



**LANDSCAPE PROFESSIONAL ECO-LOGICAL BUSINESS PROGRAM
ELIGIBILITY CRITERIA FORM**

Date Received: _____

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Thank you for your interest in the Ecological Business Program for Landscape Professionals. To qualify for the free recognition services of the Portland Area Pollution Prevention Outreach (P2O) team you are required to complete the following certification elements:

1. **Complete this Checklist.** Questions within each category are numerical and identified in three categories: *Legal*, *Program*, and *Elective* options. To be eligible, businesses need to meet **100%** of the *Legal* and *Program* requirements, and **80%** of the *Elective* options. Complete **only** the sections of this checklist that are applicable to your company activities, for instance Design only firms should concentrate on the Design section only. Installation and maintenance firms should concentrate on all but the Design section. **All** firms must complete the general business and customer education sections. When in doubt note a “not applicable” and the program reviewers will evaluate the specific company issue at the time of checklist review.
2. **Choose the 100-point Certification Options on Page 3.** Check which boxes are the items you choose to meet the 100-point certification total. Provide applicable attachments such as case studies or certificates for training programs.
 - a. **Provide a Typical Plan Set for Your Work and Typical Contract Documents.** These materials will also help the P2O staff evaluate your firm’s knowledge and communication abilities on environmental impact issues.

Company Legal Name _____

Facility Address _____

Mailing Address _____

Contact Person _____

Title _____ Phone _____

Business type (contractor, designer, full service): _____

_____ # of employees _____ % Customers in Natural Program _____ Acres

Do you operate outside of the Portland Metro Area? Yes No

If yes, where? _____

Certification Options: How to become an Ecological Business

Select any combination of the following choices for a total of at least 100 points.

- Program Staff Visit/Inspect Customer Sites** **50 Points**
Providing example sites and contact information for program staff to visit that demonstrate a more minimal environmental impact. Provide at least 3 sites and time frames for when any maintenance or installation work is occurring at that site (if applicable). Design sites may be after the fact.
- Track Chemical Use and Expenses** **50 Points**
Your firm provides information on the amount of horticultural chemicals used on environmentally sustainable sites. Provide program staff with existing reports or create a chemical tracking system. All chemical purchases are documented (product, supplier, volume purchased) and information regarding use per acre should be tracked. This documentation should be periodically submitted to program staff OR available for staff to review at any time. Provide an example document with your checklist submittal.
- Attend a Class** **30 Points**
Successful completion of an 8-hour training course, class or exam on environmentally related issues found in this checklist. Classes should demonstrate knowledge of low-impact landscaping techniques and cover issues such as IPM techniques, water conservation, stormwater management, erosion control, use of native plants or similar pollution prevention item. The business owner, crew leaders, or at least 30 percent of total staff must provide proof of passing. Classes must be within the past 3 years. Provide complete certificates with your checklist submittal.
- Lead a Training Class** **20 Points**
Lead at least 2 hours of presentation time for events where the public or other contractors are present (garden tours can be included). Classes should demonstrate knowledge of issues covered in this checklist. Provide a schedule of classes that shows your name with your checklist submittal.
- Document Standard Operating Practices** **30 Points**
Provide written documentation on procedures related to the various manual/eligibility list sections. Specific examples of staff training procedures, after care manual, customer surveys, standard plan set notes, etc. Submit examples with your checklist.
- Case Studies** **30 Points**
Select 3 jobs you have worked on using environmentally friendly practices, and submit a case study for each. Document initial site conditions and how you assessed existing environmental impacts; the approach taken and practices used to modify site design or maintenance; and final results. Submit this information with your checklist. A sample format is available on the EcoBiz website.
- Provide Your Clients With a Plant List** **20 Points**
A list of your recommended top 20 native, native like, low maintenance or otherwise beneficial to the environment plants for clients to choose from and become familiar with.
- Typical Contract /Plan Documents (REQUIRED)** **20 Points**
Include a typical contract and planting plan in your submittal. This will help staff verify your knowledge and communication skills on environmental impact and sustainability issues.
- Yard Location Visits (REQUIRED for Installers and Maintenance firms)** **30 Points**
Program staff will come out to verify the environmental friendliness of your work truck and equipment yard. Things that are looked for: safe materials storage & handling practices, good housekeeping techniques, spill prevention measures, and controlled washing and equipment maintenance areas.

SECTION 1 - BUSINESS PRACTICES

GENERAL BUSINESS ISSUES – all firms to complete

GOAL: Actively promote sustainability in all aspects of business management.

1 – Legal

Are you a licensed landscape contractor?

Yes No Not Applicable

License number _____

You may not need a license if:

- Income from each job does not exceed \$500 annually
- Your company performs exclusively maintenance
- Your company performs exclusively planting design work
(see manual for more information)

2 – Legal

Do you have a current business license?

Yes No Exemption

License/Exception number: _____

3 – Legal

Do you have public liability, personal injury and property damage insurance (ORS 671.510 to ORS 671.710)?

Yes No Not Applicable - design only

Policy Issuing Agency(ies) _____

Policy Number(s) _____

4 – Legal

Does your company have a surety bond filed with the Landscape Contractor Board (ORS 671.690) or another organization?

Yes No Not Applicable

Organization _____

Bond number _____

5 – Legal

Which city/county ordinances do you check for regulations that affect your work on a customer's site?

(all required when applicable)

- Zoning – property lines/setbacks, environmental resources, etc.
- Tree requirements
- Building codes
- Stormwater management requirements
- Plumbing codes (required for installers)
- Erosion control regulations (required for installers)
- Covenants or deed restrictions (CCRs from HOAs)
- Other (please describe) _____

6 – Program

(At least one staff member for installers and maintenance firms should have CLT certification)

Who on your workforce has current Certified Landscape Technician (CLT) status?

- Self
- Crew Leads
- Maintenance crew members
- Not Applicable – design only

What percentage of employees is currently CLT certified? _____

OFFICE MATERIAL RECYCLING – all applicants

7 – Program

(all required)

For which products do you have a recycling or reuse system in place at your office? Check all that apply.

- Paper
- File folders / Dividers
- Glass
- Aluminum
- Plastic containers
- Metal
- Other (please describe) _____

8 – Elective

Which steps do you take toward reduction of paper waste?

