Acorn Bioenergy IMS Controlled Document		
	Document Title	ACD 007d Site Decommissioning Plan
	Version Number	Draft
	Date Approved	
	Approved By	
	Document Owner	

Site Decommissioning Plan

Introduction

At the end of their economic life the anaerobic digestion (AD) plants in the Acorn Bioenergy Operations Limited portfolio will need to be dismantled carefully and in accordance with environmental requirements. The information below details the outline procedure for doing so.

Purpose

The purpose of this decommissioning plan is to ensure that:

- each facility will be decommissioned without causing pollution; and
- each site will be returned to a satisfactory condition, and the land utilised for alternative uses depending upon the prevailing market conditions and requirements at the time.

The Decommissioning Process

The waste hierarchy will be considered with respect to all the materials and infrastructure on site to ensure the best possible environmental outcomes. As the plan is outline only, all work will be subject to detailed risk assessments reflecting best practice, guidance and regulations relevant at the time of decommissioning.

The following actions will be undertaken in the decommissioning process to minimise environmental risk and waste production:

- Ideally all feedstocks will be used up as the plant moves towards being decommissioned but if there are any feedstocks left then these will either be sold or appropriate off-site use will be arranged. Alternative destinations for any wastes will be scheduled beforehand.
- Liquid feedstock tanks and associated lines, the Reception Hall and associated solid feed line will then be flushed out with clean water. The resulting dirty water will either be fed into the AD process (preferred) or removed by a licensed waste contractor.
- After feeding has ceased, the digesters will undergo digestion until they are no longer producing significant biogas.
- The resulting spent digestate will be pasteurised, analysed and once the quality is known it will be removed from site for land spreading if appropriate or dispatched for further treatment
- When all the digesters have been emptied, de-gritting will be carried out in accordance with the specialist contractor's method statement. The digesters and associated pipework will then be washed out with water, and this dirty water will either be land spread if suitable, dispatched for further treatment or disposed of by a licensed waste contractor as appropriate, dependent upon analysis results.
- All infrastructure used to store and treat biogas will be decommissioned by a specialist contractor in compliance with the permit to work procedure.

- All equipment onsite will be safely isolated when it is no longer needed, disconnected, and removed from site. Any cleaning of equipment will take place in an appropriate bunded area. Redundant equipment will be sold for reuse where practicable, otherwise will be recycled.
- Any chemicals or fuels will either be sold or suitably disposed of as hazardous waste by a registered contractor.
- All wastes arising will be removed by a licensed waste contractor and recycled where reasonable to do so.
- All tanks and concrete will be decommissioned and removed if required by a suitable appointed contractor.

The site is fully contained to capture any surface water, and this will be disposed of appropriately until any materials that may leach dirty water have been removed from site. Once all materials have been removed, dismantling the plant will commence.

At the end of decommissioning process, a full site assessment in relation to risk of pollution to land and groundwater will be carried out in accordance with the previous Site Condition Report. Site records will be interrogated to understand if there is any risk that the soil or groundwater may have been impacted by activities at the site. If there is any identified risk, then soil and groundwater testing will be carried out as appropriate the results of which will inform the need for any site remediation.

Reporting

Before decommissioning or moth-balling the plant, Acorn Bioenergy Operations Limited will notify the Environment Agency of their intentions and provide a copy of a site-specific decommissioning plan with approximate timescales. The plan will include details of all underground pipework and vessels.

Once decommissioning is complete Acorn Bioenergy Operations Limited will provide a further written report to the Environment Agency detailing the actions that have been taken in accordance with the decommissioning plan. This will form part of the final Site Condition Report for surrender of the Environmental Permit as appropriate.