

Exhibit W

Generation of Solid Waste and Wastewater

**Wheatridge Renewable Energy Facility East
December 2022**

**Prepared for
Wheatridge East Wind, LLC**

Prepared by



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Acronyms and Abbreviations

ASC	Application for Site Certificate
BMP	Best Management Practices
Certificate Holder	Wheatridge East Wind, LLC
Council	Oregon Energy Facility Siting Council
EPA	U.S. Environmental Protection Agency
ESCP	Erosion and Sediment Control Plan
Facility	Wheatridge Renewable Energy Facility East
MW	megawatts
NPDES	National Pollutant Discharge Elimination System
OAR	Oregon Administrative Rule
O&M	operations and maintenance
ODEQ	Oregon Department of Environmental Quality
RFA 1	Request for Amendment 1
WPCF	Water Pollution Control Facility

1.0 Introduction

The Wheatridge Renewable Energy Facility East (Facility) is an approved, but not yet constructed, wind energy generation facility consisting of up to 66 turbines and related or supporting facilities with a peak generating capacity of up to 200 megawatts (MW), to be located in an Approved Site Boundary of approximately 4,582 acres on over 42,000 acres of leased land in Morrow and Umatilla counties, Oregon. As part of Request for Amendment (RFA) 1 to the Facility Site Certificate, Wheatridge East Wind, LLC (Certificate Holder) is proposing to expand wind power generation at the Facility to provide the opportunity for increased power capacity and availability. This includes expanding the Site Boundary and micrositing corridors, increasing the peak generating capacity by adding more and newer turbines, changing the intraconnection routes, and extending the construction date. See the RFA 1's Division 27 document (*Request for Amendment #1 for the Wheatridge Renewable Energy Facility East*) for a more detailed summary of the proposed changes.

This Exhibit W was prepared to meet the submittal requirements in Oregon Administrative Rules (OAR) 345-021-0010(1)(w). Analysis in this exhibit incorporates and/or relies on reference information, analysis, and findings found in the Application for Site Certificate (ASC), previous RFAs, and Oregon Department of Energy Final Orders to demonstrate that the Facility, as modified by RFA 1, continues to comply with applicable Site Certificate conditions and the approval standard in OAR 345-022-0120.

2.0 Description of Solid Waste and Wastewater Generation – OAR 345-021-0010(1)(w)(A)

OAR 345-021-0010(1)(w) Information about the applicant's plans to minimize the generation of solid waste and wastewater and to recycle or reuse solid waste and wastewater, providing evidence to support a finding by the Council as required by OAR 345-022-0120. The applicant must include:

OAR 345-021-0010(1)(w)(A) A description of the major types of solid waste and wastewater that construction, operation and retirement of the facility are likely to generate, including an estimate of the amount of solid waste and wastewater.

As detailed in the following sections, although the proposed changes provide for additional solid waste and wastewater needs for the Facility and the larger Amended Site Boundary, the Certificate Holder can still comply with all Site Certificate conditions for waste minimization previously adopted by the Oregon Energy Facility Siting Council (Council) for compliance with OAR 345-022-0120.

Conditions applicable to solid waste and wastewater include:

- Condition GEN-OE-04: Contractual agreement to transport and dispose of battery and battery waste.
- Condition PRE-WM-01: Minimum construction waste management plan requirements.
- Condition PRE-WM-02: Confirmation of no surface/ground/drinking water impacts from concrete washout.
- Condition CON-WM-01: Requirements of off-site soil disposal.
- Condition CON-PS-01: Additional Construction Waste Management Plan measures.
- Condition OPR-PS-01: Discharge of wastewater.
- Condition OPR-PS-03: Implementation of an Operational Waste Management Plan.
- Condition GEN-PS-01: Coordination with solid waste handler.
- Condition CON-SP-01: Work in compliance with a final Erosion and Sediment Control Plan (ESCP) as required under the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Discharge General Permit 1200-C (see Exhibit I for further information).