- Actively request electronic versions of catalogues & other written materials
- Assess billing and advertising practices for opportunities to reduce waste
- E-mail quotes, invoices, statements
- Double side copying

9 – Elective

How do you work to employ sustainable purchasing strategies, and select products with low embodied energy?

Prioritize selection of materials that are:

- Made from recycled content
- From local sources
- Reduced or reusable packaging
- Made/extracted using little or no chemical treatment (i.e. unbleached paper)
- Other (please describe) _____

10 – Program

(all required)

How do you take pollution prevention into account when selecting products and supplies?

- Assess whether any waste streams can be reused or recycled on-site
- Select products that will contribute least amount of waste/ pollution possible
- Routinely reevaluate materials for their hazard levels, and availability of less toxic alternatives
- Routinely test or try less-toxic or non-toxic products
- Request vendors provide alternatives to hazardous products

11 – Elective

Are food prep/dishwashing facilities available to office staff, reducing use of disposable plates, cups, and utensils?

Yes No Not Applicable

12 - Elective

Have you conducted an energy audit of your shop and office spaces to look for increased efficiencies?

Yes No

EMPLOYEE TRAINING AND INVOLVEMENT

GOAL: Work to assure all of firm's employees have sufficient knowledge to achieve environmental goals. Provide training and technical assistance in all aspects of landscape management.

Sole ownership or partner only firms should answer the following questions based on their own knowledge. If no other employees other than applicant, please check here.

13 – Program

Program
(all required)

Employees/owners are trained in the following:

All applicants:

- Principles of IPM
- Plant and pest identification
- Horticultural practices
- Erosion control

If your company installs or maintains landscapes:

- Safe equipment handling procedures
- Equipment care and maintenance
- Need for/proper use of hearing protection
- Proper handling of chemicals and wastes
- Spill prevention and response procedures, including locations of spill kits

If your company handles irrigation projects:

- Water management/budgeting
- Irrigation system design & repair
- Specific capabilities of any system they are to operate
- Billing structure for irrigation meters

14 – Program

Program
(at least two required)

How or where is training provided or acquired? Which format is used?

- External course
- Trade group certification program/conference
- Staff meetings
- Staff mentor/apprentice relationship
- On the job training
- Employees provided with educational materials to study

15 – Program

Do you routinely review the aforementioned topics, and provide opportunities for employees to ask questions? (for firms with employees)

- Yes No NA

16 – Program

Program
(all required)

Are all firm owners / employees involved in developing ways to:

Minimize / control company use of:

- Pesticides
 Water
 Stormwater runoff
 Waste

Improve:

- Customer education
 Safety

CUSTOMER EDUCATION

GOAL: Foster understanding of environmental systems, and the impacts created by green vs. chemical landscape management; provide education on true overall cost of various options.

17– Program

(one required per section)

Do you look for opportunities to help clients understand the advantages of “green” landscaping techniques, and how these can affect their property?

Plant maintenance

- Comprehensive Integrated Pest Management program
 Tolerance levels (broadleaf plants in lawn, insect presence)
 Value of monitoring visits

Water use

- Irrigation system scheduling and maintenance requirements
 Comprehensive water management programs
 Potential areas for water use reduction, and cost reduction, on their site

Waste reduction

- Potential areas for site waste reduction
 Benefits of cultural practices such as grasscycling and composting

Pollution prevention

- Alternatives to chemical fertilizers
 Alternatives to pesticides
 Runoff prevention

SECTION 2 - SITE DESIGN

Does your company perform any landscape design services? Yes No
If no design work is performed, please skip to *Section 3 - General Installation* on page 15

GENERAL DESIGN

GOAL: Design landscapes that are pest and disease resistant, water efficient, produce minimal green waste, and incorporate natural habitat.

18 – Legal

If your business does design work for public properties (or creates technical specifications for another company or individual to follow), do you employ a Registered Landscape Architect (ORS 671.310 to 671.459)?
 Yes No Not Applicable – no public design

19 – Legal

(all required)

Which elements of your site plans assure that access and safety standards defined by the Americans with Disabilities Act (ADA) are met for publicly accessible spaces?
 Not Applicable – no public design work is done
 Paving
 Grades
 Handrails
 Other (please describe) _____

20 – Elective

For work on private property, are you or do you have a certified landscape designer on staff?
 Yes No Not Applicable
If yes, what type of certification does the staff member hold?
 APLD certification
 Registered Landscape Architect (ORS 671.310 to 671.459)
 Other (please describe) _____

21 – Program

(at least one required)

Which of the following techniques do you use to investigate utility locations on-site?
 Call locator service
 Check service maps
 Pothole (hand dig to locate buried pipes)
 Previous site design notes/maps
 Other (please describe) _____

22 – Program

Does your design minimize the likelihood of construction damage to utility infrastructure through careful placement of landscape features such as trees, or structures like patios and ponds?

- Yes No

23 – Program / Elective

How does your design ensure future access to utilities (i.e. septic systems, sewer lines, electrical or telephone lines)?

Program
(both required if applicable)

- Accessible drain/fill systems, if applicable
 Access to septic tanks / sewer clean-outs, if applicable

Elective

- No deep-rooted permanent plantings above or next to utility points
 Gates and other access points are wide enough for maintenance equipment
 Other (please describe) _____

24 – Program

How do you gather direct knowledge of site conditions before beginning the design process (rather than relying exclusively on plot plans)?

(all required)

- Walk site
 Observe/identify microclimates
 Test soil for biological and chemical properties (see manual), or add notes that samples should be taken by the installation contractor

25 - Program

When creating a landscape design for sites with slopes greater than 10 percent, which techniques do you usually apply?

(one required)

Physical controls

- Terracing / rock walls with drainage systems along contours
 Placing row of rocks or shrubs across slope to interrupt the flow of water
 Avoid placing features (ponds, patios, lawns) on slopes to minimize need for grading and maintenance difficulties
 Other (please describe) _____

(one required)

Material Selection

- Select appropriate plant material (i.e. species with low water requirements and deep root systems)
 Call out appropriate paving materials
 Call out appropriate drainage management systems - drainage rock. French drains, etc
 Other (please describe) _____

26 – Program / Elective

How do you address natural drainage issues in your designs?

