Baseline Standard for Growing Media Association
(Code of Best Practice)

July 2011

This Standard is the internal audit by GMA / HTA for producers of Growing Media that are non-BOPP accredited producers.

THE GROWING MEDIA ASSOCIATION
c/o Horticulture House, 19 High Street
Theale, Reading RG7 5AH
Tel: 0118 930 3132
www.growingmedia.co.uk

Growing Media Manufacturing Baseline Auditing Form

Business Name	Contact Name
Business Address	
Auditor	Date
Signature	Print Name

Summary of Non - Conformities	
Section	Description

	Compliance Criteria	YES	NO	Comments
1.0	**Record Keeping**			
1.1	Does the manufacturer already operate a quality control process ISO 9000 or RHP to a recognised internationally accepted certificated scheme or do they have their own Quality Management scheme			
1.2	There shall be records to show weighing equipment being used has been calibrated within the last 12 months. For heavy use evidence would be required of more frequent checks			
1.3	Documentation to show that the E.C equipment is calibrated regularly dependent on use			
1.4	Documentation to show that the pH equipment is calibrated regularly dependent on use			
1.5	There shall be evidence that a COSHH assessment has been conducted and reviewed annually. A written copy must be available to all staff			
1.6	Documentation of the company's Health and safety policy. A copy must be available to all staff			
1.7	Documentation of safety data sheets for materials that are used, and copies available to staff.			
1.8	There shall be evidence of the up to date accident book, and valid first aid certificates of nominated first aiders			
1.9	There shall be available for inspection the company quality assurance manual and it should be available to staff.			
1.10	There shall be available for inspection either the			

	company's environmental policy or the GMA environmental policy			
1.11	Is the Public Liability Insurance certificate current and displayed in a prominent position?			

	Compliance Criteria	YES	NO	Comments
2.0	**Specification**			
2.1	For each product, there shall be a clear formula for ingredients.			
2.2	Within the specification there shall be evidence of anticipated pH at time of production			
2.3	Within the specification there shall be evidence of anticipated EC at time of production			
	Compliance Criteria	YES	NO	Comments
3.0	**Traceability**			
3.1	Evidence is required to show that each formula or customer order has an unique batch code			
3.2	There shall be evidence for each packaging unit there is a unique batch code printed on it			
3.3	There is evidence that a reference sample of each mix is produced is retained in a cool dry environment			
3.4	There is evidence that the reference samples are retained for between 6 – 12 months			
3.5	There shall be documentation to show that production (mix) records are retained for a minimum of 2 years			

	Compliance Criteria	YES	NO	Comments
4.0	**Volume**			
4.1	The British standard BS EN 12580:2000 – Soil improvers and Growing Media. Determination of quantity shall be available for inspection and available for staff to access			
4.2	The British standard BS EN 12579 – Soil improvers and Growing Media - Sampling. Determination of quantity BS EN 12580:2000 shall be available for inspection and available for staff to access			
4.3	There shall be evidence that the 20-litre cylinder and equipment complies with BS EN 12580:2000.			
4.4	There shall be evidence that the pack volume at time of manufacture is equal or greater than the declared volume.			
4.5	For bulk loads there shall be evidence that the volume determination test is conducted at least twice.			
4.6	There shall be evidence that at least four tests of determination of quantity have been conducted in each packaging run.			
4.7	There shall be evidence that non conforming products are NOT offered for sale, unless the declared volume has been rectified and agreed with the purchaser			
4.8	There shall be evidence that a pack storage test has been conducted for a range of products			
4.9	There shall be evidence that the pack volume is tested after storage test trial			

	Compliance Criteria	YES	NO	Comments
5.0	**Pack Labelling**			
5.1	There shall be evidence of a statement of the declared volume in either ‘x Litres’ or ‘x L’ format			
5.2	There shall be evidence of a traceable batch code printed on the packaging.			
5.3	There shall be evidence of a traceable batch code on outer shroud with product name (If applicable)			
5.4	Where controlled release fertilizers are incorporated into mixes, information regarding the product type, rate applied and maximum storage time should be provided to the customer.			
5.5	Where pesticides are incorporated into the growing media this must be indicated on the pack with the product name, application rate and use instructions. A copy of the MSDS should be provided to the customer.			

