




## Transaction Advisory Services & Environmental Site Assessment Services

Environmental Due Diligence Services, Land Contamination  
Investigation & Remediation Services





# Transaction Advisory Services & Environmental Site Assessment Services

AGV's Transaction Advisory Services and Environmental Assessment Services assist clients to conduct Environmental Due Diligence to assess risks and liabilities in various stages of asset-based investment that includes acquisition, operations and divestiture. We cater to clients ranging from real estate investors, financial institutions, corporate decision makers, M&A consultants, legal counsels and financial professionals.

## Environmental Due Diligence for Buyers

AGV's Environmental Due Diligence (EDD) determine the risks and liabilities associated with an acquisition by assessing environmental risks associated with the investment as accurately as possible. This gives a more accurate assessment and valuable resolution of environmental risk. As a result, the client gets to clearer picture of the financial impact of the environmental risk and the potential liability/cost involved.

### **The Environmental Due Diligence for Buyers include:**

- ▶ Phase I & Phase II Environmental Site Assessment to ASTM Standard
- ▶ Estimation of the Remediation Cost involved
- ▶ Environmental Risk Assessment

# Environmental Due Diligence for Sellers

We provide assurance that would enable the seller to enjoy price for the asset that is not compromised due to unclear environmental risks. By identifying the main environmental issues related to the asset for the potential buyers/investors, we develop strategies to resolve risks associated with these environmental issues. We assure that there is no disparity in the valuation for the asset as determined by the buyer and seller due to environmental risks and liabilities.

AGV provides our clients a clear and concise report of the critical business issues impacted by environmental risk and address the concerns arising from it. The due diligence report we prepare helps the seller including the financial and legal advisors to understand the liabilities and the related financial implications.

## **The Environmental Due Diligence for Sellers include:**

- ▶ Phase I, Phase II Environmental Site Assessment to ASTM Standard
- ▶ Environmental Liability Estimation
- ▶ Environmental Risk Assessment

# Environmental Compliance Requirements

We provide comprehensive evaluation of compliance of the asset in any transaction to environmental regulatory requirements. Failure to adhere to compliance requirement can result in environmental accidents, heavy fines and possible shutdown of operation. We help our clients assess and address non-compliance, and help to meet all the environmental regulatory requirements during the operational phase, and during the plant closure/decommissioning stage.



## AGV'S Services

- ▶ Corporate and Statutory Environmental Due Diligence Audits
- ▶ Contaminated Site Characterization - Phase 1, Phase 2 Detail ESA and Delineation
- ▶ Soil Gas & Vapor Intrusion Assessment
- ▶ Conceptual Site Modelling (CSM) & Human Health Risk Assessment (Tier 1 & Tier 2)
- ▶ Leaking Underground Storage Tank (LUST) Removal Validation
- ▶ Groundwater Monitoring & Contamination Management Solutions
- ▶ Remedial Action Plan, Remediation Alternative Analysis & Method Statement
- ▶ Site Remediation and Project Management
- ▶ Strategic Advice on Risk and Liability Management
- ▶ Permitting, Statutory Compliance and Regulatory Support
- ▶ Contaminant Fate and Transport Modelling

We will provide a range of options from these services to assess possible contamination and risk to human health and environment, and develop suitable strategies to remediate contamination present.



# Industries and Activities that can Potentially Contaminate Soil and Groundwater, and Subject to Assessment

**Main industrial activities or site usages that could cause soil and groundwater contamination. *Contaminated Land Management and Control Guidelines, Department of Environment, Malaysia.***