2.1 Solid Waste

The following sections identify the anticipated types of solid waste generated throughout the Facility and the estimated quantities of that waste. During construction and operation, the Certificate Holder shall coordinate with its solid waste handler to provide the information solicited through the Oregon Department of Environmental Quality's (ODEQ) Recycling Collector Survey to the Morrow County Wasteshed representative on an annual basis (Condition GEN-PS-01).

2.1.1 Construction

Construction of the Facility will generate a small amount of non-hazardous solid waste, which are handled by a local solid waste hauler and are managed through the implementation of measures outlined in the Construction Waste Management Plan (Conditions PRE-WM-01 and CON-PS-01). The types of solid waste will be similar to those from construction of the previously approved wind turbines and associated infrastructure, given that the same types of construction materials will be used (see Exhibit G). Waste materials generated through construction of the additional turbines and associated infrastructure will primarily consist of scrap metal (e.g., wire and rebar scraps), dirt and rock spoils, wood, concrete, concrete waste and other packaging materials, which are consistent with materials previously considered by Council. It is estimated that cumulative Facility construction (including previously approved and proposed infrastructure) would produce approximately 13,500 cubic yards of waste per phase during active construction, estimated to span 12 months, which will be disposed of following the Construction Waste Management Plan

(Conditions PRE-WM-01 and CON-PS-01). Construction battery waste will continue to be disposed of following Condition GEN-OE-04.

Access road construction and grading are expected to produce negligible amounts of dirt and rock spoils that would need disposal, since cut and fill measures are expected to balance the need for and use of soils. Excavation for the additional turbine foundations and associated structures are not expected to produce significant amounts of dirt and rock spoils. These materials would be spread over areas previously disturbed during construction. Materials would only be spread as appropriate, with adequate measures for soil conservation and erosion and sediment control, as required by the ESCP (Condition CON-SP-01). When it is not appropriate to spread materials over previously disturbed areas, materials would be hauled to appropriate disposal sites on participating landowner property; the location of such sites will be determined on an as-needed basis during construction. If off-site soil disposal is necessary, the requirements of off-site soil disposal in Condition CON-WM-01 will be followed.

Construction of the Facility would create some concrete waste from the construction of turbines, battery energy storage system, Intraconnection Line poles, and substation foundations. Concrete truck chutes would be washed down at each foundation site to prevent the concrete from hardening within the chutes. In these cases, the concrete wastewater will be washed out into a dedicated concrete washout area located within each foundation excavation. The bottom will consist of the compacted foundation subgrade and the sides will consist of the excavation side cut, hardened concrete foundation, and soil berms at each end to construct a confined area. The soil used to construct the washout area berms (along with any concrete solids) will be buried as part of the foundation backfill. This method for concrete washout water management is a regularly utilized Best Management Practice (BMP) for construction of wind generation facilities within the area, and has been accepted by the ODEQ.

2.1.2 Operation

The addition of more wind turbines and related infrastructure will not change the way that operational solid waste will be handled from what the Council previously considered. An insignificant amount of solid waste is expected to be generated during the operation and maintenance (O&M) of the Facility. This waste may include equipment and components that are replaced, packing materials for replacement components, and waste typical of a small office employing up to 5 to 10 people. It is estimated that no more than 2 cubic yards of waste would be produced monthly based on the addition of the proposed wind turbines and associated infrastructure, for a total of up to 8 cubic yards of waste per month for the Facility as a whole, to be disposed of at either the Finley Butte Landfill or through the Morrow County Rural Solid Waste Collection Services, as identified in the ASC. The waste would be handled consistent with the Morrow County Solid Waste Management Ordinance and according to the Operations Waste Management Plan (Condition OPR-PS-03). Operations battery waste will continue to be disposed of following Condition GEN-OE-04.