	Compliance Criteria	YES	NO	Comments
6.0	**General Appearance**			
6.1	As a visual observation are the areas around the factory and raw material storage area mostly clear of weeds			
6.2	As a visual observation is the site generally free of mud, debris of pallets and packaging			
6.3	Within the factory site are employees wearing safety equipment as specified by the company			
6.4	Within the manufacturing production lines are there magnets to remove metal contaminants			
6.5	In line with current legislation are there ‘No Smoking’ signs clearly visible at the entrances to buildings			

	Compliance Criteria	YES	NO	Comments
7.0	**Practical volume determination**			
7.1	The inspector will take 1 - 3 bags (as specified in Table 1) from the top layer of three randomly selected pallets of the chosen product from the storage yard and using the manufacturer's volume measuring equipment determine the out turn of the bag(s) on each pallet. The results of the test shall be recorded in the table below.			

Results of volume determination			
	Pallet 1	Pallet 2	Pallet 3
Date of Manufacture			
Date of determination			
Declared Volume of individual bags			
No. of bags required for testing (See Table 1)			
Total gross wt.			
Total packaging wt.			
Total net wt. of growing media			
20L Weight determination (1)			
20L Weight determination (2)			

20L Weight determination (3) – if specified in Table 1			
Mean 20L Weight			
Determined Volume per individual bag			
Manufacture's target fill to ensure declared volume at outturn after storage			
Percentage deviation from declared volume			
Percentage deviation from target fill			

Further Comments

Section	Comments

Guidance Notes.

1.0 Record Keeping.

1.1 Companies that currently operate quality control process within the businesses. For example ISO 9000 or RHP schemes, Will be required to undertake the Growing Media Association base line audit to show compliance with associations' codes.

1.2 The weighing equipment shall included all scales and weighbridges used on site. Records to show that the weighing equipment has been calibrated within the last 12 months can be shown as a certificated or as a label attached to the equipment with a date of last calibration. In all cases, documentation evidence of such calibration shall be available for inspection.

Note: The actual volume of the '20 litre' cylinder must be known and used in all calculations

1.3 – 1.4 Documentation to show that the E.C and pH equipment has been calibrated in accordance with the equipments manufacture instruction manual at least weekly, using the correct calibration solutions.

1.5 There shall be evidence that a COSHH assessment has been conducted on activities and substances used within the premises.

1.6 The company Health and Safety policy must be available for inspection and available to staff. It will show when last updated

1.7 Safety data sheets listed in the Baseline standard shall be available for inspection. The safety data sheets shall include any of the following products provided they are used within the business and all for other products that are not specified in the table.

Insecticides	Herbicides	Fungicides	Fertilisers	Peat
Bark	Processed wood	Coir	Perlite	Green Compost

1.8 The Accident Book and valid First Aid certificates shall be available for inspection.

1.9 The quality assurance manual shall be available for inspection to ensure, and it covers all procedures within the manufacturing facilities.

1.10 The current environmental policy for the company and / or the GMA's current environmental policy shall be available and in a format customers can refer to upon request

2.0 Specification

2.1 For each product produced there shall be a specification held either as a computerised or as paper record. This product specification shall list the raw materials by either percentage Vol. or litres. It will also include all other additives and the rates required.

2.2 – 2.3 The specification shall include a statement of the pH and EC both at time of manufacture and after 24 hours.

3.0 Traceability

3.1 During the production, processes there shall be evidence of a unique batch code to enable products to be traced to a specific production day/run and to identifiable batches of input materials.

3.2 A unique batch code shall be printed on each packaging unit and be legible.

3.3 Retained reference samples shall be labelled with, the unique batch code and date of manufacture and, where appropriate, the customers name. Other labelling systems, which have been adopted within the company, may also meet these criteria. The reference samples shall be stored in a cool and dry environment.

