

# SEPA ENVIRONMENTAL CHECKLIST ("EA")

## A. BACKGROUND

1. **Name of the proposed project, if applicable:** Maiden Wind Project.
2. **Name of applicant:** Washington Winds Inc.
3. **Address and phone number of applicant and contact person:**

California Office

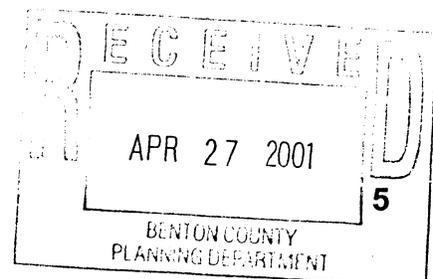
William Damon, Vice President  
Washington Winds Inc.  
1185 Larch Avenue  
Moraga, California 94556  
phone: 925.388.0072  
fax: 925.388.0073  
e-mail: [wldamon@powerworksinc.com](mailto:wldamon@powerworksinc.com)

Headquarters

Rick S. Koebbe, President  
Washington Winds Inc.  
5356 N. Cattail Way  
Boise, Idaho 83703  
phone: 208.853.4602  
fax: 208.853.4628  
e-mail: [rskoebbe@powerworksinc.com](mailto:rskoebbe@powerworksinc.com)

4. **Date checklist prepared:** April 18, 2001.
5. **Agency requesting checklist:** Benton County Planning Department.
6. **Proposed timing or schedule (including phasing, if applicable):** The tentative plan is to submit a draft Environmental Impact Statement ("EIS") for the project by October 2001, followed by the final EIS by December 2001, then commence construction of the Maiden Wind Project in April 2002. With an estimated construction period of nine (9) months, the project would achieve commercial operation by the end of December 2002.

**7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal?** The Maiden Wind Project is currently expected to generate approximately 150 MW of electrical power. The exact output of the project, and the necessary equipment/facilities associated with the size of the project, may vary somewhat as the project is further defined. A second, and similar wind project of approximately 250 MW is being considered in the Rattlesnake Hills southeast of the Maiden Wind Project, also in Benton County, consisting of approximately 278 wind turbines, generally located as follows: R24E, T11N, Sections 24, 23, 22, 15 and 14, and R25E, T11N, Sections (or any portion thereof) 34, 30, 29, 28, 27, 26, 23, 22 and 21, plus, in Yakima County, R23E, T11N, Section 11. The EIS being prepared for the Maiden Wind Project will also cover the project site of this second project.



**8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.** We have had preliminary discussions with the Bonneville Power Administration (“BPA”), the Washington Department of Natural Resources, Washington Department of Fish & Wildlife, Benton County planning department, and Yakima County planning department, and we are not aware of, nor do we anticipate any, significant environmental impacts associated with this proposed project. The BPA is in the process of preparing an EIS for the property for this proposed Maiden Wind Project which includes this project site. It is anticipated that the EIS will be used to jointly satisfy the NEPA and SEPA processes for this project.

**9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.** The only pending application that we are aware of is our April 12, 2001 Conditional Use/Special Permit (“CU/SP”) application to install temporary meteorological (“met”) towers to verify the wind energy resource potential at this same project site. Any permanent met towers for this proposal are included in this CU/SP application.

**10. List any government approvals or permits that will be needed for your proposal, if known.** A Conditional Use/Special Permit is required from Benton and Yakima Counties, followed by Building and Grading Permits. Other permits covering construction and long-term occupancy of the project are anticipated (though not currently defined pending completion of the EIS), such as, a county septic system permit (regarding a maintenance building), a state water quality certification and Army Corp 404 permit (regarding road and underground cable crossings of intermittent creeks), and Federal Aviation Administration notification (regarding a turbine height over 200 feet).

**11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)** We will install approximately 167 NEG Micon NM900/52 wind turbines and associated equipment and facilities to generate approximately 150 MW of electrical power (or an equivalent wind turbine and capacity, depending on final commercial evaluations, i.e., if we select a larger turbine size, less turbines would be installed to sum 150 MW). The wind turbines are rated for 900 kW each and stand 75 meters/246 feet tall at their highest point (a 52 meter rotor atop a 49 meter tower); however, we are considering turbine sizes up to 1,650 kW which stand 113 meters/371 feet (a 66 meter rotor atop a 80 meter tower). Major equipment and facilities that will also be installed include: one or more permanent met towers, step-up transformers at each wind turbine, underground and overhead medium voltage distribution and communications lines, a 230 kV substation and BPA transmission line interconnection equipment,

an operation and maintenance facility, and requisite access roads. The major features of the project will be located approximately as shown on the attached Exhibit B, Preliminary Site Plan. In addition, find attached Exhibit C for information about the proposed NEG Micon wind turbines.

