



## ASSURED BIOSOLIDS LIMITED (ABL)

## BIOSOLIDS ASSURANCE SCHEME (BAS)

### SCHEME OVERVIEW

#### **1. Introduction**

From 2013 to 2017 the UK Water Industry developed a quality assurance scheme for sludge treatment and its subsequent recycling as biosolids to agricultural land. The primary objective of the scheme was to promote the acceptance of recycling biosolids to agricultural land through a process of risk assessment, operational controls, third party audit and stakeholder reassurance.

The Biosolids Assurance Scheme (BAS) Standard, which is based on regulations and best practice, is audited by a third-party Certification Body to demonstrate that members of the Scheme are conforming to its requirements. The resulting Certified Biosolids should provide reassurance to food chain stakeholders and the public that biosolids are safely and sustainably recycled to agricultural land.

The Scheme is currently being implemented by all UK Water and Sewerage Companies and will apply to all sewage sludge destined for agricultural land. By mid-2017, circa 83% (or 700,000 tonnes dry solids/annum) were certified for treatment, storage and application to land with a target of 100% certification by the end of 2018.

The UK Water Industry and Assured Biosolids Limited (ABL) are currently in discussion with the UK Government to explore how the BAS could be used to facilitate free market trading in sludge, whilst maintaining quality standards that will continue to provide food safety assurance and protect the environment.

#### **2. Background**

The UK Water Industry recognised the importance of ensuring food safety *'from farm to fork'* and understands that comprehensive controls on biosolids (treated sewage sludge) as an agricultural input should help support this objective. Clearly there is a requirement to ensure that sewage sludge derived products are safe to use and pose no threat (whether real or perceived) to the food chain, consumers and the environment.

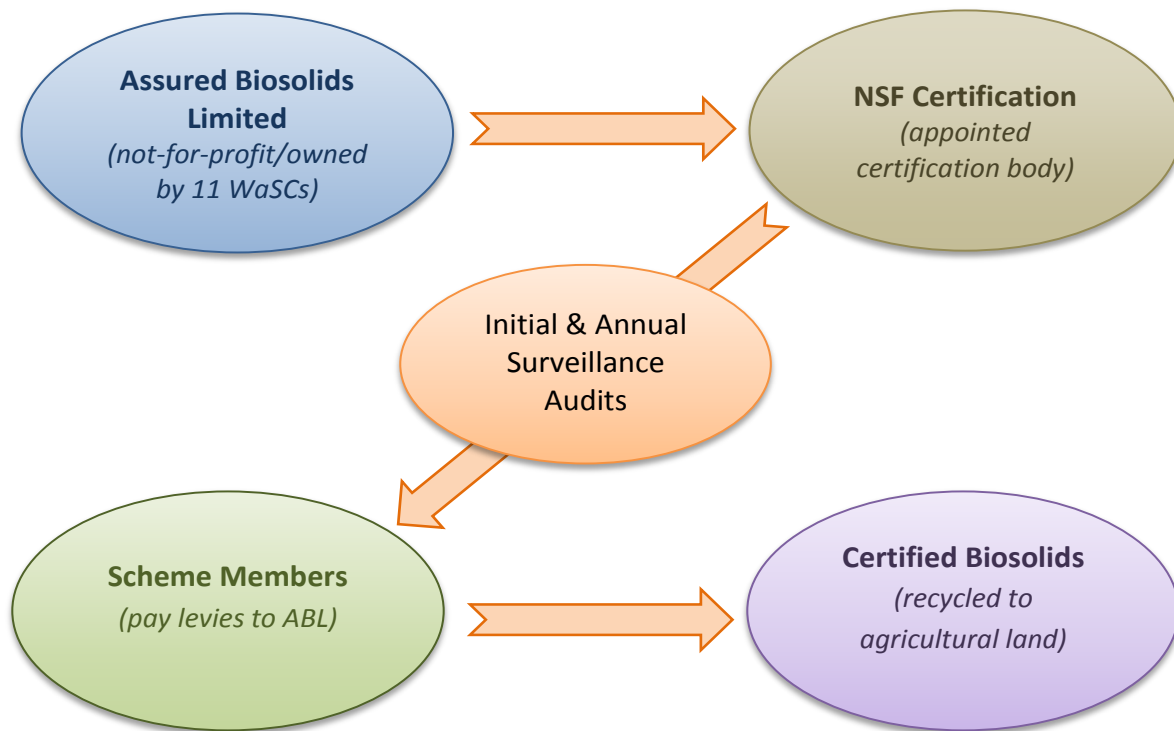
Current legislative and non-legislative controls for sewage sludge are referred to in several EU and UK documents making it difficult for third parties to establish the level of assurance they require.