The battery energy storage system may generate incidental waste from repair or replacement of electrical equipment. The battery energy storage system will require regular replacement of batteries as they degrade over time. These batteries will be replenished at a rate dependent on usage. For example, a battery that is cycled more often will degrade faster than one that is used less often. Lithium-ion batteries are expected to last between 10 and 15 years. The Certificate Holder anticipates a 10-year replacement cycle to be conservative. This assumption likely overestimates the number of batteries that will flow into and out of the Facility, because not all batteries will be replaced during each replenishment cycle (e.g., fewer batteries will need replacing early in the Facility life span). A group of lithium-ion battery cells will constitute a “rack.” At this rate of replacement, approximately 390 battery racks will be used over operation term of the battery energy storage system (see Exhibit G).

For the replacement of batteries during operation, the Applicant will follow the handling guidelines of 49 Code of Federal Regulations 173.185 – Department of Transportation Pipeline and Hazardous Material Administration related to the shipment of lithium-ion batteries. Licensed third-party battery suppliers will be responsible for transporting batteries to and from the Facility in accordance with applicable regulations, as required through their licensure. Spent batteries will be disposed of at a facility permitted to handle them, in compliance with applicable Resource Conservation and Recovery Act and Toxic Substances Control Act regulations administered by the U.S. Environmental Protection Agency (EPA) or the ODEQ. Note that used lithium-ion batteries are not considered hazardous waste by the EPA; at present, there are optional EPA guidelines (EPA’s Universal Waste Regulations) that address the responsible disposal and recycling of these batteries.

Repair or replacement of the wind turbines and associated electrical equipment could generate incidental waste. However, a wind turbine typically lasts more than 20 years without significant degradation in function, and will be replaced infrequently, if at all. Operation of the additional wind turbines and associated infrastructure will not result in a significant amount of solid waste.

2.1.3 Decommissioning

The addition of more wind turbines will not change the way that decommissioning solid waste will be handled from what the Council previously considered. The anticipated working life span of the Facility is 50 years, after which time the Facility may be extended, repowered, or decommissioned. Facility decommissioning is discussed in greater detail in Exhibit X. In the event the Facility would be decommissioned, and the site restored to a useful, non-hazardous condition for other planned uses, the amount of solid waste can be inferred from the materials inventory provided in Exhibit G. Should the Facility be decommissioned, the components will be disassembled, and the materials will be recycled, sold for scrap, or taken to a landfill following the requirements of the Operational Waste Management Plan (Condition OPR-PS-03). As described in the ASC, all turbine components and towers, and above-ground electrical components would be removed. Ancillary components, such as concrete foundations and gravel, will be removed in a manner similar to the methodology approved in the ASC. Concrete foundations would be cut and removed to a minimum depth of 3 feet below ground, or deeper if required by a landowner for agricultural operations. Underground

cables would typically be left in place, as removing them would cause unnecessary habitat disturbance. Metals and electrical components are expected to be recycled as scrap rather than disposed of in a landfill wherever possible. The portions of concrete foundations that are removed would be disposed of as construction waste. Transformers and other substation equipment would be removed to be reconditioned for use elsewhere or recycled as scrap metal. The control buildings would be demolished and disposed in an appropriate facility, or converted to agricultural buildings for the use of the landowners. None of these materials are considered hazardous.

The decommissioning of the battery energy storage system will involve disposing of battery components at an off-site facility designed and approved for disposal or recycling of batteries by licensed third-party battery suppliers, who will be responsible for transporting batteries to and from the Facility in accordance with applicable regulations, as required through their licensure. The batteries will be disposed of at decommissioning in the same manner described above for operational replacement. Ancillary components of the battery energy storage system will also be removed in a manner similar to the methodology of the other concrete pads.

It is estimated that decommissioning of Facility infrastructure would produce approximately 15,000 cubic yards of waste, to be disposed of at the Finley Butte Landfill.

2.2 Wastewater

Wastewater generated by the Facility will include construction wastewater consisting of sanitary wastewater, equipment wash water and concrete washout water and operational wastewater produced at the shared/existing O&M building. This section discusses how each of these types of wastewater will be handled throughout the life of the Facility.