Program
(both required)

- Study drainage patterns before beginning design
 Avoid placing features near seeps, springs, etc. (use minimal excavation to avoid disturbance)

Elective

- Incorporate swales or other stormwater detention/infiltration facilities – dry wells, French drains
 Do a percolation test to assure good drainage.
 Other (please describe) _____

27 – Program

Do you check on and/or consult with past owners on past site uses or current soil conditions that may affect your design (e.g. soil contamination, soil compaction, previous fill, illegal dumping, etc.)?

- Yes No

28 – Program

(at least one required)

Where do you check for site history and current conditions?

- Insurance company
- Bank, or lending institution
- Portland Maps
- Level I, II, or III Environmental Assessment (typically required for commercial real estate transactions)
- Oregon Historical Society
- Other (please describe) _____

29 – Elective

When creating a design for sites with degraded soils, do you:

- Take core samples from various site locations
- Plan remediation measures to precede site installation – i.e. add compost
- Other (please describe) _____

30 – Elective

How do you utilize existing on-site materials in your designs?

- Protect healthy existing plants for continued use in new landscape
- Salvage healthy plants for use on owner or other sites
- Compost clippings onsite for mulch
- Protect soil structure by avoiding compaction during installation
- Use existing boulders / stones in final design
- Use branches or whips from shrubs and trees to construct woven trellises, fences
- If grading is required, stockpile soil for reuse on-site
- Other (please describe) _____

31 – Program / Elective

Program
(at least one required)

Elective

Which methods are used onsite or called out in plan notes to retain or protect trees and other existing vegetation from construction damage?

- Fencing at dripline
- Ring of poles
- Plant small understory plants around trees to help exclude machinery
- Other (please describe) _____
- Certified arborist retained or consulted for additional protective options

32 – Program / Elective

Which factors do you consider when recommending or purchasing materials?

Program
(all required)

- Life expectancy
- Installation requirements
- Other (please describe) _____

Elective

- Minimal packaging and recyclable or reusable containers
- Embodied energy (all direct and indirect energy used to extract, manufacture, transport, install, and maintain materials)
- Long-term cost (including overall environmental cost)
- Compatibility with surrounding landscape
- Recycled construction materials (plastic lumber, recycled concrete)
- Alternative materials (crushed hazelnut shells for pathways, twig fencing/lattices, etc.)
- Other (please describe) _____

33 – Program / Elective

When selecting plant material, which of the following do you actively seek to create in your landscape?

Program
(all required)

- Plantings adapted to existing drainage, exposure, humidity, and wind conditions
- Landscape that will thrive in existing soil conditions (assuming conditions are hospitable), minimizing need for soil amendment requirements
- Plantings not listed as prohibited or nuisance on applicable plant lists
- Diverse plant community
- Plantings that actively compete with weeds
- Provision of beneficial insect habitat
- Wildlife habitat
- Irrigation zones

Elective

- Complete multistory plant community
- Landscape compatible with surrounding plant communities
- Plantings that will be successful without supplemental irrigation
- Plantings that will succeed without fertilizers
- Other (please describe) _____

34 - Program

When considering plant placement, do you:

Program
(all required)

- Group plants with similar horticultural requirements
- Space according to size at maturity
- Maximize shade cover in unplanted areas to keep down weed growth
- Space plants to allow adequate maintenance
- Other (please describe) _____

35– Legal / Program

How do you address erosion control issues in your design?

Standard notation on the planting plan set

Legal

Required for installers:

Prepare an erosion control plan outlining potential causes of erosion and outlining steps that will be taken to prevent it

Program

Prioritize erosion control materials (grass mats, mulch, tackifiers) over sediment control measures (sediment fences, hay bales, biobags, etc)

36- Program (for installers)

Does the construction plan or plan set notes provide site-specific comments to the contractor or installer that remain with the site plan? Example comments include specific statements such as, permits may be required for this activity, should be installed by a licensed contractor, and erosion control needed for this activity.

Yes No

37– Program (for installers)

(all required)

Which types of designated locations are identified on your construction plan?

- Soil stockpiles
- Material staging area
- Equipment storage
- Equipment fueling (if performed on-site)
- Equipment cleaning (if performed on-site)
- Tree protection zones
- Offsite fueling
- Offsite cleaning

HARDSCAPE DESIGN (Patios, Decks, Fences)

Does your company perform any hardscape design services? Yes No

If not, please skip to the **Ponds and Water Features** portion of *this section*, page 13.

GOAL: Minimize environmental impacts created by any hardscapes called for in your designs.

38 - Program

(at least one required)

How do you minimize the impacts (i.e. increased runoff, temperature pollution) of any impervious area created in your designs?

- Limited or no hard surface
- Porous pavement
- Tree canopy coverage over hardscapes
- Infiltration facilities
- Other (please describe)_____

39 – Program

(at least one required)

In your design specifications or plan set notes, do you call for:

- Untreated, naturally rot-resistant wood products (e.g. cedar)
- Sustainable supply source
- Alternative products (plastic or composite lumber)
- Wood products preserved with less-toxic treatments like Alkaline Copper Quaternary (ACQ) rather than Chromated Copper Arsenate (CCA)

PONDS & WATER FEATURE DESIGN

Does your company perform any pond or water feature design services?

Yes No Only layout– use pond builder (complete #40 - #42)

If not, please skip to the **Irrigation Systems** portion of *this section*, page 14.

GOAL: Provide habitat area while minimizing energy use, water use, and maintenance requirements.

POND LAYOUT

40– Program

(all required)

How do you address issues that may impact pond stability and health OR health of surrounding landscapes?

- Buffer zone between turf edge and pond.
- Avoid placement in cut slopes where springs may be present
- Avoid placement where construction may damage tree roots
- Other (please describe) _____

41– Elective

Does your design call for reusing any soil removed during pond construction elsewhere on-site?

- Yes No

42 - Program / Elective

(all required)

How do you approach plant selection for water features?

- Plan for 50 – 70% vegetated coverage
- Call out / note to use only native or non-invasive exotic plants (see manual for plant lists)
- Review sun exposure requirements, and select plants that are appropriate for your specific site

Elective

- Select border plantings that won't drop leaves into pond
- Other (please describe) _____

POND BUILDING – required for pond builders

Skip / NA

43 – Legal

(all required)

Which legal aspects of pond construction do you research and design to meet?

