**Nursery Accreditation Scheme (NAS) Pre-Assessment Checklist**

|  |  |
| --- | --- |
| **Name of Nursery:** |       |
| **Address of Nursery:** |       |
| **Contact person:** |       |
| **Contact No.:** |       |
| **Email Address:** |       |
| **Lease/ Tenancy Expiry Date:** |       |
| **Assessor Audit Date:** |       |

**SECTION A)** **Please check the relevant boxes**:

|  |  |
| --- | --- |
| 1. **Site Layout & Condition**
 | **Assessor’s Comments & Rating** |
| **1.1 To be identified on submitted Site Layout plan:** |  |
|[ ]  Waste disposal areas (e.g. open area/ concrete structure/ bin facility) |  |
| [ ]  | Water Storage area/ Pond |  |
| [ ]  | Growing media storage areas |  |
| [ ]  | Planting areas (Potting, Propagation & Holding areas) |  |
| [ ]  | Plant quarantine area |  |
|[ ]  Chemical and fertilizer storage areas |  |
| [ ]  | Office and staff training rooms |  |
| [ ]  | Staff areas (Resting and Refreshment areas) |  |
| [ ]  | Retail areas (Including wholesale & point of sale areas) |  |
| [ ]  | Receiving & dispatch areas (i.e. loading & unloading area) |  |
| [ ]  | Parking areas (with road access) |  |
| [ ]  | Other areas associated with nursery activities (e.g. Worker’s quarters) Specify |  |
| * 1. **Overall Site Condition, Safety and Cleanliness**
 |  |
| [ ]  | Site is fenced up. |  |
| [ ]  | Site is tidy and clean.  |  |
| [ ]  | Footpath free of algae and properly maintained |  |
| [ ]  | All structures are structurally sound and areas are in good repair |  |
| **1.3 Layout Planning of Infrastructure/Storage Areas** |  |
| [ ]  | Enables efficient movement from area to area |  |
| [ ]  | Public areas have good access and signage |  |
| **1.4 Potting Media / Growing Media Storage Areas** |  |
| [ ]  | Potting media areas are properly covered under a permanent roof structure |  |
| [ ]  | Growing media areas, compost-mix are properly covered under a shed and /or canvas |  |
| **1.5 Planting Areas** |  |
| **Potting &Propagation areas** |  |
| [ ]  | Areas are spacious, clean, well-ventilated and covered under a permanent roof structure. |  |
| [ ]  | Work tables & benches for staff for potting activities |  |
| [ ]  | Trolleys are available for moving plants |  |
| **Holding Areas** |  |
| [ ]  | Areas are located under shade nettings where appropriate |  |
| [ ]  | Accessibility of loading and unloading areas  |  |
| **1.6 Plant Quarantine Areas** |  |
| [ ]  | Screened & Isolated quarantine areas with restricted access  |  |
| **1.7 Equipment Storage & Maintenance Areas - Machinery, Tools and Materials** |  |
| [ ]  | Well-ventilated storage facilities are provided with sufficient access |  |
| [ ]  | Instruction manuals and maintenance records are accessible by staff |  |
| [ ]  | Safety signages are clearly displayed |  |
| **1.8 Staff Areas – Briefing, Resting and Refreshment, Offices and Training rooms** |  |
| [ ]  | Rooms are tidy, conducive, and functional |  |
| **1.9 Waste Disposal Areas** |  |
| [ ]  | Areas are isolated from planting areas and are accessible for refuse disposal and collection |  |
|  |  |  |
| 1. **Production System**
 |  |
| **2.1 Quality of Plant Stock before Sales** |  |
| [ ]  | Not physically damaged and healthy |  |
| [ ]  | Free of weeds, pests & diseases |  |
| **2.2 Propagation Material** |  |
| [ ]  | Mother stock is healthy and properly maintained (ornamental plants) |  |