2.2.1 Sanitary Wastewater

Sanitation during construction activities will be addressed through the provision of portable toilets located throughout the Facility Amended Site Boundary at locations that will be determined prior to and during construction, as described in the ASC and RFAs. Portable toilets will be provided by a licensed subcontractor, who will be responsible for servicing the toilets at regular intervals and disposing of wastewater in accordance with local jurisdictional regulations. The construction contractor will ensure that a sufficient number of toilets are provided, and that the licensed subcontractor complies with applicable regulations, including the use of holding tanks for biological waste that conform to OAR 340-071 and transportation of waste in accordance with Oregon Revised Statutes 466.005.

For O&M of the Facility, there will be no change to the previously approved plan of how sanitary waste would be handled, through an on-site septic system serving the shared/existing O&M building, as discussed in the ASC and RFAs. Sanitary waste would be handled through an on-site septic system serving the shared/existing O&M building. The Certificate Holder will obtain necessary permits for the septic system from the ODEQ Pendleton office. A Water Pollution Control Facility (WPCF) permit would not be necessary for this type of use; the WPCF permit is required for

disposal of industrial wastewater directly to ground, including processing water; cooling water; stormwater from gravel, placer mining, or from feedlots; vehicle and equipment wash water from stationary wash facilities; and water from petroleum hydrocarbon cleanup. None of these industrial wastewater types would occur with the Facility. However, a WPCF permit would be required for gray water re-use, such as for landscaping purposes; in the event that grey water re-use is considered at the shared/existing O&M building, either at Type 2 general permit or a Type 3 individual permit would be appropriate, and would be obtained from ODEQ prior to construction.

2.2.2 Construction

No new types of wastewater will be generated from the construction of the additional wind turbines and associated infrastructure. Construction, operation, or decommissioning activities may generate small amounts of wastewater that can be allowed to infiltrate on-site, according to the terms of a NPDES Permit that will be issued by ODEQ (Condition CON-SP-01). Facility construction, operation, and decommissioning would not generate substantial amounts of wastewater that would need to be treated as effluent. The nature of the Facility is such that it would not produce industrial wastewater.

Most of the wastewater generated over the life of the Facility will be concrete washout water produced during construction of foundations. Concrete washout water typically makes up approximately 25 percent of the total water used for concrete in foundations. Based on the estimated water use for concrete presented in Exhibit O, estimated concrete washout water totals are as follows:

- 303,117 gallons for turbine tower foundation construction;
- 1,875 gallons for met tower foundation construction;
- 23,520 gallons (Transmission Line A) or 34,668 gallons (Transmission Line B) for Intraconnection Line pole foundation construction;
- 1,563 gallons for battery energy storage system foundation construction; and
- 4,858 gallons for substation foundations construction.

Concrete truck chutes would be washed down at each foundation site to prevent the concrete from hardening within the chutes. Concrete wastewater will be handled as previously described, using BMPs for the construction of wind generation facilities within the area, which have been accepted by ODEQ. In addition, an investigation in coordination with ODEQ will be required to confirm that no surface, ground, or drinking water impacts would occur from concrete washouts (Condition PRE-WM-02). Concrete wastewater will be washed out into a dedicated concrete washout area located within each foundation excavation. The bottom of the washout area will consist of the compacted foundation subgrade and the sides will consist of the excavation side cut, hardened concrete foundation, and soil berms at each end to construct a confined area. The soil used to construct the washout area berms (along with any concrete solids) will be buried as part of the

foundation backfill. This method for concrete washout water management is a regularly utilized management practice for construction of wind generation facilities within the area.

Washing of vehicles and equipment to prevent the spread of weeds will also generate small amounts of wastewater. Vehicle and equipment washing will occur at the temporary construction yard(s), and wastewater from these activities will be covered by the general NPDES 1200-C stormwater permit. The estimated amount of wastewater for vehicle and equipment washing is expected to be minor compared to overall Facility water use, and is included in the overall estimates of water use presented in Exhibit O. The amount of water used for vehicle and equipment washing will be sufficiently small that it would not create runoff, but would instead infiltrate into the ground.

Water will be sprayed onto disturbed areas during construction for dust control. The amount of water used for dust control will be sufficiently small that it would not create runoff, but instead infiltrate into the ground. Dust control water, therefore, will not contribute to wastewater volumes.