- Local fencing ordinances for deeper ponds
- Electrical codes
- Plumbing codes (example: assure that design includes approved overflow & disposal/drainage facilities)

44 – Program

(all required)

Which do you specify in pond design?

- Drain valve and underlying drainage system (disposing to approved destination)
- Recirculating pump
- Energy efficient electrical equipment
- Auto-fill valve
- Backflow preventer

IRRIGATION SYSTEM DESIGN

Does your company perform any irrigation design services? Yes No
If not, please skip to the **Turf Design** portion of *this section*, page 15.

GOAL: Design systems that conserve water and energy while distributing adequate water for mature plantings.

45 – Program

(at least one required)

Does your company have one of the following on staff?

- Certified Irrigation Designer (Irrigation Association standards)
- Landscape Architect
- Control System Manufacturer training (Rainbird, etc) + Certified Irrigation Auditor (Irrigation Association standards)
- Other design professional - college degree, etc.
(please describe) _____

46 – Program / Elective

Program (all required)

How does your design work to achieve efficient and uniform distribution of supplemental water into each hydrozone?

- Identify irrigation zones, and design water distribution system to efficiently meet needs in each zone
- Design to achieve an overall weighted design average Distribution Uniformity (DU) of at least 70% for irrigated turf areas
- Design system to deliver water according to needs of mature landscape
- Specify rain sensors to prevent wet-weather irrigation

Elective

- Specify metering device that measures total landscape water use separate from other uses
- Specify wind sensors to shut off system in high wind conditions
- Use low-volume irrigation for planting beds
- Consider/recommend use of water harvesting options to supplement irrigation needs

47 – Legal / Program

Legal (both required)

How does your design process address material selection?

- Pipe selected according to plumbing codes
- Electrical wires selected according to applicable codes

Program (all required)

- Design specifies manufacturer, model, type, and size of all components to eliminate ambiguity at construction and facilitate system management
- Sprinkler components selected and placed based on expected size of larger specimen plantings
- All materials selected are appropriate for environmental conditions

48 – Program

How do you create a design that will minimize installation and maintenance difficulties?

- Swing joints used for popup spray heads

TURF DESIGN

Does your company perform any turf area design services? Yes No

If not, please skip to **Section 3 - General Installation** on page 16.

GOAL: Design turf areas to require minimal inputs (water, fertilizer).

49 – Program

Program (both required)

How does your design minimize turf area?

- Avoid using turf on sloped areas
- Use turf only where required by client for recreation or other needs

50 – Elective

How do you address species selection in turf design?

- Specify seed mixture including multiple species rather than a single grass type
- Specify use of seed or sod from local region
- Specify low growing species that require limited or no mowing
- Alternatives to turf routinely recommended to clients

51 – Program

Do you specify or add design notes for mechanical barriers at turf edge in areas where grass spread is undesirable?

- Yes No

SECTION 3 - INSTALLATIONS

Does your company perform any landscape installation services? Yes No
 If no installation work is performed, please skip to **Section 4 – Site Maintenance** on page 21.

GENERAL INSTALLATION

GOAL: Minimize environmental impact from installation activities.

52- Legal

(all required)

When required, do you obtain permits for:

- Not Applicable – Prime contractor gets permits
- Plumbing (drainage, underground piping)
- Stormwater management (water quality, flow detention)
- Erosion control (grading, cut & fill, spill cleanup)
- Building (structures, foundations, footings)
- Zoning (setbacks, environmental zones)
- Other (please describe) _____

53 – Legal

Is your firm licensed / certified to perform required projects (ORS 671.520)?
 Yes No

54 – Program

Do you consult with designers about design issues that seem impractical or inefficient (e.g. soil amendment, plant selection or placement, etc)?
 Yes No

55 – Elective

Is it your practice to soil test and modify the designer’s soil amendment specifications as needed to reflect site soil conditions?
 Yes No

56 – Legal / Program

Legal
(all required)

Program
(all required)

How do you ensure erosion control standards are met, and minimal erosion is created during construction?

- Construction entrance stabilized to prevent vehicles from tracking sediment offsite
- Accidental depositions swept up by end of work shift
- Protect soil stockpiles of soil from wind and water
- Keep maintenance log
- Meet with erosion control inspectors or other regulators onsite prior to starting work (especially for sites 1 acre or larger)
- Cover bare ground within 24 hours of exposure
- Schedule construction to avoid wet weather grading, and to complete grading as soon as possible after starting
- For large projects, grade only small areas at each time, stabilizing each before moving on to next area

57 – Program

Are utility locations identified, and clearly marked in the field?

- Yes No

58 – Program

Which elements of the construction plan do you go over with all participating employees?

Program
(all required)

- Sequencing of events
- Erosion control
- Site pollution prevention
- Expected employee practices
- Utility locations and how they are marked on-site

59 – Program

Which sediment control measures do you add for wet weather work?

Program
(at least two required)

- Additional mulch
- Seed cover
- Sediment control traps
- Increased inspection frequency of site sediment control measures
- Other (please describe) _____

60 – Program

How do you address soil compaction caused by construction practices?

(at least one required)

- Plan construction staging areas/ stockpiles for locations that are now, or will be eventually covered with impervious surface

OR, if staging in a landscape area:

After large structures are complete, before installing landscape plantings:

- Retill
- Aerate
- Add compost or gravel under turf installation
- Other (please describe) _____

61 – Elective

When deconstruction is required, do you reuse or recycle:

- Concrete waste
- Lumber / wood scraps
- Fencing
- Trellises
- Other construction supplies (please list) _____

62 – Program

Do you provide waste receptacles on-site for non-recyclable materials and food waste?

- Yes No Store in vehicle to return to yard

63 – Program / Elective

How do you integrate IPM practices into installation?