**12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.** The project site is located primarily in Benton County, Washington, approximately 15 miles north of Prosser in the Rattlesnake Hills area. More specifically, the site is located in Township 11 North, Range 24 East and covers Sections 7, 8, 9, 10, 17 and 18 (Section 16 is expected to be included later). In addition, two contiguous Sections 12 and 13 are located in Yakima County, Township 11 North, Range 23 East. The property location, boundaries and approximate locations for the installed wind turbines and major facilities are shown respectively on the attached Exhibit A, Project Location Map, and Exhibit B, Preliminary Site Plan.

## **B. ENVIRONMENTAL ELEMENTS**

### **1. Earth**

**a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.** The site is mainly rolling hills with a predominant ridgeline running NW to SE. The north face of the ridgeline and a few gullies on the south face of the ridgeline have steeper slopes.

**b. What is the steepest slope on the site (approximate percent slope)?** In the immediate area of the planned wind turbine and major facilities placements, the steepest slope is approximately 17%, but most are approximately 1 - 10%. Within the project site boundaries, but beyond any area of wind turbine or facilities installation or area of use by the project, the steepest slope is approximately 50% – on the north face of the ridge.

**c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.** The predominant soil is a thin layer of silty loam over basalt rock.

**d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.** There is no evidence of unstable soils.

**e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.** There may be some filling or grading required to construct the project, including access roads.

**f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.** Yes, construction of access roads, staging areas, cable trenches and wind turbine foundation areas could result in some temporary, but likely minor, erosion during construction.

**g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?** Less than one percent (1%).

**h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:** A yet undefined erosion control plan will be developed and implemented during construction.

## **2. Air**

**a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial, wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.** The operating wind turbines will produce no emissions, however, there will be incidental truck and automobile emissions during construction (and to a much lesser extent after the project is completed), as well as dust generated from these vehicles traveling over dirt/gravel roads.

**b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.** No.

**c. Proposed measures to reduce or control emissions or other impacts to air, if any:** A yet undefined dust control plan (i.e., watering roads, if necessary) will be developed and implemented during construction. Overall vehicle emissions are not significant.

## **3. Water**

### **a. Surface:**

**1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.** There is no appreciable surface water body on the site, however, there are four (4) identified seasonal springs; Maiden Spring, West Maiden Spring, Lower Maiden Spring, and Section 9 Spring (plus Canyon Spring in Section 13 of Yakima County).

**2) Will the project require any work over, in, or adjacent to (within 200 feet) of the described waters? If yes, please describe and attach available plans.** Some existing access roads come within 200 feet of the identified seasonal springs, but no new construction is expected over, in or within 200 feet of these seasonal springs.

**3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water, or wetlands, and indicate the area of the site that would be affected. Indicate the source of fill material.** None expected.

**4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.** No, any water required is expected to come from wells or alternative sources.

**5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.** No.

**6) Does the proposal involve any discharge of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.** No.

**b. Ground:**

**1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.** Yes, ground water from wells is expected to be withdrawn during construction as required to produce wind turbine foundation concrete and for dust control uses. Quantities have not yet been determined.

**2) Describe waste material that will be discharged into the ground from septic waste tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals..., agricultural, etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.** A sanitary septic system will be constructed to serve the small number of skilled personnel working out of the operation and maintenance facility that will be constructed on the site.

**c. Water Runoff (including storm water):**

**1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

There will be no additional storm water runoff – the site will essentially remain in its current and natural state.

**2) Could waste materials enter ground or surface waters? If so, generally describe. No.**

**d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:** not applicable.

#### **4. Plants**

**a. Circle the types of vegetation found on the site: deciduous tree: alder, maple, aspen, other; evergreen tree: fir, cedar, pine, other; shrubs; grass; pasture, crop or grain; wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other; water plants: water lily, eelgrass, milfoil, other; other types of vegetation.** Big sagebrush, bluebunch wheatgrass, shrubs, dryland pasture (no trees). Baseline field studies of vegetation has just commenced as part of the environmental/vegetation studies.