Therefore, the Water Industry agreed to bring all the control elements together into a single transparent and consistent quality assurance scheme standard with an independent audit function. The Biosolids Assurance Scheme has a similar structure to other schemes for agricultural inputs and outputs and is therefore familiar to food chain stakeholders.

### 3. Scheme Structure

The Scheme is owned and operated by Assured Biosolids Limited (ABL), a not-for-profit company, owned by the 11 mainland UK Water and Sewerage Companies. The Board of Directors is responsible for the direction and management of ABL and will ensure that the Scheme objectives are achieved.

The operation and marketing activities of the Scheme are funded by a levy system based on the tonnes of dry solids of biosolids recycled to agricultural land (within the scope of the audit). ABL has appointed an administration company to operate to the scheme and has appointed a Certification Body to provide audit services to scheme applicants and members.



The scope of the scheme includes the treatment of sludge (including source material risk assessments), transport, storage and application to agricultural land. Note currently recycling to non-agricultural land is not included in the scope. Subject to the certification across the entire scope, Members are entitled to market BAS Certified Biosolids as products to farmers.



#### **4. Stakeholders**

Nearly 200 stakeholders including individual organisations and trade associations were identified as potentially interested parties. Individual meetings and group seminars were held with all interested parties during the development phase with feedback noted and actioned.

All stakeholder groups welcomed the Scheme and appreciated how well it fitted with food chain culture and responsibility. They also supported the use of a Certification Body to provide a third-party audit function to provide increased credibility for the Scheme.

ABL formed a Technical Advisory Committee (TAC), comprised of industry experts and food chain stakeholders to assist ABL to maintain and develop the Scheme Standard and Audit Protocols. It is responsible for evaluating; relevant evidence-based information that becomes available; feedback from external stakeholder organisations; and other information to ensure that appropriate recommendations on the Scheme Standard and Audit Protocols are made to ABL. The role of the group ensures that the food supply chain can have a high level of confidence in the Scheme Standard and Audit Protocols but correspondingly that the requirements are practicable and achievable.

#### **5. Certification Body and UKAS accreditation**

ABL has appointed a Certification Body to provide audit services to scheme applicants and members. The Certification Body operates to established Audit Protocols and following successful audits provides Certificates of Conformity for the activities within the scope of the audit.

ABL intends that the BAS Standard will be added to the Certification Body's UKAS *Schedule of Accreditation* under ISO/IEC 17065. The United Kingdom Accreditation Service (UKAS) is the national accreditation body for the UK, appointed by government, to assess organisations that provide certification.

#### **6. The Standard**

The Scheme Standard is largely (but not exclusively) based on the requirements of;

- The Water UK report; *The application of HACCP procedures in the water industry: biosolids treatment and use on agricultural land.*
- The Code of Practice for the Agricultural use of Sewage Sludge, 1996
- The Environment Permitting (England & Wales) Regulations, 2016 – exemption arrangements
- The Waste Management Licensing (Scotland) Regulations, 2011 – exemption arrangements
- The Sludge (use in Agriculture) Regulations, 1989
- The Safe Sludge Matrix, 2001
- Protecting our Water, Soil and Air: A Code of Good Agricultural Practice for Farmers Growers and Land Managers (England), 2017
- The Code of Good Agricultural Practice for the Protection of Water, Soil and Air for Wales, 2011
- Prevention of Environmental Pollution from Agricultural Activity (PEPFAA) A code of good practice (Scotland)
- The Nitrate Pollution Prevention Regulations, 2015 (England)
- The Nitrate Pollution Prevention (Wales) Regulations, 2013