| **2.3 Production Records** |  |
| [ ]  | Records track all batches of plants through the production system / sales records |  |
| **2.4 Labelling** |  |
| [ ]  | Plants and sections in nursery are labelled for identification purposes |  |
|  | Plant labelling includes:[ ]  Plant Scientific Name[ ]  Common Name[ ]  Plant Cultural Notes *(e.g. use as groundcover)*[ ]  Trademarks/License Names *(if applicable)* |  |
| 1. **Plant Sales & Delivery**
 |  |
| **3.1 Receiving Area** |  |
| [ ]  | Parking area is well located, allows efficient movement, loading & unloading |  |
| [ ]  | Parking area is well maintained |  |
|  |  |  |
| 1. **Fertiliser Application, Pest & Disease Control**
 |  |
| **4.1 Staff Training & Safety** |  |
| [ ]  | At least one member of staff is able to identify pests & diseases |  |
| [ ]  | Trained staff have obtained AVA’s Pesticide Operator’s Certificate, trained in pesticide and fertiliser application |  |
| [ ]  | PPE is well maintained and in working order |  |
| [ ]  | **Materials Safety Data Sheets (MSDS)** are provided*Please list any other Pest, Weeds & Disease control courses attended & attained by your staff if have*Click here to enter text |  |
| **4.2 Chemical and Fertilizer Storage Areas** |  |
| [ ]  | Chemicals are stored in storeroom under lock & key |  |
| [ ]  | Proper approval letters, Material Safety Data Sheet (MSDS), and relevant safety signages are displayed |  |
| [ ]  | Chemicals are stored properly and storage area is well-ventilated  |  |
| [ ]  | Secondary Containment of chemicals to minimise spread of leakages |  |
| 1. **Weed Management**
 |  |
| **5.1 Staff Training & Safety** |  |
| [ ]  | Staff are trained in weed identification and removal techniques |  |
| [ ]  | Operators are trained in chemical weed control |  |
| [ ]  | MSDS are provided for Herbicides |  |
| 1. **Water Management**
 |  |
| **6.1 Condition of Water Storage Area** |  |
| [ ]  | Properly Maintained, amount of suspended silt is acceptable |  |
| **6.2 Water Treatment** |  |
| [ ]  | Sediments are filtered (e.g. using swales, filters, sediment trap etc.)  |  |
| [ ]  | Water system is regularly treated and tested prior application to plants |  |
| **6.3 Irrigation System** |  |
| [ ]  | Irrigation system is well maintained (every 6 months) and operational |  |
| [ ]  | A Contingency plan is in place should the regular watering system fail |  |
| **6.4 Drainage System** |  |
| [ ]  | No major ponding or puddling after rain, watering and irrigation |  |
| [ ]  | Water recycling: Surface runoff water is channelled into a retention pond for re-use |  |
| [ ]  | Methods are in place to control the amount of water overflowing into public drains |  |
| 1. **ONLY FOR RETAIL NURSERIES – Retail Management**
 |  |
| **7.1 Retail Area & Point of Sale Area** |  |
| [ ]  | Proper signage and labellings are displayed |  |
| [ ]  | Allows ease of movement for customers |  |
| **7.2 Retail facilities and layout** |  |
| [ ]  | Retail space is aesthetically pleasing and organised layout |  |
| [ ]  | Washrooms are well-maintained |  |
| [ ]  | Trolleys are provided for customers |  |
| **7.3 Quality of Plant Stocks** |  |
| [ ]  | Not physically damaged and healthy |  |
| [ ]  | Free of weeds, pests & diseases |  |
| **7.4 Retail Staff** |  |
| [ ]   | Staff are welcoming, friendly and knowledgeable  |  |