**b. What kind and amount of vegetation will be removed or altered?**

Construction of access roads, staging areas, underground cable trenching, overhead transmission lines and wind turbine foundations will disturb some existing vegetation. The types and amounts have not yet been determined, but a large percentage is expected to be pasture grass over rocky surfaces.

**c. List threatened or endangered species known to be on or near the site.**

No listed threatened or endangered plant species are known to be on or near the site.

**d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:** The locations of access roads, equipment and facilities will be selected to avoid any sensitive vegetation areas.

#### **5. Animals**

**a. Circle any birds and animals which have been observed on or near the site or are known to be near the site: birds: hawk, heron, eagle, songbirds, other; mammals: deer, bear, elk, beaver, other; fish: bass, salmon, trout, herring, shellfish, other.** Observed at this time: Birds: ravens, songbirds, others. Mammals: cattle. Fish: none.

**b. List any threatened or endangered species known to be on or near the site.** Field baseline studies of animals (including birds) on the site for this proposed Maiden Wind Project have only just now commenced as part of the environmental studies. While not drawing any specific conclusions, preliminary

discussions with the Washington Department of Natural Resources, the Washington Department of Fish & Wildlife, and Pacific Northwest National Laboratory ecosystem monitoring program (which monitors the Hanford Site and adjacent areas, including the proposed site) did not raise any concerns regarding known threatened or endangered species.

c. **Is the site part of a migration route? If so, explain.** No.

d. **Proposed measures to preserve or enhance wildlife, if any:** The locations of access roads, equipment and facilities will be selected to minimize any impacts on wildlife.

## 6. Energy and Natural Resources

a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.** The wind turbines generate electrical energy in amounts far outweighing the small amount they consume to operate – making them self-sufficient. Any met towers will be powered by solar panels and batteries making them self-sufficient. The operation and maintenance facility will require electrical energy for lighting, heating and the powering of tools and equipment, probably less than 2,500 kWh per month.

b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.** No.

c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:** A wind energy project utilizes very minimal amounts of energy. The met towers will use photovoltaic panels and batteries.

## 7. Environmental Health

a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.** Yes, small amounts of vehicle fuels, lubricating oils, and cleaning solvents will be stored and used for construction and operation and maintenance. Some risk of fire exists, as it does with any electrical transmission system.

1) **Describe special emergency services that might be required.** No special emergency services will be required, but a health and safety plan will be developed and implemented for use during construction and long-term operation.

**2) Proposed measures to reduce or control environmental health hazards, if any:** Limited amounts of oil/fuel-based materials will be stored in contained areas. Any accidental releases will be cleaned-up and contaminated soils disposed of according to applicable regulations. A health and safety plan, including worker health and safety training, will be developed and implemented for use during construction and long-term operation.

**b. Noise**

**1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?** The project site is in a remote farming/pasture area and noises are related to limited agricultural activity in the area. This noise will have no affect on the project.

**2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.** There will be temporary noise impacts during construction (from vehicles and construction equipment), but noise generated from wind turbine operation on an on-going basis (whenever the wind blows) will not be audible at the nearest residence, and it will not be distinguishable from normal wind and local activity background noise levels.

**3) Proposed measures to reduce or control noise impacts, if any:** None.

**8. Land and Shoreline Use**

**a. What is the current use of the site and adjacent properties.** The current use of the site and adjacent properties is primarily pasture for cattle grazing or wheat crops.

**b. Has the site been used for agriculture? If so, describe.** Yes, cattle grazing.

**c. Describe any structures on the site.** There are a few unpaved rural roads and 4WD primitive roads, some communication towers, an underground power line on the site to service such communication towers, two (2) parallel high voltage transmission lines—a double circuit 230 kV and double circuit 500 kV.

**d. Will any structures be demolished? If so, what?** No.

**e. What is the current zoning classification of the site?** GMA Agricultural District.

**f. What is the current comprehensive plan designation of the site?** GMA Agricultural District.

**g. If applicable, what is the current shoreline master program designation of the site?** Not applicable.

**h. Has any part of the site been classified as an “environmentally sensitive” area? If so, explain.** No.

**i. Approximately how many people would reside or work in the completed project?** No one would reside in the completed project, but a small number of skilled operation and maintenance people would work in the project (approximately 5 persons; exact amount to be determined).

