

Keeping You Informed

Mar 2023

Our role is to protect and improve the environment so that everyone can enjoy the benefits of a clean, safe and healthy place to live

We are responsible for protecting the environment by regulating waste storage, treatment, recovery, and disposal

This briefing will give you information and an update on the implementation of improvement conditions for Biowise Limited Permit Ref: EPR/PP3096ZA

Best Available Techniques - Biowise Limited Permit Review

In our previous newsletter we informed the community that a review of Biowise Ltd Environmental Permit identified significant improvements were required in order to meet current legislative requirements and implement Best Available Techniques (BAT). The Environment Agency have agreed improvements across the entire process to comply with the new standards, and in particular the outside composting area, shredding and screening operations in order to reduce the potential for odour.

We confirm that Biowise Ltd have completed and are in the process of completing works and submitting information to us in response to those improvement conditions (IC) that are in their permit. Appendix 1 to this newsletter is the table of ICs as detailed in the permit. Below is a summary of key points for works completed, underway and amendments to deadlines as required:

Improved leachate tank

An improved leachate tank has been installed on the open compost area to minimise the potential for odour. Works were completed by the end of March 2023.

Improved method of screening material

Engineering designs to reduce the potential for odour from the outside screening process have been submitted to and agreed by us. The manufacturer of the equipment required has reported a short delay in supply; these works are expected late April 2023.

Indoor shredding

All compost material arriving onsite was previously machine shredded outside. This activity has now been moved to a contained building with the facility to capture and treat potentially odorous air.

Improved biofilters

The building mentioned above houses the shredder and tunnels for pasteurising the compost; it has four biofilters which treat odorous air. All of these biofilters have had replacement filter media installed. This work was in addition to the improvement conditions required by the permit, therefore the efficiency review required will be submitted after completion.

Covers

Covers are now in place on all vehicles transporting waste material around site.

Compost bays are to be covered at all times, other than for operational purposes such as filling/emptying of bays and screening. Biowise have submitted the design specification; the work is due to be completed by the end of April 2023. The efficiency of these covers will be reviewed after a period of time in operation to enable a representative review of their efficiency.

Review of the compost storage plan

The compost storage plan was submitted and approved as meeting the requirements of the improvement condition.

Ongoing requirements

ICs 16, 17 and 19 were submitted to the Environment Agency on the 29 March and are currently under review. Biowise are required to submit final versions of the updated Environmental Management Systems (EMS) and Odour Management Plan (OMP) to account for improvements which have been implemented. These will be submitted on completion of all major infrastructure works.

Amended date

Improvement Condition 20 requires a review of odour control and treatment. This requires a full year's operation. The date for submission should therefore be the 2024 not 2023 as stated in the permit. This has been identified and clarified with the operator.

We will continue to update the community on Biowise progress towards completion of all improvement conditions.

Contact Us

General enquiries

**National Customer Contact
Centre PO Box 544
Rotherham
S60 1BY
United Kingdom**

Email - enquiries@environment-agency.gov.uk

Telephone 03708 506 506 Monday to Friday, 8am to 6pm

Appendix 1 – Improvement Conditions

IC11	<p>The operator shall submit to the Environment Agency for approval a risk assessment considering the possibility of soil and groundwater contamination at the installation where the activity involves the use, production or release of a relevant hazardous substance (as defined in Article 3(18) of the Industrial Emissions Directive). The risk assessment shall clearly establish with appropriate evidence whether or not there is a risk of contamination of soil and groundwater and should follow the Defra Guidance – Industrial Emissions Directive EPR Guidance on Part A Installations (Section 5.10-5.15, pages 28-29 - Baseline Reports and Permit Surrender).</p>	17/11/2023 or other date as agreed in writing with the Environment Agency
IC12	<p>Where the risk assessment carried out under IC11 above establishes a risk to soil and groundwater, the operator shall:</p> <ol style="list-style-type: none"> a) prepare and submit a baseline report compliant with Article 22 of the Industrial Emissions Directive (IED) containing information necessary to determine the current state of soil and groundwater contamination; or b) provide a summary report referring to information previously submitted where the operator is satisfied that such information represents the current state of soil and groundwater contamination, so as to enable a quantified comparison to be made with the state of soil and groundwater contamination upon definitive cessation of activity. 	3 months following completion of IC11 or other date as agreed in writing with the Environment Agency
IC13	<p>The operator shall ensure that an inspection of all primary containment is undertaken by a qualified engineer. The inspection shall include:</p> <ul style="list-style-type: none"> • an assessment of the design specification and condition of primary containment systems where polluting liquids and solids are being stored, treated, and/or handled; and • an assessment of the physical condition of all primary containment systems (storage and treatment vessels) and their suitability for providing primary containment when subjected to the dynamic and static loads caused by catastrophic tank failure. 	30/04/2023 or other date as agreed in writing with the Environment Agency
IC14	<p>The operator shall submit a written 'primary containment plan' which reviews and revises the existing Written Scheme of Examination and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of an inspection and program of works undertaken by a qualified engineer (IC13).</p> <p>The plan shall include:</p> <ul style="list-style-type: none"> • a Written Scheme of Examination and their suitability for providing primary containment when subjected to the dynamic and static loads caused by catastrophic tank failure; • a program of works with timescales for the implementation of individual improvement measures necessary to demonstrate that the primary containment remains fit for purpose or alternative appropriate measures to ensure all polluting materials will be contained on site; and • a preventative maintenance and inspection regime 	1 month following completion of IC13 or other date as agreed in writing with the Environment Agency