Stormwater is not considered to be wastewater. Stormwater will be managed in accordance the terms of the NPDES stormwater permit. Stormwater will be diverted around construction sites as much as possible. Precipitation that falls on a construction site will be allowed to run back to natural drainages, with erosion and sedimentation control systems in place to maintain water quality.

Construction dewatering activities, if necessary (including groundwater dewatering and well drilling discharge associated with the registered construction activity), are not considered stormwater discharges but are addressed by the NPDES permit. Typically dewatering back to the land is allowed, provided:

- Dewatering is applied in a way that results in complete infiltration with no potential to discharge to a surface water of the state; and
- BMPs or an approved treatment system (e.g., filter bags) are used to ensure compliance with discharge and water quality requirements.

Testing would not be required unless hazardous materials (e.g., petroleum products) were suspected of being in the water.

2.2.3 Operation

Minimal water will be used during operations and will primarily be related to sanitation at the shared/existing O&M building. There will be no change to the Certificate Holder's plan to utilize the existing septic system serving the shared/existing O&M building. The Certificate Holder has designed the septic system for a discharge capacity of less than 2,500 gallons per day (OPR-PS-01). No new operational wastewater sources are anticipated and blade washing is not anticipated to occur.

2.2.4 Decommissioning

Minimal wastewater will be generated during retirement of the wind turbines and supporting facilities, and the Facility will be decommissioned the same manner as previously described and approved for the wind facilities. Retirement of the wind turbines and related electrical components will not generate any wastewater. Facility retirement is discussed in greater detail in Exhibit X.

3.0 Structures, Systems, and Equipment to Manage and Dispose of Waste – OAR 345-021-0010(1)(w)(B)

OAR 345-021-0010(1)(w)(B) A description of any structures, systems and equipment for management and disposal of solid waste, wastewater and storm water.

The Certificate Holder will comply with all applicable waste handling and disposal regulations on all lands associated with the Facility. Solid waste will be stored in a manner that does not constitute a fire, health, or safety hazard until such waste can be hauled off for recycling or disposal, as appropriate. The following sections describe the handling and disposal of non-hazardous solid waste planned throughout the duration of the Facility.

3.1 Construction

Construction of the updates proposed by RFA 1 will not add any new types or significant quantities of waste, and as a result, no new structures, systems, or equipment will be needed to manage and dispose of construction wastes. All waste will be disposed of following the Construction Waste Management Plan (Conditions PRE-WM-01 and CON-PS-01) and battery waste will be disposed of following Condition GEN-OE-04 (contractual agreement for hauling battery waste).

Temporary construction yards, turbine pads, substations, and access roads will be kept in an orderly condition throughout the construction period. Waste generated during construction of the Facility will be temporarily collected at each construction site (e.g., at each turbine location) and then consolidated into larger disposal containers at the temporary construction yard(s). Disposal and recycling containers will be labeled by waste type to segregate materials as appropriate for recycling or disposal.

Disposal and recycling containers will be of adequate size, design and number to handle the amount of waste being generated. Containers approximately 12 cubic yards in capacity will be used to collect scrap metal, wood and paper products, and other recyclable materials. All waste containers will be fitted with lids to prevent waste from scattered by the wind.

Solid waste generated during construction will be hauled away for recycling or disposal, as appropriate. Paper products and other materials, such as batteries, glass, metals and plastic, will be recycled when practicable. As disposal and recycling containers reach capacity they will be removed to disposal facilities that can handle these materials, and the containers will be replaced

with empty units. Removal of the waste to appropriate disposal facilities will be done by a licensed waste hauler, under contract to the construction contractor. Licensed waste haulers must comply with OAR 340-093-0220 for transportation of wastes as well as the Morrow County Solid Waste Management Ordinance.

