BUILD, OWN AND OPERATE

Options for finance and operation

The management of landfill gas and leachate on an ongoing basis can be a complex, unexpectedly costly and time consuming activity.

It is often the case that staff responsible for a landfill site may not wish to have key management effort diverted from core business to such peripheral activities.

Passing such a responsibility to a specialist company makes it possible to remove the threat of penalties accruing from system failures as well as facilitating the establishment of a clear financial forecast as a basis for management of the issues involved.

Organics offers a range of options under this heading, from straight leasing and lease-purchase to Build Own and Operate (BOO), Build Own Operate and Transfer (BOOT) and Design, Build and Operate (DBO).

KEY FEATURES

- PLANT FINANCED AND OPERATED BY A SPECIALIST COMPANY
- FIXED RATES FOR ONGOING TREATMENT
- VARIABLE RATE FOR FLOWS ABOVE BASE-LOAD
- LONG-TERM CONTRACTS
- FULL RESPONSIBILITY ACCEPTED FOR PLANT PERFORMANCE

DATA SHEET ODSM01
ADVANTAGES

• No capital investment
• No operational staffing requirement
• All design, construction and operational issues undertaken by a specialist team having all the relevant skills
• Input from Client’s management staff is significantly reduced during the design and construction period
• Input from Client’s project management and operational staff is minimised during the operational stage of the project
• Client’s staff are released to concentrate on the core activity of the company
• Minimal concern/liability for plant operations and treatment performance

PREREQUISITES

In order to design a leachate treatment facility there are a number of key parameters that must be established. Principal amongst these are the following:

• The leachate flow rate
  This will vary over the year. If actual figures are not available, it will be necessary to prepare a hydrological balance for the site as a basis for an estimate of probable leachate production against rainfall.
• Make-up of the leachate to be treated
  Once again, this will vary with time and great care should be exercised to ensure that the design concentrations are adequate for the treatment loadings that will be encountered.
• Permissible discharge concentrations for the leachate after it has been treated
  This will usually come in the form of a discharge license or consent. It is extremely unwise to commit to the construction of a leachate treatment facility until a consent has been obtained.

HOW IT WORKS

Subject to the complexity of the treatment facility required, the stages to development of such a turnkey project are as follows:

• Data evaluation
  The first step in deciding how to deal with a leachate or landfill gas management situation is to review all available data. This will allow the specific circumstances to be fully assessed and to determine what other information may be required.
• Design
  Once the site-specific parameters are adequately established it will be possible to prepare a design and costing for a suitable treatment system.
• Proposal
  With capital and operating costs established it will be possible to evaluate the financial options that may be considered. Organics will prepare a detailed proposal outlining the nature of the contract, the cost implications and the assumption of responsibility that would result.
• Planning
  Once a mutually satisfactory contract is in place, the next step is implementation planning. This may also include acquisition of statutory planning consents and other such approvals.
• Manufacturing, installation and commissioning
  The installation of technology commences with manufacturing and is completed with installation. Organics will manage the full process, from initial procurement through to site supervision, quality control and final commissioning.
• Operation
  The ongoing responsibility for operation and performance will be wholly adopted by Organics. This may require manned operation or remote supervision.

For further information on this approach to leachate and landfill gas management, please contact our Technical Sales Department.