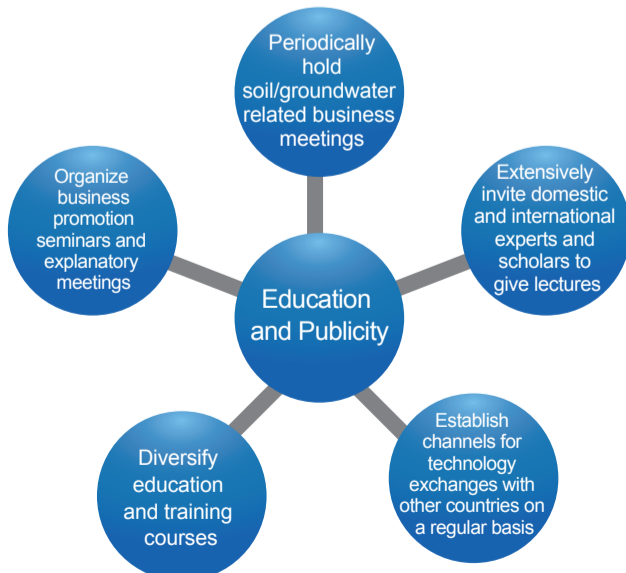
Soil and groundwater pollution remediation works are complex and diverse in nature, requiring an integration of professional manpower in such areas as environment, civil engineering, chemistry, biology, agriculture, geology, water resources, law as well as information. Local environmental personnel are invited to discuss work facilitation for policy execution. Moreover, efforts have been made among industry, government, and academia to hold lectures, workshops, seminars, and conferences to enhance professional literacy of domestic personnel, and to establish a professional engineer certification system to ensure the quality of relevant documents in relation to investigation, assessment, and remediation.



▲ In-Situ Venting Workshop



▲ Taiwan-US Seminar



▲ Education and Publicity

Different from traditional practices, the Board extends education and training to college and university students in addition to industry, government, and academic bodies. Apart from general courses, laboratory operations and site visits are arranged to allow trainees to achieve a deep understanding of the issue of site remediation. Diverse contests and events are designed and held for different age groups in a bid to provide environmental education through entertainment.

## Future Prospects

In accordance with the Act, the Board will continue to work toward pollution prevention, site investigation, pollution remediation, and land rehabilitation for contaminated sites while strengthening educational training and publicity for a greater public understanding of soil and groundwater pollution remediation work.



▲ Soil and Groundwater Pollution Remediation Web  
<http://sgw.epa.gov.tw/public/>