Soil and rock materials from foundation excavations will be spread within the temporary disturbance areas during construction or removed from the excavation site as soon as practicable. Most excess spoils generated during road cut and fill excavation activities will be incorporated into Facility grading activities as fill material. Excess spoils would be a very small amount, and any excess spoils from excavation of the foundations will be spread out around the foundations. Disturbed soil and rock materials will be contained using appropriate BMPs to prevent sedimentation release to local habitat, especially wetlands and other waters that may be in the vicinity.

The construction contractor will arrange off-site disposal of excess soils if this should be necessary. Disposal sites may be on public or private lands, but must be approved by the Certificate Holder's environmental representatives and the receiving landowner. The disposal contractor will obtain signed consent between themselves and the party receiving the earth materials and copies of the documentation must be provided to the Certificate Holder. The disposal agreement between the landowner and construction contractor will be in place prior to disposal. All disposal sites will be inspected by the Certificate Holder's environmental personnel to insure that sensitive environmental resources, such as wetlands or high quality habitats, are not impacted.

The construction contractor will submit a plan for approval by the Certificate Holder on how solid waste materials during construction activities will be reused, recycled, or disposed of in accordance with OAR 340-093-0010 (Condition PRE-WM-01). That plan will specify the number and types of waste containers to be maintained at construction sites and the temporary construction yard(s), and how wastes are to be segregated for recycling or disposal. It will also specify the names and locations of appropriate recycling and waste disposal facilities, collection requirements, and hauling requirements.

3.2 Operation

Any solid waste generated by the operation of the additional wind turbines and associated infrastructure will be collected by the maintenance crews and transported to off-site to facilities such as Finley Butte Landfill that handle the disposal or recycling of these items. Wastes generated at the shared/existing O&M building would be collected there in appropriate waste or recycling containers, to be removed by a licensed waste hauler under contract to the Certificate Holder. All operational waste will be handled according to the Operations Waste Management Plan (Condition OPR-PS-03) which will be consistent with Morrow County Solid Waste Management Ordinance Sections 5.020 and 5.030. Battery waste will be disposed of following Condition GEN-OE-04.

Self-contained battery components and spent batteries will be removed and disposed of or recycled by a license vendor in compliance with applicable Resource Conservation and Recovery Act and Toxic Substances Control Act regulations administered by the EPA or ODEQ. The batteries will be

handled by a licensed third-party battery supplier in accordance with applicable regulations, as required through their licensure. Additionally, waste hauling by facility personnel within Morrow County will be performed in compliance with Morrow County Solid Waste Management Ordinance Section 5.000 Public Responsibilities and 5.030 Responsibility for Proper Disposal of Waste Hazard.

Battery modules will require periodic replacement because the modules lose their effectiveness through repeated charge/discharge cycles. The frequency of replacement will depend on operational parameters that are not yet fully designed, but for purposes of this analysis, it is conservatively assumed batteries will be replaced every 10 years. The following procedures are anticipated to be implemented for battery replacement:

- The Facility operator will disconnect and de-energize the battery system prior to removal from the installed racks, and package the batteries for transport to an approved facility.
- At the recycling facility, the qualified contractor will dismantle battery modules and prepare individual cells for metals recovery.
- Individual cells will be processed in a furnace to recover metals. Recovered metals may include aluminum, calcium, lithium, and a metal alloy comprising cobalt, copper, nickel, and iron.
- Recovered metals will be recycled or separated to recover individual metals where economically viable.

No additional industrial wastewater streams will be generated during operation of the additional wind turbines and associated infrastructure. The Facility will increase the impervious area within the watershed with the installation of the additional wind turbines and Intraconnection Line. However, the increase in impervious area will not likely result in a significant amount of additional stormwater during operations. No additional structures, systems, or equipment are required for stormwater resulting from the additional wind turbines and associated infrastructure.

3.3 Decommissioning

Waste produced from retirement activities will be managed in a similar manner to the waste produced during construction and operation and as presented in the ASC (see Sections 3.1 and 3.2). At the expected life span of 50 years, the Facility will be dismantled, and components sold for reuse or scrap as practicable. Otherwise, components will be recycled or disposed at a solid waste facility.