3.4 Reference samples shall be for between 6 and 12 months.

3.5 The production records shall be retained for 2 years and be available for inspection either as paper copies or as a computerised record

4.0 Volume

4.1 A copy of British Standard BS EN 12580:2000. Soil improvers and growing media. Determination of a quantity shall be held for reference within the office or in another appropriate place.

4.2 A copy of British Standard BS EN 12579:2000. Soil improvers and growing media - sampling. Shall be held for reference within the office or in another appropriate place.

4.3 There shall be evidence that the 20-litre cylinder and equipment complies with BS EN 12580:2000. This may take in the form of a label attached to the cylinder or a certificate within the office. If no certificate is available, it shall be shown that the cylinder is calibrated accordingly.

4.4 – 4.6 Within the quality assurance records there shall be evidence of due diligence testing showing that the volume of any packed product will be equal or greater than that declared on packaging after three months storage under typical conditions. On packaging runs there shall be evidence that at least four determinations of volume been conducted.
For bulk loads there shall be evidence that on loads less that $40m^3$ - 2 test have been conducted and on loads of more that $40m^3$ at least 3 tests have been conducted. Theses results are to be documented and available for random inspection.

4.7 There shall be documentation to show the procedures regarding non-conformities regarding declaration of volume. If a product does not meet the volume declaration on the packaging, the product may not be sold. However, if the purchaser is notified of this variance, and, the declaration on packaging is changed, and it is shown on all subsequent paper work regarding the non-conformity product, this would be permissible.

4.8 The storage test trial should be documented and show the production date, product and number of bags / pallets retained for testing in the future.

4.9 The results of the storage test should show the volume of packaging at time of manufacture, the anticipated volume, and the actual volume at the end of the determined time of the storage test. If the volume is below an acceptable level for selling to a consumer, an action plan is require showing what procedures have implemented to address the short fall in volume.

5.0 Pack Labelling

5.1 – 5.5 Pack labelling shall be clear and concise and the volume declaration shall be in accordance with codes of practice.

6.0 General Appearance

6.1 - 6.2 The general appearance of the site shall be mostly clear of weeds especially around the raw material storage areas and also around the buildings, the site should be generally clear of rubbish and other potential contaminates to the finished products.

6.3 If within the production building forklifts are being operated the staff should be wearing safety fluorescent jackets and the forklifts been segregated away from manual working areas. Within the working areas, the staff should be wearing safety boots if deemed appropriate.

6.4 If peat used within the factory, is sourced directly from the peat areas and not processed at another facility there shall be magnets should be present to remove magnetic contaminants.

6.5 In line with current legislation, there shall be 'NO SMOKING' signs at each entrance / exit to buildings

7.0 Practical Volume determination

All determinations shall be conducted in accordance with The British Standard BS EN 12580:2000 Soil improvers and Growing Media - Determination of a quantity and British Standard DS EN 12579:2000 Soil Improvers and growing media - Sampling

To obtain an accurate and meaningful volume determination the number of bags and determinations to be conducted shall be in accordance with Table 1 (below).

Table 1: Number of bag and determinations according to nominal pack volume

Bag Size (Litres)	20	25	35	36	50 - 80	100 - 150
No. Bags required	3	3	2	2	1	1
Number of determinations	2	2	2	2	2	3

Three pallets of a given product type will be randomly selected from the stock area and based upon the bag size , 1-3 bags will be taken to make the test sample for each as listed in Table 1. To carry out the determination of outturn the following describes (in brief) the steps undertaken.

- The selected bag(s) is/ are weighed to obtain the gross weight.
- The selected bag(s) is /are first emptied out and carefully and thoroughly fluffed up and homogenised by hand to remove any compacted material.

- The weight of the packaging removed is weighed to enable the net weight of test material to be calculated

- The 20-litre cylinder is weighed and tare. The calibrated volume of the cylinder is noted for use in the calculations.

- The collar and 20mm fall controller (Sieve) are then fitted onto a tare and calibrated 20-litre cylinder.

  Note: BS EN 12580:2000 describes a process, which involves the selection of the appropriate aperture size for the fall controller depending on the coarseness of the material under test. However, it is assumed that for multi purpose and most growing media a 20mm aperture will be appropriate, although the determinations must be carried out with the appropriate apparatus and in the prescribed manner.