- |  |   |
|--|---|
| 1. Abrasive blasting                                       | 29. Toxic and Hazardous waste storage, reuse, recycling, recovery, treatment and disposal   |
| 2. Acid or alkali plant                                    | 30. Herbicides formulation, packaging and/or distribution   |
| 3. Agrichemical spray contractor                           | 31. Other agrichemical formulation, packaging and/or distribution   |
| 4. Agricultural land                                       | 32. Petroleum industries  |
| 5. Airport   | 33. Pharmaceutical manufacturing  |
| 6. Analysts—commercial analytical laboratory               | 34. Port activities   |
| 7. Asbestos products                                       | 35. Printing  |
| 8. Asphalt or bitumen                                      | 36. Railway yard  |
| 9. Battery manufacturing or recycling                      | 37. Sawmill   |
| 10. Brake lining manufacturer                              | 38. Service station   |
| 11. Cement or lime manufacturing                           | 39. Shipyard  |
| 12. Chemical manufacturing and storage                     | 40. Smelting or refining  |
| 13. Coal and coke yard                                     | 41. Transport depot   |
| 14. Concrete and cement                                    | 42. Storage tanks for fuel and chemicals  |
| 15. Drum and tank re-conditioning                          | 43. Storage, reuse, recycling, recovery, treatment or disposal for wastes other than toxic and hazardous wastes.                                |
| 16. Electrical transformers                                | 44. Wood treatment or disposal  |
| 17. Electronics – manufacturing, repairing, reconditioning | 45. Wool, hide and skin production  |
| 18. Engine re-conditioning                                 | 46. Any site that has been, or could have been, subject to the migration of hazardous substances present in the soil or water on adjacent sites |
| 19. Explosive production or bulk storage                   | 47. Any other facility or activity that stores, uses or disposes of hazardous substances  |
| 20. Fertilizer manufacturing                               |   |
| 21. Gasworks   |   |
| 22. Landfill site  |   |
| 23. Livestock dips or spray races                          |   |
| 24. Metal surface treatment or coating                     |   |
| 25. Mining and mineral processing                          |   |
| 26. Motor vehicle workshop                                 |   |
| 27. Paint manufacturing and formulation                    |   |
| 28. Pesticides formulation, packaging and/or distribution  |   |

***Code of Practice on Pollution Control, Singapore.***

- a) Oil installations and other premises storing, handling and using large quantities of oils and similiar hydrocarbons products, including the following:
  - Oil refineries;
  - Oil depots;
  - Petrochemical complexes;
  - Petrol stations and refuelling depots;
  - Aircraft manufacture and repair industries;
  - Motor repair workshops.
- b) Chemical plants, chemical warehouses or terminals including the following:
  - Chemical warehouses or terminals;
  - Pharmaceutical/biomedical plants;
  - Pesticides formulation factories;
  - Wood treatment and preservation facilities;
  - Large electroplating works;
  - Factories that use, manufacture or store toxic chemicals.
- c) Shipyards and grit blasting works
- d) Gas works
- e) Power stations
- f) Toxic wastes treatment facilities
- g) Scrap yards
- h) Landfill site for municipal or industrial wastes
- i) Facilities for the treatment of sewage.

# AGV's Project Experience

## ► Manufacturing/Warehousing Facilities

Spillage of chemicals at storage facilities and compromised integrity of wastewater treatment facilities within the site can lead to soil & groundwater contamination which over a period of time can be harmful to human health and the environment.

## ► Acquisition of Commercial/Industrial Facilities and M&A Transactions

Environmental Due Diligence is highly recommended in determining potential liabilities resulting from soil and groundwater contamination, if suspected and to ascertain the true cost of the assets subjected to a transaction.

## ► Property Development on Industrial Land - Brownfield Developments

Redevelopment of brownfield sites (industrial/mining/commercial) must be preceded with a comprehensive ESA to eliminate potential risks to human health due to soil and groundwater contamination.

## ► Agro-based Processing Mills

Processing mills often house storage facilities for chemicals that pose contamination risks to soil and groundwater. The proximity of such facilities to agricultural land, water ways and increases the risks to water system contamination that threatens human health and ecosystems.

## ► Hydrocarbon Storage Facilities (Oil Refinery, Terminals, Transport Hubs, Petrol/Gas Stations)

Continuous monitoring and good environmental management practice averts unacceptable health & environmental challenges due to leakage or spillages and offsite contaminant migration and potential vapor intrusion affecting sensitive receptors. This greatly increases the risk to human health and environment. Remediation is recommended in case contamination is present.