3.4 Solid Waste Disposal Site

Solid waste disposal for the Facility will be provided through a private contract with local commercial haulers. Solid waste generated by the Facility will ultimately be disposed of at the Finley Butte landfill in Morrow County. See Exhibit U for further discussion of landfills. Correspondence with the Finley Butte Sales Manager (Exhibit U, Attachment U-1) confirms that the Finley Butte Landfill has adequate capacity to handle the projected waste generated by construction, operation, and decommissioning of the Facility. During construction and operation,

the Certificate Holder shall coordinate with its solid waste handler to provide the information solicited through ODEQ's Recycling Collector Survey to the Morrow County Wasteshed representative on an annual basis (Condition GEN-PS-01). The Certificate Holder will provide information to the Morrow County Wasteshed on the amounts and types of wastes sent to landfill or recycling, as required by the Morrow County Solid Waste Management Ordinance. The Morrow County Wasteshed shall benefit through the reporting of recyclable disposal.

4.0 Water Use Reduction – OAR 345-021-0010(1)(w)(C)

OAR 345-021-0010(1)(w)(C) A discussion of any actions or restrictions proposed by the applicant to reduce consumptive water use during construction and operation of the facility.

As discussed in the ASC and previous RFAs, minimizing use of water for the Facility will be an important environmental consideration as the Facility moves into the construction phase. The Certificate Holder will use appropriate BMPs to reduce water use to the greatest extent feasible. Wind facility construction by nature does not afford the construction contractor significant opportunities for reducing water use. Water will be used on an as-needed basis to construct concrete foundations and pads, suppress dust on the roads (and other areas disturbed by grading), and wash out concrete truck chutes. Water will be applied only as needed in areas of active construction or vehicle movement, will be applied sparingly, and only at necessary intervals. To reduce the water used for dust suppression, stabilization materials such as mulch, or soil tackifiers and binders such as magnesium chloride, may be used to lengthen the interval between necessary dust control water applications, if such additives are permitted by landowners and applicable regulations. Weather and soil conditions will be regularly monitored to minimize watering the construction roads while maintaining regulatory compliance for fugitive dust issues. Water for dust control will not be applied if weather conditions are such that disturbed soils will remain sufficiently damp and fugitive dust will not be created. Additionally, other dust suppressants besides water may be utilized as necessary during extreme drought conditions (synthetic polymer emulsions, chemical suppressants, organic glues, and wood fiber materials) depending on the site and condition (to be applied by trained and certified vendors familiar with applicable environmental regulations including the federal Endangered Species Act, the Clean Water Act, the Salmon Recovery Act, and state and local regulations).

No industrial wastewater will be generated during operations. Operation of the Facility does not require consumptive water use, except for minimal amounts at the shared/existing O&M building similar in nature to typical office use (see Exhibit O). The water used at the shared/existing O&M building will meet building code requirements for water conservation practices. Blade washing is not anticipated to occur; it has been found to be unnecessary in most environments, does not enhance turbine performance, and is generally not recommended by turbine manufacturers.

5.0 Plans for Recycling and Reuse – OAR 345-021-0010(1)(w)(D)

OAR 345-021-0010(1)(w)(D) The applicant's plans to minimize, recycle or reuse the solid waste and wastewater described in (A).

The changes described in this amendment request will result in additional solid waste in the form of potential additional turbine, Intraconnection Line, and associated part replacements during operation, and through decommissioning at the time of retirement. These materials will be recycled where practicable and disposed at an approved disposal location where necessary (Conditions PRE-WM-01, CON-PS-01, and OPR-PS-03). When recycling is not feasible, the materials will be sorted and stored in dumpsters or other suitable containers and transported by a licensed waste hauler to an approved disposal location where necessary (Condition PRE-WM-01). All operational waste will be handled according to the Operations Waste Management Plan, which will be drafted during construction prior to operations (Condition OPR-PS-03).

6.0 Impacts of Project Waste

6.1 Description of Impacts – OAR 345-021-0010(1)(w)(E)

OAR 345-021-0010(1)(w)(E) A description of any adverse impact on surrounding and adjacent areas from the accumulation, storage, disposal and transportation of solid waste, wastewater and stormwater during construction and operation of the facility.