|  |  |
| --- | --- |
| 1. **Business Management**
 | **Assessor’s Comments & Rating** |
|  | **Target** **(3 years from now)** | **Actual** **(based on latest FY)** |  |
| **9.1 Financial Planning** |  |  |  |
| Total Revenue |       |       |       |
| Revenue per Worker |       |       |       |
| Revenue per hectare |       |       |       |
| Value-add per worker per yr |       |       |       |
| Profit |       |       |       |
| Value of largest project |       |       |       |
| Notable clients |       |       |       |
| **9.2 Human Resource** |  |  |  |
| Number of Staff |       |       |       |
| Total Local : Total Foreign worker ratio employed in Company |       |       |       |
| **9.3 Innovation, R&D** |  |  |  |
| Current Innovative techniques |       |       |       |
| Future Innovative techniques/Improvements |       |       |       |
|  |
| Upgrading Works, Construction, Renovations |       |       |       |
| Investments in nursery operations *(e.g. new machineries, new buildings, new IT system etc)* |       |       |       |

**SECTION B) Please fill in the following information:**

1. **Nursery Activities**

|  |  |  |
| --- | --- | --- |
| **Nursery Activities** | **% of Nursery Space** | **Area (ha)** |
| **Production****(potting, media storage, propagation)** |     % |      ha |
| **Wholesale** |     % |      ha |
| **Holding** |     % |      ha |
| **Retail** |     % |      ha |
| **Non – Nursery Area****(e.g. roads, pond, office, workers quarters, carpark)** |     % |      ha |
| **Total Area** | **100%** |      **ha** |

1. **Nursery Staff only**

|  |  |  |
| --- | --- | --- |
| **Nursery Staff**\**There may be replicates for staff, but overall the first row should indicate the total nursery staff* | **No. of****Local staff** | **No. of****Foreign staff** |
| **Estimated Full Time (EFT) Total Nursery Staff** | Total staff | Total staff     |
| EFT Senior Management Nursery Staff |      |      |
| EFT Office Nursery Staff |      |      |
| EFT Operational Nursery Staff |      |      |
| Total Staff with relevant expertise such as WSQ Trained, Non-WSQ Trained such as Landscape Certificate, Horticultural Diploma, Certified Practising Horticulturist (CPH), Landscape related degree etc |      |      |

1. **Source Country for Plant Supply**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Plants** | **Growing Media** | **Remarks** |
|  |  | **% Quantity** | **% Quantity** | (e.g. note down any instances of infestations)Click here to enter text |
| **Production** | **Singapore** |      % |       %  |
| **Imported / Purchased**  | **Singapore** |      % |       % |
| **Malaysia** |      % |      % |
| **Thailand** |      % |      % |
| **Indonesia** |      % |      % |
| **China** |      % |      % |
| **Other:** Click here to specify |      % |      % |
| **Total** | **100%** | **100%** |

1. **Import**

**Do you own and/or have shares in an overseas nursery?**

|  |  |
| --- | --- |
| [ ]  | Yes [ ]  No |

**If yes, please indicate the percentage of plant stocks imported from your overseas nursery subsidiary and/or entity.**

|  |  |
| --- | --- |
| [ ]  | Less than 20% [ ]  Between 20% - 50% [ ]  More than 50% |

1. **Supplier Source (Top 3)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Supplier** | **Country** | **% Quantity** |
| **Plants** | 1.       |       |      % |
| 2.       |       |      % |
| 3.       |       |      % |
| **Compost** | 1.       |       |      % |
| 2.       |       |      % |
| 3.       |       |      % |
| **Fertilizer** | 1.       |       |      % |
| 2.       |       |      % |
| 3.       |       |      % |

1. **Export**

**Do you export plants and / or orchids to overseas?**

|  |  |
| --- | --- |
| [ ]  | Yes [ ]  No |

**If yes, please indicate the percentage of the stock exported throughout the year.**

|  |  |
| --- | --- |
| [ ]  | Less than 20% [ ]  Between 20% - 50% [ ]  More than 50% |

1. **Plant Propagation**

|  |  |  |
| --- | --- | --- |
| **Growing Media Mix for Propagation** |  | **Propagated Plant Types** |
| **Component** | **% of Total Component** |  | **Plant Type** | **% of Total Propagated Plants** |
| Soil |      % |  | Trees |      % |
| Burnt Clay |      % |  | Shrubs |      % |
| Expanded Clay |      % |  | Ferns |      % |
| Sand |      % |  | Indoor Plants |      % |
| Coco Peat |      % |  | Hydroculture plants |      % |
| Peat |      % |  | Aquatic plants |      % |
| Lignin Peat |      % |  | Orchids |      % |
| Vermiculite |      % |  | Others 1: Specify |      % |
| Pumice |      % |  | Others 2: Specify |      % |
| Perlite |      % |  | Others 3: Specify |      % |
| Rice Hills |      % |  | **Total** | **100%** |
| Bark |      % |
| Polystyrene |      % |
| Compost |      % |
| Charcoal |     % |
| Sphagnum moss |     % |
| Other 1: Specify |      % |
| Other 2: Specify |      % |
| **Total** | **100%** |

1. **Fertilizer Management**

Please list down the three most commonly used fertilizers in your nursery.