Program
(at least one required)

Mechanical, rather than chemical, weed control practiced prior to installation

- Manual pulling
- Tilling
- Mechanical weed barriers (edging materials, landscape fabrics)
- Other (please describe)_____

Program
(both required)

- Inspect plants prior to installation, and reject those showing signs of disease, pest infestation, or other weakness
- Substitute natural soil amendment products, such as compost, for chemical fertilizers when installing new plants

Elective

- Chip cleared or grubbed vegetation for reuse onsite as mulch

HARDSCAPE INSTALLATION (Patios, Decks, Fences)

Does your company install patios or hardscapes of any kind? Yes No

If not, please skip to the **Ponds & Water Features** portion of *this section*, page 19.

GOAL: Use installation techniques that minimize pollution and prevent compaction of surrounding soils.

64 – Program

How do you prevent unnecessary soil compaction during hardscape installation?

Program
(at least one required)

- Stockpile heavy materials in areas that will not be planted
- Other (please describe)_____

65 – Program

Do you have an appropriate area designated for concrete waste washout on projects using concrete?

- Yes
- No
- Not Applicable
- Contract out concrete

66 – Program

If a design calls for stone products, do you purchase from reputable suppliers and avoid materials harvested from intact natural ecosystems?

- Yes
- No
- Not Applicable

67 – Legal / Program

If a design calls for treated wood products, which of the following procedures are generally followed? Not Applicable

Legal
(both required)

- Potential health hazards are discussed with employees and clients before work begins
- Employees receive adequate protective equipment

Program

- Scraps and sawdust are properly disposed of (lined landfill) – NEVER burned

Elective

- Designer is consulted for alternative material options

PONDS & WATER FEATURE INSTALLATION

Does your company install any ponds or water features? Yes No
If not, please skip to the **Irrigation Systems** portion of *this section*, below.

GOAL: Encourage long-term stability, healthy conditions for aquatic plant & fish species (if applicable), and water conservation.

68 – Program

(at least one required)

How do you manage your excavated materials for erosion control?

- Any stockpiles are covered appropriately until removed
- Materials immediately removed from site for use elsewhere
- Reused immediately on-site with adequate mulch and/or seed cover

69 – Program

(at least one required)

How do you work to ensure water is conserved as much as possible?

- Check system for leaks by allowing water to sit for 24 hours
- Adjust waterfalls to minimize splashing onto surrounding hard surfaces
- Prepare bed carefully before installing liner to reduce the possibility of punctures
- Create adequate plant coverage on the surface to reduce evaporation

70– Program / Elective

Program
(all required)

Elective

Which IPM practices do you integrate into your installation routine?

- Wait at least 48 hours after filling features with water prior to installing fish/plants
- Clean plants prior to installation, minimizing the chance for spread of invasive species
- Provide aeration/water movement
- Seed pond water with bacterial mixtures
- Add natural algae eaters (native species preferred - fish, snails, or other aquatic organisms)
- Bio-filtration systems in recycling / pumped tanks.

IRRIGATION SYSTEM INSTALLATION

Does your company install any irrigation systems? Yes No
If not, please skip to the **Installing Turf** portion of *this section*, page 21.

GOAL: Assure that all components are up to code, compatible, and properly installed for maximum efficiency and life expectancy.

71 – Legal

When altering or installing any drainage system, do you check to see if a plumbing permit is required?

- Yes
- No

72 – Program

Are you a Certified Irrigation Contractor (Irrigation Association standards)?

- Yes
- No
- Other IA Certifications _____
- Other Certification (explain) _____

73 – Legal | Do you install the legally required backflow prevention device on all systems?
 Yes No

74 – Program | Do you flush the main line before installing any valves?
 Yes No

75 – Program | Do you flush each irrigation system after installation?
 Yes No

76 – Program | When flushing lines, do you ensure that discharge goes to an approved system at a rate that will not cause erosion?
 Yes No

77 – Program | Which erosion control methods do you employ?
(at least one required) Erosion prevention measures (grass mats, mulch, tackifiers)
 Sediment control measures (sediment fences, hay bales, biobags, etc.)

78 – Program / Elective | Which water conserving practices do you offer?
Program (all required) Install the system according to design and manufacturer specifications
 Verify that the flow rate and pressure match design criteria
 Review planting plans to minimize conflicts between larger plants and irrigation heads
 Place components where they most effectively irrigate without creating runoff
Elective Audit system upon completion to verify that it meets design specifications (average measured distribution uniformity, or DU, at 90% of the design-specified DU)
 Other (please describe) _____

79 – Program / Elective | During the installation process, do you:
Program (both required) Consult the designer before deviating from the design specifications
 Clearly note changes on plan drawings
Elective Provide owner with accurate “as-builts” upon project completion

80 – Elective | Do you provide the owner/end user with all product warranties and operating instructions for all equipment?
 Yes No

INSTALLING TURF

Does your company ever install turf? Yes No

If not, please skip to **Section 4 – Maintenance** on page 22.

GOAL: Encourage healthy future lawn by assuring that conditions at (and following) installation are conducive to seed germination or sod establishment.

81 – Program | Do you ensure that grading is adequate (no low spots where water will collect and puddle), evening out problem areas as needed prior to installing turf?
 Yes No

82 – Elective | When laying sod, do you place the strips across (rather than down) any slope present?
 Yes No

83 – Elective | If importing topsoil is necessary, do you request a written commitment from the supplier that it is free of invasive perennial weeds?
 Yes No

84 – Program / Elective | Which IPM techniques do you regularly apply during turf installation?

Program (all required)	<p>Installation conditions:</p> <input type="checkbox"/> Properly amended soil <input type="checkbox"/> Pre-moistened soil
Elective	<input type="checkbox"/> Soil test prior to installation to verify amendment specifications are adequate <input type="checkbox"/> Add only nutrients shown lacking by soil test <input type="checkbox"/> Amend soil with mature compost prior to installing turf (finished organic content brought to 20-25%) <input type="checkbox"/> Topdress with compost tea, or other biological stimulants, after installation <input type="checkbox"/> Install during appropriate season for the grass species.

SECTION 4 - SITE MAINTENANCE

Does your company perform any landscape maintenance services? Yes No
 If no maintenance work is done, please skip to the *Section 5 –Materials Handling and Storage*, page 27.

GENERAL MAINTENANCE

Does your company perform any landscape maintenance services? Yes No
 If not, please skip to the **Hardscape Maintenance** portion of *this section*, page 23.