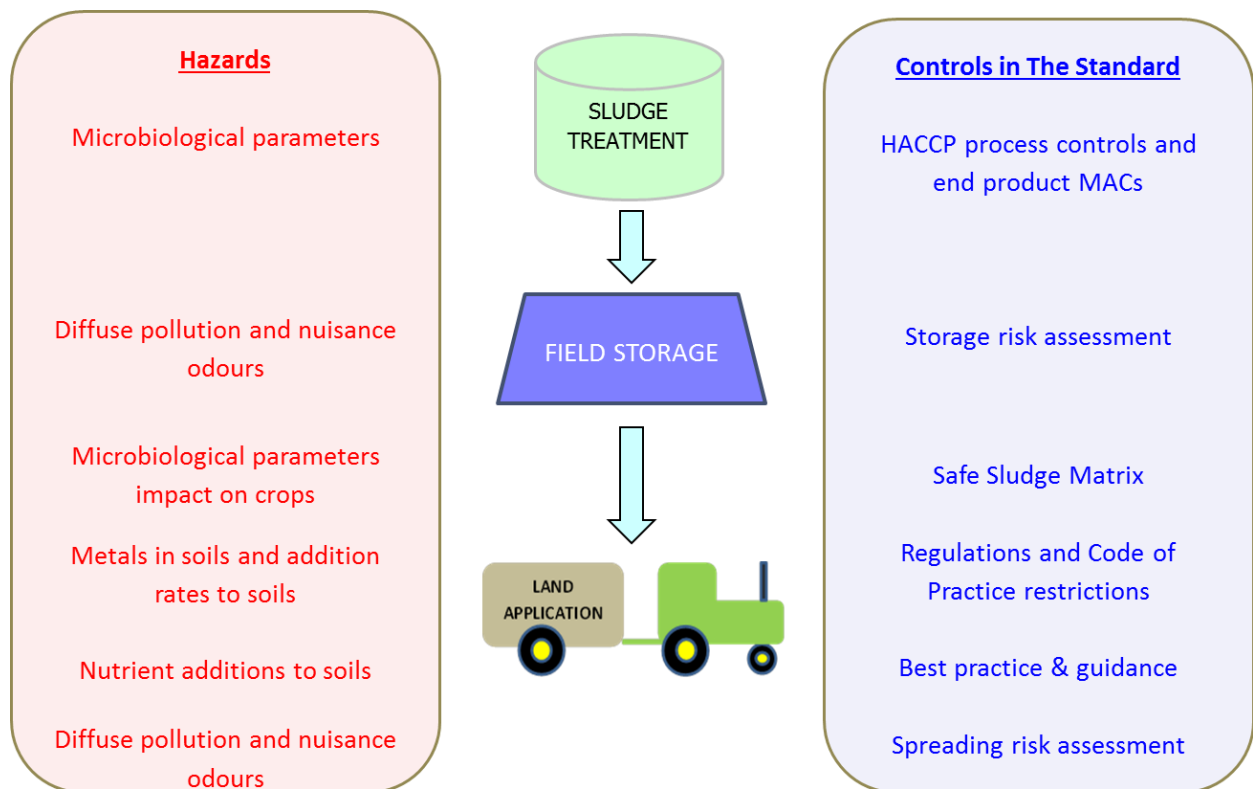
- The Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008; amended 2013

It also includes industry and stakeholder approved enhancements, for example, to control the rate and frequency of nutrient applications to soil.

## 7. Risk Assessment and Control

The Standard includes a module on Source Material Risk Assessment, where organisations are required to demonstrate that all materials entering the process are subject to risk assessment and that control measures are in place to reduce any risks to acceptable levels.

A generic Hazard Assessment provides an overview of potential hazards in source materials and in biosolids and sets out management control measures within the Scheme Standard to mitigate any associated risks to humans, animals, crops and the environment.



The UK Water Industry operates a research programme (UK Water Industry Research), which coordinates a common research programme. Research projects include the ongoing *Chemical Investigations Programme Phase 2 (CIP2)* on potential contaminants.

ABL will discuss the outcomes of this and other research (an evidence base) with stakeholders at the annual Technical Advisory Committee (TAC). The TAC can then recommend amendments to the Standard requirements to the Board of ABL.