Leaking underground storage tanks (LUST) and above ground storage tank spillages are very common especially in petrol service stations, oil terminals and transportation hubs. Spillage also occur during refilling of these tanks. Petroleum hydrocarbon products often gets into the ground, groundwater and the drainage.



# About Us & Our Services

AGV Environment is a multidisciplinary environmental consultancy, founded by environmental consultants and professionals who have extensive experience of more than 20 years in senior roles in leading multinational consultancies and engineering firms, and in the public sector. The firm is a registered environmental consultancy with the Ministry of Finance Malaysia, all our consultants have the necessary licenses and are registered with the Department of Environment and the Department of Occupational Health & Safety.

Our consultants have consulted for projects across a vast number of sectors among which are construction, property/infrastructure development, power generation, water resource management, plantation, petrochemical & chemical, oil & gas, renewable energy – solar & biodiesel, land reclamation, waste management and manufacturing. Experiences in the manufacturing sector includes electronics, cement, rare earth processing, palm oil mills, automotive and construction material sectors. The combined experience of our senior consultants exceed 180 years of solid environmental consultancy and environmental engineering work undertaken in almost every sector and industry.

To provide our clients with top notch service, we have forged strategic partnerships with some of the leading international environmental consultancies from North America and Europe. Working together with our partners, we offer benchmarking against other international projects, input of global experiences that can further enrich the value of our consultancy, and technical review by some of the best experts in the subject from around the world.

AGV Environment has the expertise and experience, in our consultants and in our strategic partners to provide the best in environmental consultancy to meet regulatory requirements and stakeholders' expectations in your current operations and to continuously support the growth of your organisation.

## **Environmental, Health & Safety**

Environmental Impact Assessment (EIA)  
Environment & Social Impact Assessment Services (ESIA)  
Environmental, Health & Safety  
Compliance Audit  
Environmental Management Plan (EMP) and Monitoring  
Environmental Permitting Services  
Industrial Hygiene  
EHS Management System  
Climate Change and Resilience  
Energy, Carbon & Climate

## **Sustainability Services**

Preparation of Sustainability Report as per BURSA requirement  
Developing Internal Sustainability Guidelines, Sustainability Strategy, Sustainability Policy and Monitoring & Evaluation of Sustainability Initiatives

## **Land Contamination & Remediation**

Phase I Environmental Site Assessment  
Phase II Environmental Site Assessment (ESA)  
Remediation Works and Contracting

## **Waste Management**

Waste Management Consultancy  
Rehabilitation & Redevelopment of Landfill  
Basel Convention Permitting Services

## **Water Management**

Wastewater Treatment Permitting  
Groundwater services  
Coastal & Marine Services  
Surface Water & Hydrology Service

## **Strategic Advice & Planning**

Due Diligence Services  
Strategic Planning, Advice & Management Services  
Mergers & Acquisitions, Divestiture  
Project Management Services  
Land Development

## **AGV ENVIRONMENT SDN BHD (1155709T)**

### **Malaysia**

100-6-035, Block J, Jaya One, 72A, Jalan University,  
Petaling Jaya 46200, Selangor

**T** +603 79311455

**F** +603 79313512

### **Penang**

Suite 163-16-01, Level 16,  
Hunza Tower, Gurney Paragon,  
Jalan Kelawai, Georgetown,  
10250 Penang

**T** 04-2228986

**F** 04-2228801

### **Johor Bahru**

25.03A, Level 25,  
Johor Bahru City Square Office Tower,  
106-108, Jalan Wong Ah Fook,  
80000 Johor Bahru, Johor

**T** 07-2087535

**F** 07-2087401

### **East Malaysia**

Lot 9.05, 9th Floor,  
Wisma Perindustrian,  
Jalan Istiadat, Likas,  
84400 Kota Kinabalu, Sabah

## **AGV ENVIRONMENT ASIA PTE LTD (201726942 G)**

### **Singapore**

Level 39, Marina Bay  
Financial Centre Tower 2  
No 10, Marina Boulevard  
Singapore 018983

**T** +65 68185703

 [www.agvenvironment.com](http://www.agvenvironment.com)

 [inquiry@agvenvironment.com](mailto:inquiry@agvenvironment.com)