GOAL: Utilize preventative techniques to promote healthy plant growth and landscape condition.
 Choose least-toxic methods for disease and pest control.

85 – Program

Program
(all required)

Does your customer contract address these elements of Integrated Pest Management?

- Site Monitoring and Recordkeeping
- Pest/Problem Identification
- Pest Tolerance Levels / Action Triggers
- Cultural Controls
- Physical / Mechanical Controls
- Biological Controls
- Chemical Controls Not Used
- Evaluation of Treatment Effectiveness

86 – Program

Program
(50% of each section required)

Which controls do you routinely use on most sites?

Cultural:

- Use of pest/disease resistant plants
- Appropriate watering practices
- Appropriate soil maintenance (e.g. organic amendments, slow release fertilizers as needed)
- Maintenance of high species diversity and elimination of monocultures in plantings
- Raking and debris removal (eliminating alternate hosts for diseases)
- Use of sterile or sanitary techniques to prevent the spread of pests (cleaning tools, containers after use)

Physical / Mechanical:

- Mulch application to planting beds
- Traps and barriers (yellow sticky boards, traps for mammalian pests)
- Hand removal (e.g. insect or plant pests; diseased tissue)

Biological (Non-chemical):

- Use of naturally occurring or introduced beneficial species (plants, insects or disease parasitoids, predators, microbial products)
- Pheromone traps

Chemical:

- Spot treatment, rather than blanket application
- Select chemical with lowest toxicity (i.e. insecticidal soap) and/or shortest residual effect
- Appropriate timing (to coincide with pest or disease life stage) for maximum control

87 – Program

Do you compost, or take to a composting site, all green waste for later use (using high temperature composting, or separating weeds for disposal in other ways)?

- Yes No

88 – Program

Program
(all required)

Do you alter or cancel spraying for the following conditions:

- Wind
- Rain
- Open waterways adjacent to property
- High evaporation rate
- Pest life stage
- Other contractors or bystanders in the area
- Other (please describe) _____
- Do not spray.

89 – Elective

When pesticides are applied, is it your company’s policy to:

- Notify community centers and schools one week in advance of pesticide application.
- Post parks and right-of-ways with notification of pesticide use prior to application.
- Provide homeowner / property manager with the name of any chemical used on-site.
- Do not use pesticides.

90 - Elective

Instead of dusts, wettable powders, or fine liquid sprays, what do you use to reduce drift losses?

- Granules
- Pellets
- Injectable materials
- Do not use chemicals.

91 – Program

Do you spot-treat small infestations, rather than using blanket application methods?

- Yes No Do not use chemicals

HARDSCAPE MAINTENANCE (Patios, Decks, and Fences)

Does your company maintain patios or hardscapes of any kind? Yes No

If not, please skip to the **Ponds & Water Features** portion of *this section*, page 24.

GOAL: Use least toxic, most resource efficient techniques to clean; seal; and keep hardscapes clear of weeds, leaves, or other debris.

- 92 – Program**
(both required)
- When maintaining hardscape or adjacent paved areas (including streets), do you offer the following services:
- Mechanically (by hand, hot water, or propane torch) remove weeds rather than using chemical herbicides
 - Primarily use a broom to sweep up debris, excess clipping or horticultural products
- 93 – Program**
(one required)
- When cleaning decks and/or fences, do you: Do Not Maintain
- Scrub with soft bristle brush and light detergent
 - Lightly power wash (less than 1500 PSI)
- 94 – Program**
(all required)
- If power washing is performed, how do you alleviate impacts to the surrounding environment? Do Not Maintain
- Work to minimize runoff
 - Control runoff any runoff that does occur (i.e. prevent it from entering storm drains – see manual)
 - Collect paint or wood chips
 - Other (please describe) _____
- 95 – Legal / Program**
Legal (both required)
Program (all required)
- When sealing or otherwise finishing decks and fences, do you:
- Do Not Maintain
 - Follow manufacturer’s directions
 - Use protective equipment as required
 - Use least-toxic products
 - Properly prepare surface before applying product for maximum effectiveness
- 96 – Program**
(all required)
- If maintaining existing decks, fences or other structures made from wood treated with Chromium Copper Arsenate (CCA), do you: Do Not Maintain
- Regularly inspect sealant condition, and reseal immediately when sealant is losing effectiveness
 - When repair/replacement is required, use least toxic products (avoid replacing CCA)
 - If CCA treated scraps require disposal, make sure they go to a lined landfill (DO NOT BURN)

POND & WATER FEATURE MAINTENANCE

Does your company maintain any ponds or water features? Yes No
If not, please skip to the **Irrigation System Maintenance** portion of *this section*, page 25.

GOAL: Maintain stable water quality, plant life, and healthy habitat for fish or other aquatic species (if applicable).

97 - Program

(at least one required)

How do you manage growth of algae?

- Increase shade (add floating or broad-leafed plants to block sunlight)
- Identify nutrient source and reduce or eliminate excess nutrients
- Tolerate some algae

98 – Program

If filters are used, do you set a filter cleaning/changing schedule for the client (or your employees)?

- Yes
- No

99 – Program

Do you regularly inspect pumps, filter systems, and other equipment?

- Yes
- No

100 – Elective

Do you offer to vacuum the pond periodically to remove detritus (especially when fish are present)?

- Yes
- No

101 – Elective

Do you offer a partial water change (drain 1/3 of pond water, and replace with fresh water) at least annually?

- Yes
- No

102 – Program

(at least one required)

When draining ponds, how is the water disposed of to prevent causing erosion and nutrient problems in local waterways?

- Infiltrated on site (e.g. applied to landscape plantings)
- Drained to sanitary sewer
- Sent to storm sewer at a rate that will not cause erosion

IRRIGATION SYSTEM MAINTENANCE

Does your company maintain irrigation systems for any clients? Yes No

If not, please skip to the **Turf Maintenance** portion of *this section*, page 26.

GOAL: Keep irrigation systems in top form to promote efficient energy use and distribution of water.