	The plan shall be implemented in accordance with the Environment Agency's written approval.	
IC15a	<p>The operator shall:</p> <ol style="list-style-type: none"> design proposals for a new leachate tank that serves the ASP area replacing the current boythorpe tank. The tank design must include a suitably designed abatement system in order to prevent the release of fugitive emissions including odour. The tank design must also include a level monitoring and control system to ensure over-filling does not occur. ensure that the leachate tanks that serves the IVC has a suitably designed abatement system in order to prevent the release of fugitive emissions including odour; update relevant sections of the EMS and OMP to include sections detailing the operation, including filling and emptying, monitoring and maintenance of both tanks. provide the design specification and inspection and maintenance of both tanks and the EMS and OMP updates. provide details of the maintenance, monitoring and critical control points for the proposed tank abatement system for both tanks. These should be designed to prevent, or where not possible, to minimise emissions including odour. 	31/12/2022 or other date as agreed in writing with the Environment Agency
IC15b	Following approval of the proposed tank in IC15a, the operator shall install the tank as approved.	30/04/2023
IC16	<p>The operator shall ensure an inspection of secondary containment is undertaken by a competent structural engineer, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of secondary and tertiary containment systems where all polluting liquids and solids are being stored, treated, and/or handled.</p> <p>The inspection shall consider, but not be limited to:</p> <ul style="list-style-type: none"> an assessment of the storage vessels, bunds, loading and unloading areas, transfer pipework/pumps, temporary storage areas, and liners underlying the site; and an assessment of the physical condition of all secondary and/or tertiary containment systems, and their suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure. 	30/04/2023 or other date as agreed in writing with the Environment Agency
IC17	<p>The operator shall submit a written 'secondary and tertiary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of an inspection undertaken by a competent structural engineer (IC16).</p> <p>The plan shall include:</p> <ul style="list-style-type: none"> a program of works with timescales for the implementation of individual improvement measures necessary for the secondary and/or tertiary containment systems to comply with CIRIA C736 (2014) guidance, or equivalent. a preventative maintenance and inspection regime <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	30/04/2023 or other date as agreed in writing with the Environment Agency
IC18	<p>The operator shall review the current compost storage plan and provide an updated "compost storage plan" for approval by the Environment Agency.</p> <p>The updated compost storage plan shall include:</p>	31/12/2022 or other date as agreed in writing with the

	<ul style="list-style-type: none"> Review of current storage of compost produced from site operations. The review shall examine site contingency arrangements in the event of closed landspreading periods, extreme weather conditions, site closure, disease outbreak etc. Additional storage capacity on-site (at least 2 months storage) and storage capacity off-site; Additional measures to reduce emissions from storage locations; and Identification of alternative outlets for finished compost – identify companies /permitted waste facilities that would be able to manage the compost, taking into account their permits and capacity constraints. <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	Environment Agency
IC19	<p>The operator shall review the capacity and air delivery of the in vessel composting system. The review shall cover:</p> <ul style="list-style-type: none"> the design engineering capacity of the site; effectiveness of air flow and distribution in the waste material to maintain aerobic conditions; an assessment the rate of stability of the materials in the in vessel composting system over a period of weeks. <p>On completion of the review, the operator shall submit a report to the Environment Agency summarising the findings and review measures to improve the efficiency of the IVC process.</p>	28/02/2023 or other date as agreed in writing with the Environment Agency
IC20	<p>The operator shall ensure that a review of all odour control and engineered abatement plant on site is undertaken by a qualified odour specialist. The review shall determine whether the design and engineering remain adequate to prevent and where not possible, minimise emissions released to air including but not limited to odour and ammonia.</p> <p>The operator shall submit a written report to the Environment Agency following this review for assessment and approval.</p> <p>The report shall include but not limited to the following aspects:</p> <ul style="list-style-type: none"> A detailed investigation to identify all areas of processing and storage that are giving rise to odours: A full investigation and characterisation of the emissions. Odour control /abatement monitoring results (input and output), not limited to odour and ammonia over a period of 1 year minimum Odour control /abatement process monitoring results not limited to odour and ammonia over 1 year (minimum) Odour monitoring results at the site boundary Records of odour complaints and odour related incidents Recommendations for improvement including the replacement or upgrading the odour control and engineered abatement plant Timescales for implementation of improvements to the abatement plant <p>The operator shall submit a plan of improvement including the replacement or upgrading the odour control and engineered abatement plant and shall implement the improvements in line with the timescales as approved by the Environment Agency.</p>	30/04/2023 or other date as agreed in writing with the Environment Agency