**j. Approximately how many people would the completed project displace?** None.

**k. Proposed measures to avoid or reduce displacement impacts, if any:** None; not applicable.

**l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:** The wind turbines and associated facilities are compatible with the landowners’ agricultural activities.

## **9. Housing**

**a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.** None.

**b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.** None.

**c. Proposed measures to reduce or control housing impacts, if any:** None; not applicable.

## **10. Aesthetics**

**a. What is the tallest height of any proposed structure(s) not including antennas; what is the principal exterior building material(s) proposed?** The 900 kW wind turbines will be the tallest structures at approximately 246 feet; however, we are considering turbine sizes up to 1,650 kW which stand 113 meters/371 feet. Their exteriors are primarily painted steel and fiberglass, typically painted white or off-white. Any met towers will be approximately 164 feet tall and constructed of 6 inch diameter tubular towers made of galvanized steel. The operation and maintenance facility has not yet been designed, so height and building material information will not be available until later.

**b. What views in the immediate vicinity would be altered or obstructed?**

The views of the ridge top and slopes just below the ridge tops on the southerly face will be altered by the wind turbines. No designated scenic areas or significant vistas will be within the line-of-sight of the project. The visual impact will not be significant from populated areas, many miles away.

**c. Proposed measures to reduce or control aesthetic impacts, if any:** None planned.

**11. Lights and Glare**

**a. What type of light or glare will the proposal produce? What time of day would it mainly occur?** There will be no light or glare produced except that it is anticipated that the FAA will required some unknown numbers of aviation warning lights to be installed on selected wind turbines.

**b. Could light or glare from the finished project be a safety hazard or interfere with views?** No.

**c. What existing off-site sources of light or glare may affect your proposal?** None.

**d. Proposed measures to reduce or control light and glare impacts, if any:** None.

**12. Recreation**

**a. What designated and informal recreational opportunities are in the immediate vicinity?** Hunting (as allowed by private landowners) may occur informally in the area.

**b. Would the proposed project displace any existing recreational uses? If so, describe.** No.

**c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:** None.

**13. Historic and Cultural Preservation**

**a. Are there places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? if so, generally describe.** None on the site, however, the DOE Hanford Site (National Monument) is located northeast of the project site.

**b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.** None.

**c. Proposed measures to reduce or control impacts, if any:** A yet undefined plan will be developed and implemented to establish mitigation procedures during construction should archaeological or cultural artifacts be uncovered, which includes monitoring during construction.

#### **14. Transportation**

**a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plan, if any:** The project site is accessed by county and rural farm roads off of Highway 241 (in Yakima County).

**b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?** The site is not served by public transit. The nearest transit stop is not known, but Highway 241 is some two to five miles distant, depending on choice of private road. There is no need for public transit because the wind project will not be open to the general public.

**c. How many parking spaces would the completed project have? How many would the project eliminate?** Only a few parking spaces for the operation and maintenance facility will be required (private) and none will be eliminated.

**d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).** Yes, local access roads to the wind turbines and associated facilities will be widened and regraded as necessary, and new local access roads constructed where needed, all on private land (none for public use). No improvements to any County roads are required.

**e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.** No.

**f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.** Vehicular trips will be limited to daily operation and maintenance personnel gaining access to the operation and maintenance facility and to the wind turbines and associated equipment. The trips will be few in number and will have no significant impact on county roads.

**g. Proposed measures to reduce or control transportation impacts, if any:** None.

**15. Public Services**

**a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe. No increased need will result.**

**b. Proposed measures to reduce or control direct impacts on public services, if any:** Local, on-site fire prevention and protection plans will be developed and implemented.

**16. Utilities**

**a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:** None.

**b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.** During construction, arrangements will be made for temporary telephone, water, sanitation, electrical power and related utilities. Upon completion of the project, water for the operation and maintenance facility (restrooms and sinks) is expected to be provided from wells, a sanitary septic system will be installed, electrical power will be available from the utility grid interconnection and the power the project generates, and telephone service will be installed.

**C. SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

**Washington Winds Inc.**

**Signature:**   
Rick S. Koebbe, President

**Date Submitted:** April 18, 2001

**Attached Exhibits:** A - Project Location Map  
B - Preliminary Site Plan  
C - NEG Micon Wind Turbine Met Tower Data