103 – Program

(at least one required)

Are you and/or any of your employees:

- Certified Landscape Irrigation Auditor (Irrigation Association standards)
- Certified Landscape Irrigation Manager (Irrigation Association standards)
- Certified Irrigation Contractor (Irrigation Association standards)
- Other (please describe) _____

104 – Program / Elective

In your irrigation system service contract, do you specify:

Program
(all required)

- Routine activation & inspection of irrigation system components
- Testing of all repairs
- Protocol for winterizing the system, and for reactivating it each spring
- Technical assistance

Elective

- Routine meter reads
- Development of a site maintenance log

105 – Program

Which activities do you offer to perform at installation and periodically?

(all required)

- Verify that backflow prevention device is functioning properly. Comply with any local requirements for checks.
- Confirm water supply and pressure meet design standards
- Adjust pressure regulators for desired operating pressure
- Check filters; clean and replace as needed
- Confirm proper controller operation (check date/time input)
- Verify that sensors used in system are working, and within their calibration specifications
- Confirm that valves and valve flow regulators are properly adjusted
- Adjust heads as needed (nozzle size, arc, radius, level, and attitude with respect to slope)
- Repair or replace broken hardware or pipe
- Clean or flush heads
- Make design recommendations to customer if needed to improve system efficiency

106 - Program

Do you set customer schedules to water in early morning hours (avoiding midday watering unless new landscaping requires it)?

- Yes No

TURF MAINTENANCE

Does your company ever maintain turf? Yes No

If not, please skip to the **Section 5 - Vehicles and Equipment** section, page 27.

GOAL: Use IPM practices (i.e. thatching, aerating) to maintain a high level of grass health and reduce chemical inputs.

107 – Program / Elective

Which of these practices are standard to your maintenance routine?

Program
(all required)

- Routine monitoring for thatch and removing as needed
- Regular aeration
- Use grasscycling, or compost grass clippings rather than disposing of them
- Mow to the recommended height for each turf species
- Avoid using chemical pesticides, especially products containing clopyralid or picloram (Confront, Curtail, Stinger, Millennium, Transline, Tordon, Grazon, Lontrel, Fieldstar Prevail, Hornet, Spectrum, Scorpion, Striker, Pathway, Access, Eclipse, Chaser Ultra, Accent Gold, Reclaim, TruPower)

Elective

- Use soil auger to look at soil conditions, checking to see if water is reaching the root zone
- Topdressing with compost or compost tea instead of chemical fertilizers (esp. after aeration)

SECTION 5 - MATERIALS HANDLING

MATERIAL HANDLING AND STORAGE

(GENERAL MATERIAL HANDLING, SPILL PREVENTION, AND STORAGE PRACTICES)

Does your company store materials and vehicles at a company yard? Yes No
If no storage is done, please skip to the *end of the checklist*, page 32.

GOAL: Contain and protect materials to prevent them from coming into contact with, and polluting, stormwater. Minimize waste.

108 - Elective | Does your shop use an inventory system to reduce the amount of materials that are in use, expired, leftover, or unused?
 Yes No

109 - Elective | Does your shop contract with an industrial laundry for cleaning shop rags and uniforms?
 Yes No

110 - Program | Are your shop's floor swept with a dry broom and cleaned with a damp mop in stead of wet mopping or hosing down the space?
 Yes No

SITE DRAINAGE

111 - Program | Have you identified the drainage system for all shops and yard drains?
 Yes No

Program

Shop Areas

- Surface infiltration
- Subsurface infiltrations – drywell, sump, French drain ** **these are UIC systems – see 112**
- Surface drainage to a private or public storm sewer or drainage system
- Piped drainage to a sanitary or combined sewer.

Program

Open Storage / Lot Areas

- Surface infiltration
- Subsurface infiltrations – drywell, sump, French drain** **these are UIC systems – see 112**
- Surface drainage to a private or public storm sewer or drainage system
- Piped drainage to a sanitary or combined sewer.

112 - Program

Program
(all required)

If you have determined your shop or yard drain to a designated Underground Injection Control (UIC), have you met the following regulatory requirements to protect underground aquifers? No UICs present, skip to next question

- Determined which liquids enter the underground system
- Determined what pretreatment, if any, is in place to remove pollution prior to discharge.
- Registered the UIC system with DEQ (see DEQ website)
- Closed any illegal or prohibited UIC systems (see DEQ website) NA

113 - Elective

Have you stenciled dump no waste messages on all onsite storm system or infiltration drains?

- Yes No

114 - Program

Program
(at least one required)

Bulk Material Storage practices (e.g. compost, bark dust, lime)

- Stored under tarp or other portable cover
- Stored in covered facility
- Stored in an enclosed structure

OR

Elective

- If openings are present in structure, practices are in place to prevent tracking materials to storm sewer
- Storage of large quantities of material is avoided altogether (instead of stockpiling, purchase as needed)

SPILL PREVENTION

115 – Program

(all required)

Spill prevention/management practices

- Spill response program has been developed
- Shipments are inspected for leaks or damage before they are accepted
- Spill kits are accessible; placed in company vehicles and storage facility
- Pump dispensers eliminate the need for pouring from awkward containers
- All containers have tight fitting lids
- Any pouring or transferring of product occurs over a drip pan
- Secondary containment is used for all liquid materials

116 – Program

Do you label all bulk product containers that are not in original packaging?

- Yes No

117 – Program

Do you conduct a general housekeeping survey of the shop and yard at least twice a year to look for outdated, unused, unneeded chemicals that should be forward for reuse or proper disposal?

Yes No

118 – Elective

Do you use refillable containers to cut down on packaging waste?

Yes No

119 -
Legal/Program/Elective

Legal

Program
(all required)

Elective

Do you comply with cleanup and disposal best practices:

- Dispose of excess chemicals in accordance with manufacturer’s instructions
- Mix chemicals only in the quantity needed
- Clean up chemical spills immediately, using dry cleanup methods
- Keep absorbents on hand for immediate use when chemical spills occur
- Dispose of used absorbents in an approved manner
- Search for companies that can reuse or recycle wastes

HAZARDOUS MATERIAL HANDLING, SPILL PREVENTION, & STORAGE

Do you use hazardous materials (DEQ list)? Yes No
If not, please skip to the *Pesticide Use* section on the next page.

GOAL: Evaluate hazardous material use and application methods, and adjust your practices as necessary to achieve the lowest waste and hazard levels possible.