- The test material is manually fed onto the fall breaker using a scoop and agitated there by hand to facilitate its passage into the cylinder. Continue filling until the media is above the level of the collar.

- The sieve and collar are then removed and a metal edge used to remove surplus material using a sawing action.

- The 20-litre cylinder is then weighed and a net weight of the contents recorded.

- The number of determinations listed in Table 1 shall be undertaken, depending on the pack size the contents of the cylinder from one determination shall not be used for any subsequent determinations.

- The actual volume of the bag is determined by dividing the net weight of the whole bag by the calculated mean weight of 20 litres of substrate according to BS EN 12580:2000

Calculations

- Once all the determinations have been made calculate the mean weight of 20L of product (taking account of the calibrated volume of the cylinder)

- Based upon the net weight of the test material, use the above ‘20L weight’ to determine the mean volume of material within each pack for the bag(s) sampled from each pallet.

- Express the resultant volume as a percentage deviation from both the declared pack volume and as a percentage deviation from the manufactures target filling volume.

- If the deviation is equal to greater than 10% below the declared pack volume then the determinations shall be repeated on a further 1 – 3 bags (according to declared volume) from each of the chosen pallets.

- If the outturn of the repeated determination falls 10% or more below the declared volume on the packaging the company will fail the base line audit and the company will be put forward for arbitration procedures as out lined in the relevant section within this document

STATEMENT OF RULES AND INSPECTION PROCEDURES

The Scheme requirements set out in the Baseline standard for Growing Media Association and will be maintained at the same level unless specific changes are agreed by the GMA and communicated to all members.

1. The Inspectors appointed by the GMA will undertake the Base line Audit.

2. The growing media association members shall be inspected every 3 years with a visit by a nominated inspector to demonstrate compliance with the GMA base line standard.

3. For companies that have more than one production facility, the inspector shall nominate the facilities for auditing.

4. If the additional companies join the GMA, the numbers of audits conducted will increase accordingly by agreement within the GMA to ensure that each GMA member is audited every three years.

5. The inspectors that are conducting the baseline audit will be informed by the GMA which companies will be inspected. The inspectors shall give at least 4 weeks prior notice of inspection.

6. Inspectors will not disclose any confidential information except with the agreement of the member.

7. The results of the base line audit will be sent to the audited company and a copy of the results will be held by the HTA on behalf of the GMA.

8. During the on-site inspections, the Inspector will need to inspect all relevant documentation to verify all points documented in the baseline standard.

9. Any non-conformity will require the company to submit relevant documentation to the inspectors within an agreed time scale.

10. The fees for the baseline audit visit shall be payable within 30 days of visit to the HTA.

11. The auditors for the GMA base line audit shall be familiar with the processes of auditing procedures, and have an understanding of the growing media industry. The auditor shall be approved by the GMA.

An additional re-inspection fee of £750 plus travelling expenses + VAT will be charged if an additional visit is required, If changes are not made to the satisfaction of the inspector.

Arbitration Procedures

Suspension of membership may be carried out:

1. If a member has failed to meet the non-conformance rectification deadline.
2. If a member brings the baseline audit into disrepute
3. If the GMA receives a letter of complaint relating to a specific member of the GMA and is investigated and the complaint is upheld.
4. A company fails to pay necessary fees relating to the inspection for the base line audit.
5. The volume of the tested bags is below 10% stated volume.

The GMA will decide on any action required and may seek guidance from elected officers of the GMA or another appropriate source. The member has the right to appeal and any appeal will be recorded by the HTA

Complaints and Appeals Procedure

All appeals and disputes may be made in writing to the Scheme Manager within the HTA (Tim Briercliffe)

All complaints referred to the HTA will be logged and will be dealt with in conjunction with the current chairperson and vice chairperson of the GMA.

The GMA will aim to investigate and deal with the appeal. However, if an amicable agreement cannot be reached then this will be referred to an independent panel made up of a full GMA Member, the current GMA chair person, the HTA and an independent consultant member of the GMA . The appellant will be given the opportunity to formally present their case. The decision of this panel will be final.