|  |
| --- |
| **Most commonly used Fertilisers** |
| **Synthetic Fertiliser** |
| **Item** | **Fertilizer 1** | **Fertilizer 2** | **Fertilizer 3** |
| **Fertilizer Product Name** |       |       |       |
| **N:P:K** |       |       |       |
| **Application Method*****(hand, liquid, fertigation etc)*** |       |       |       |
| **General Frequency of Application** |       weeks |       weeks |       weeks |
| **Organic Fertiliser** |
| **Item** | **Fertilizer 1** | **Fertilizer 2** | **Fertilizer 3** |
| **Fertilizer Product Name** |       |       |       |
| **N:P:K** |       |       |       |
| **Application Method*****(hand, liquid, fertigation etc)*** |       |       |            |
| **General Frequency of Application** |       weeks |       weeks |       weeks |

1. **Pest & Disease Management**

Please list down the two most commonly used Pest & Disease Chemicals used in your nursery.

|  |
| --- |
| **Most commonly used Pest & Disease Chemicals** |
| **Item** | **Pest & Disease Chemical 1** | **Pest & Disease Chemical 2** | **Pest & Disease Chemical 3** |
| **Trade Name** |       |       |       |
| **Chemical Composition** |       |       |       |
| **Application Method** |       |       |       |
| **General Frequency of Application** |       |       |       |

1. **Weed Management**

|  |
| --- |
| **Most commonly used Herbicides** |
| **Item** | **Herbicide Chemical 1** | **Herbicide Chemical 2** | **Herbicide Chemical 3** |
| **Trade Name** |       |       |       |
| **Chemical Composition** |       |       |       |
| **Application Method** |       |       |       |
| **General Frequency of Application** |       |       |       |
|  |

1. **Water Management**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Water Usage and Source** | **Amount** |  | **Water Source** | **Estimated % of Water Supply** |
| **Average Monthly Water Use for Nursery Irrigation** |       kilolitres |  | **Water Storage & Harvesting On-Site – Ponds** |  % |
|  |  |  | **Water Storage & Harvesting On-Site –** **Tanks**  |      % |
| **Storage Capacity** | **Amount** |  | **PUB Water Supply** |      % |
| **Area of Water Storage Spaces** |       m2 |  | **Water Trucked to Site** |      % |
| **Depth of the Water Pond** |      m |  | **Other:** Specify |      % |
| **Capacity of Water Storage Spaces** |      kilolitres |  | **Total** | **100%** |

|  |  |
| --- | --- |
| **Water Analysis** | **Result** |
| **pH** |       |
| **Salinity (EC)** |       uS/L |
| **Nitrogen (N)** |       uS/L |
| **Phosphorus (P)** |       uS/L |
| **Postassium (K)** |       uS/L |

 **Documents Checklist** *(For NParks to fill)*

|  |  |  |
| --- | --- | --- |
| **1. Import System** |  | Remarks |
| a. | Orders are documented: Purchase Orders, Delivery Orders |[ ]        |
| b. | Phytosanitary Certificate, CITES |[ ]        |
| c. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **2. Production System** |  | Remarks |
| a. | Production Records |[ ]        |
| b. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **3. Plant Sales & Delivery** |  | Remarks |
| a. | Orders are documented: Purchase Orders, Delivery Orders, Export Documents  |[ ]        |
| b. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **4. Growing Media** |  | Remarks |
| a. | Recent Soil Sample Analysis Reports |[ ]        |
| b. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **5. Fertilizer Management** |  | Remarks |
| a. | Fertiliser application procedures and records are documented |[ ]        |
| b. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **6. Plants & Pest Disease Management** |  | Remarks |
| a. | Plants & Pests Disease procedures and records are documented |[ ]        |
| c. | Material Safety Data Sheets of chemicals (MSDS) |[ ]        |
| d.  | Pesticide Operator Certificate  |[ ]        |
| d. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **7. Weed Management** |  | Remarks |
| a. | Weed management procedures and records are documented |[ ]        |
| b. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **8. Water Management** |  | Remarks |
| a. | Water use monitoring program (if applicable) |[ ]        |
| b. | Recent Water Sample Analysis Test Reports |[ ]        |
| c. | Others (Specify): |[ ]        |

|  |  |  |
| --- | --- | --- |
| **9. Business Management** |  | Remarks |
| a. | Any training materials (Specify): (Training on Chemical Handling, machinery, safety courses) |[ ]        |
| b. | Any other certifications (e.g. ISO, Biz safe cert): |[ ]        |
| c.  | Site Layout |[ ]        |
| d. | Company Organisation Chart |[ ]        |
| e.  | Risk Management System  |[ ]        |
| f.  | ACRA Document |[ ]        |
|  g. | Financial Report |[ ]        |
| d.  | Others (Specify): |[ ]        |