120– Legal

(at least one required)

This business’s hazardous waste generator status is:

- CEG Conditionally Exempt Generator
- SQG Small Quantity Generator
- LQG Large Quantity Generator
- None of the above

121 – Program

What is your waste hauler’s identification number?

DEQ ID # _____

122 – Legal

Legal
(all required)

How are you maintaining compliance with regulatory requirements for hazardous material use?

- Keep records on (manifest) all waste products
- Annually notify fire department of current inventory
- MSDS sheet for each material use/stored posted in conspicuous location & easily available to all employees or access to OHSU database

123 – Program

Program
(all required)

Which of these elements are present in your hazardous material storage facility?

- Storage area is located away from environmentally sensitive areas
- Access is restricted to trained personnel
- Free of direct heat sources (sunny windows, steam pipes, furnaces, etc.)
- Majority of storage facility construction materials are fire resistant
- Anti-spark electrical components

Elective

- Temperature control system in place

124 – Legal

(all required)

Are your hazardous materials containers:

- Leak free
- Clearly labeled with current content
- Appropriate for material stored (i.e. flammable liquids in appropriate containers)
- Disposed of appropriately (separated from other waste)

125 – Program

(all required)

How do you work to reduce the volume of hazardous material used and stored, and to minimize leftover, expired, or unused materials?

- Review material safety data sheets (MSDS) before purchasing a product
- Regularly inventory all materials in company yard and on trucks, and use the information gathered to help minimize the volume of material you reorder and store
- Change purchasing policy to buy only the amount of hazmat needed, limiting stock of materials

Do you apply pesticides? Yes No.

If not, please skip to the *Vehicles and Equipment* section, page 32.

PESTICIDE USE

126 – Program

(all required)

When mechanical and biological controls have not resolved a problem and chemicals will be used, do you prioritize selection of a product that is:

- Target specific
- Pest life-stage appropriate
- Site appropriate
- Safe for applicator & site users
- Low mobility & persistence

127 – Elective

How do you work to minimize pesticide container waste?

Prioritize selection of products that utilize:

- Refillable containers
- Effervescent tablets with limited or no containers.
- Polyvinyl alcohol (PVA) water soluble containers
- Gel-based formulations

128 – Legal

How do you comply with legal requirements for proper pesticide application?

- Any employee applying Restricted Use Pesticides has current Pesticide Applicator's license issued by the Oregon Department of Agriculture
- Follow manufacturer's directions

SECTION 6 - VEHICLE(S) AND EQUIPMENT

SELECTING AND MAINTAINING VEHICLE & EQUIPMENT

Does your company utilize job-specific equipment or vehicles? Yes No
If not, please skip to *end of checklist*.

GOAL: Choose resource-efficient vehicles and equipment, keep them in top shape, and use the least harmful maintenance practices possible.

129 – Program

(all required)

When purchasing equipment, do you:

- Test several types before buying
- Request emissions ratings from vendors
- Purchase the most efficient model available that meets your business needs

130 – Program

Program
(all required)

Which qualities do you actively seek in mowing equipment?

- Mulching mower
- If gas, four-cycle rather than two-cycle engines
- 1997 or newer equipment
- Overhead valve rather than side valve engines when feasible
- Wide mowing deck to reduce total mowing time

Elective

- Electric mower
- Reel-type push mower

131 – Program

Do you regularly clean the underside of your mowers and sharpen blades?
 Yes No

132 – Program

Do you have a program to inspect electrical cords annually?
 Yes No

133 – Legal

(all required)

How do you protect workers' hearing?

- Provide a range of protective equipment
- Utilize mechanical sound barriers or mufflers on equipment
- Select equipment with minimal noise production when possible
- Annual hearing tests
- Other (please describe) _____
- Not applicable, do not use loud equipment.

134 - Program

Do you regularly inspect equipment for leaks to reduce drift potential?
 Yes No

135 – Legal / Program

Legal (required)

Program
(all required)

Do you have a routine schedule for equipment maintenance?
Which elements/pieces do you check?

- Safety shields
- Fuel lines
- Equipment fluids
- Blades
- Spark plugs
- Other (please describe) _____

136 – Elective

Do you recycle the following:

- Vehicle batteries
- Equipment batteries
- Tires
- Mowers
- Other (please describe) _____
- None of the above are applicable

137 – Elective

Do you use re-refined oil products in your equipment and/or vehicles?

- Yes No

138 – Program / Elective

Program
(all required)

Elective

For chemical application equipment, do you regularly: Not Applicable

- Adjust chemical spray equipment to give the droplet size which provides optimum coverage of the target
- Calibrate spray equipment to ensure that the proper amount of chemical is applied
- Clean spray equipment; disposing residue appropriately (see manual) **OR** never rinse spray equipment; rinse with next product application
- Maintain individual sprayers for specific products.

139 – Program

(all required)

How does your business address spill prevention in vehicle maintenance areas?

- Small-scale dispensers in use, or shutoffs on larger tank systems
- All vehicle batteries stored under cover in a manner so they do not spill

Maintenance/refueling occurs only in a designated area with the following attributes:

- Covered
- Contained
- Spill kit present

140 – Elective

Do you modify your equipment use practices on Clean Air Action Days?

- Yes No

WASHING

141 - Program

Legal
Elective

Does the drainage system have adequate protection:

- Surface infiltration – without soap <8 vehicles a week
- Onsite underground infiltration system - drywell, sump or trench drain – with pretreatment sump or filtration system
- Sanitary connection with oil water separator.

142 – Program

Both required

OR

One required

When washing vehicles, is it done:

- Without soap/detergent OR using biodegradable, least toxic soap/detergent
 - On a surface where runoff can be contained and channeled to appropriate treatment/disposal facility. Never to storm sewer.
- OR
- At a commercial carwash with a water recycling system in place

143 – Program

Both required

One required

When washing equipment, is it done:

- Without soap/detergent or using biodegradable, least toxic soap/detergent
 - On a surface where runoff can be contained and channeled to appropriate treatment/disposal facility
- Runoff is directed to:
- Landscape, where it infiltrates
 - Sanitary sewer for treatment

END of CHECKLIST

Thank you for completing the checklist and please submit this list and any documentation for your certification items on Page 3 to the EcoBiz Program staff. It will take us 2-4 weeks to review.