IC21	<p>The operator shall undertake an options appraisal in respect of reducing emissions from the screening of finished compost.</p> <p>The appraisal shall consider all options and not be limited to considering construction of a building at the site that is currently utilised for the screening activity.</p> <p>The appraisal shall consider undertaking the screening process within suitable enclosed and ventilated building that is maintained under adequate negative pressure and that collects and directs potentially polluting internal air to an appropriate dust and odour abatement system (for example: adsorption or biofilter) via an air extraction system and/or an air suction system close to the odour source.</p> <p>In the event that an options appraisal seeks to utilise existing abatement equipment, in full or in part, the appraisal should include an assessment of current site capacity and the capacity of the relevant abatement system to cope with the additional odour load. The requirements of the planning authority in respect of each option should also be considered.</p> <p>The operator shall submit a report of the findings.</p>	31/12/2022 or other date as agreed in writing with the Environment Agency
IC22a	<p>The operator shall provide interim containment and/or abatement measures to the current externally located screening process /equipment in order to prevent, or where that is not practicable, to minimise, emissions of dust and odour from the screening activity, pending further investigation into the construction of a building to contain this odour source options for conducting the screening activity within a suitable enclosed building – see IC21.</p> <p>The operator shall submit a proposal to the Environment Agency for approval.</p>	31/12/2022
IC22b	<p>Following approval of the submitted proposal in IC22a, the operator shall implement the containment and /or abatement proposal.</p>	31/03/2023
IC23a	<p>The operator shall submit proposals to relocate all shredding processes to a contained building with localised abatement to treat odorous emissions.</p> <p>The operator shall take into account the impact of additional particulates, diesel fumes and added odour load and shall demonstrate that this will not overload the existing abatement system.</p> <p>The operator shall demonstrate that the IVC reception building has sufficient capacity to accommodate the additional operation without the need to operate with the doors open and excessive external stockpiling of material.</p>	03/12/2022
IC23b	<p>Following approval of the submitted proposal in IC23a, the operator shall implement the relocation proposal.</p>	03/12/2022
IC24	<p>The operator shall ensure that all vehicles transporting sanitised material between the IVC and ASP areas are covered and include this in an updated OMP.</p>	31/01/2023
IC25a	<p>The operator shall provide a proposal to the Environment Agency for approval which includes:</p> <ul style="list-style-type: none"> • details of the design specification of semi-permeable covers for all ASP bays; • details of the operation of the covers (opening and closing) and how the aeration regime will be adapted to ensure aerobic conditions are maintained, • monitoring and maintenance of the covers to ensure maximum operation efficiency. 	31/12/2022
IC25b	<p>Following approval of the submitted proposal in IC25a, the operator shall install the approved covers on all bays.</p>	30/04/2023

IC25c	<p>The operator shall review the efficiency of the ASP bays including:</p> <ul style="list-style-type: none"> • assessment of the stability of composting material across the process and review and revise any measures that can improve the process to reduce the odorous nature of the material. • assessment of uniformity of the air delivery to material. • assess if negative aeration is preferable. • assessment of the efficiency of the installed semi-permeable covers 	30/04/2023 or other date as agreed in writing with the Environment Agency
IC26a	<p>The operator shall ensure that a review of the engineering and efficiency of the biofilters, scrubber and leachate storage tank on site is undertaken by a suitably competent engineer.</p> <p>Following the review, the operator shall submit updated proposals for the ongoing monitoring and management of the site's four biofilters, scrubber and leachate tank abatement systems.</p>	31/12/2022
IC26b	<p>Following approval of the submitted proposal in IC26a, the operator shall include the proposal in the site's EMS and OMP.</p>	30/04/2023
IC27	<p>The operator shall update the site EMS to include a cleaning regime for the open collection drainage chambers, air ducts, fans, scrubbers and installed covers.</p>	30/04/2023
IC28	<p>The operator shall provide a report for proposed options for the irrigation of the covered aerated static piles and shall detail how odour will be minimised in this process.</p>	31/12/2022
IC29	<p>The operator shall submit the final versions of the site updated EMS and OMP to account for any changes made in respect of the improvement conditions IC11 to IC29 as the changes are made.</p>	30/04/2023