Solid waste, wastewater, and stormwater for the Facility will be generated and managed consistent with the methods and procedures that have been previously approved by the Council for the Facility, and through the Site Certificate conditions discussed above. As a result, there will be no new, adverse impacts resulting from the changes proposed under RFA 1.

6.2 Evidence that Impacts are Minimal – OAR 345-021-0010(1)(w)(F)

OAR 345-021-0010(1)(w)(F) Evidence that adverse impacts described in (D) are likely to be minimal, taking into account any measures the applicant proposes to avoid, reduce or otherwise mitigate the impacts.

Generation of wastes from construction will be minimized by estimating material needs and employing efficient construction practices. Waste generated during construction and operation of the Facility will be recycled when feasible (Conditions PRE-WM-01, CON-PS-01, and OPR-PS-03).

Because waste generation will be minimal, there is little anticipated adverse impact on surrounding areas from solid waste or wastewater due to Facility construction, operation, or retirement. Waste will be reused or recycled; or when necessary, disposed at permitted disposal facilities. Any waste disposed on-site (e.g., excess spoils from foundation or road excavation) will be inert, disposed of in

a manner consistent with applicable regulations, and protective of human health and the environment.

Water will be used primarily for dust control, concrete mixing, and concrete washout. None of these activities would produce wastewater that would affect area streams, wetlands, or groundwater supplies. Sanitary waste during construction will be handled by a licensed contractor according to applicable regulations. The permitted and properly designed on-site septic system at the shared/existing O&M building would safely handle sanitary wastes during operation of the Facility. The Facility would not generate industrial wastewater or effluent.

Disposal of materials as fill on-site will be conducted in accordance with OAR 340-093-0080 and other applicable regulations. OAR 340-093-0080 provides a permit exemption to the disposal permit requirement for disposal of inert wastes such as soil, rock, and concrete that does not contain contaminants that could adversely affect waters of the State or the United States. To meet the clean fill definition, any inert construction debris to be disposed on-site will be separated from other debris that is not inert.

The Certificate Holder's proposed measures to avoid, reduce, and mitigate any impacts on-site or to adjacent land include storing all petroleum products, paints and finishes, solvents, pesticides and herbicides, and other hazardous materials in containers that meet all federal, state, and local requirements for storage and containment. Petroleum products, including vehicle and equipment fuels, lubricating oils, and hydraulic fluids, will not be stored in substantial quantities on-site, but would instead be delivered on an as-needed basis using a specialized vehicle by a licensed contractor. In addition, spill kits containing items such as absorbent pads will be located on equipment and in on-site temporary storage to ensure a quick response to spills. Waste disposal or recycling will be handled by a licensed contractor.

Transportation of wastes to landfills or recycling facilities will involve periodic truck trips over public and private roads between the Facility and the Finley Butte Landfill. Given the number and frequency of these trips, and the anticipated volume of waste materials, these trips are not anticipated to have adverse effects on the adjacent or surrounding areas (See Exhibit U for more detail on solid waste management).

7.0 Monitoring Program – OAR 345-021-0010(1)(w)(G)

OAR 345-021-0010(1)(w)(G) The applicant's proposed monitoring program, if any, for minimization of solid waste and wastewater impacts.

The Certificate Holder will monitor construction stormwater impacts in accordance with a NPDES Construction Stormwater Discharge General Permit 1200-C issued by ODEQ, and an associated ESCP (Condition CON-SP-01; see Exhibit I for further information). The ESCP describes BMPs for erosion and sediment control, spill prevention and response procedures, proper disposal procedures, regular maintenance for vehicles and equipment, and employee training on spill prevention.

No significant impacts from solid waste and wastewater are expected from construction and operation of the Facility. Therefore, no monitoring program aside from the ESCP is proposed. Waste management activities will be subject to periodic inspections to ensure compliance with applicable regulations and Site Certificate conditions.