

**Exhibit W**  
**Solid Waste and Wastewater**

**Umatilla-Morrow County Connect Project**



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*Application for Site Certificate*

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## ACRONYMS AND ABBREVIATIONS

ASC	Application for Site Certificate
BMP	Best Management Practice
EFSC	Energy Facility Siting Council
EFU	Exclusive Farm Use
ESCP	Erosion and Sediment Control Plan
OAR	Oregon Administrative Rule
ODEQ	Oregon Department of Environmental Quality
ORS	Oregon Revised Statute
ODOT	Oregon State Department of Transportation
Project or UMCC	Umatilla-Morrow County Connect Project
Project Order	First Amended Project Order, <i>In the Matter of the Application for Site Certificate for the Umatilla-Morrow County Connect Project</i> (April 04, 2024)
SDS	Safety Data Sheets
SPCC	Spill Prevention Control and Countermeasures Plan
SWPPP	Stormwater Pollution Prevention Plan
UEC	Umatilla Electric Cooperative

## **1.0 INTRODUCTION**

Exhibit W describes Umatilla Electric Cooperative's (UEC's) plans to minimize the generation of solid waste and wastewater and to recycle or reuse solid waste and wastewater, in support of findings by the Council under Oregon Administrative Rule (OAR) 345-022-0120 for the Umatilla-Morrow County Connect Project (Project). The Project will minimize generation of solid waste and wastewater in the construction and operation of the Project, and when solid waste or wastewater is generated, is committed to recycling and reuse of such wastes, as required by the Waste Minimization Standard at OAR 345-022- 0120(1). Exhibit W demonstrates that UEC plans to manage the accumulation, storage, disposal, and transportation of waste generated by the Project and that these activities are likely to result in minimal adverse impact on surrounding and adjacent areas.

## **2.0 APPLICABLE RULES AND PROJECT ORDER PROVISIONS**

### **2.1 Project Order Provisions**

The Project Order states that all paragraphs of OAR 345-021-0010(1)(w) apply to the Project. UEC may reference information provided in other exhibits including, but not limited to, Exhibits O and U, in the development of Exhibit W (Proposed Umatilla-Morrow County Connect Project, First Amended Project Order; April 4, 2024)

## **3.0 ANALYSIS**

### **3.1 Analysis Area**

The analysis area for Exhibit O includes all areas within the site boundary, which is defined as "the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas, and all corridors and micro-siting corridors proposed by the applicant" (OAR 345-001-0010(55)). The Project features are fully described in Exhibit B and the site boundary is described in Exhibit C, Table C-24. The location of the Project features and the site boundary is outlined in Exhibit C.

### **3.2 Methods**

Quantities of solid waste and wastewater are discussed in Section 3. Hazardous materials and waste are discussed in detail in Exhibit G and summarized below in Section 9. A description of UEC and their engineering contractor's experience that qualifies them to make these estimates is detailed in Exhibit D.

OAR 345-022-0000: General Standards of Review
OAR 345-022-01220(1) Waste Minimization Standard
OAR 345-021-0010(1)(w) Exhibit W Solid Waste and Wastewater

The General Standard of Review is set forth in OAR 345-022-0000. The Waste Minimization Standard set forth in OAR 345-022-0120(1) provides that UEC must demonstrate the following, to the extent reasonably practicable:

- » The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;
- » The applicant's plans to manage the accumulation, storage, disposal, and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.

Under OAR 345-021-0010(1)(w), Exhibit W must include information regarding UEC's plans to minimize the generation of solid waste and wastewater and to recycle or reuse solid waste and wastewater. This Exhibit provides the following:

- a. a description of the major types and amount 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;
- b. a description of the structures, systems, and equipment for management and disposal of solid waste, wastewater, and stormwater;
- c. a discussion of any actions or restrictions proposed by the applicant to reduce consumptive water use during construction and operation of the facility;
- d. plans to minimize, recycle, or reuse the solid waste and wastewater described in (A);
- 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;
- f. evidence that adverse impacts described in (d) are likely to be minimal, taking into account the measures that UEC proposes to avoid, reduce, or otherwise mitigate the impacts; and
- g. UEC's proposed monitoring program, if any, for minimization of solid waste and wastewater impacts.

### **3.3 Estimated Quantities of Solid Waste and Wastewater**

OAR 345-021-0010(1)(w): 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.

#### **3.3.1 Construction Solid Waste**

This section provides UEC estimates, based on UEC experience on other transmission line projects, of the vegetation waste, native earth materials (soil, rock, and similar), and household-type solid waste that likely will be generated during the construction of the Project. Construction sites and access will be kept orderly and solid waste from construction (and maintenance) will be minimized. Excess soil, slash, and woody debris at temporary work locations will be spread over the site. Refuse and trash will be removed from the temporary work sites and disposed of in an approved manner. All sanitary wastes will be collected in portable, self-contained toilets at all construction staging areas.

##### **3.3.1.1 Vegetation Waste**

Construction of the Project will require clearing of vegetation from portions of the site boundary, certain access roads, multi-use areas, temporary pulling and tensioning sites, light-duty fly yards, and other temporary and permanent disturbance areas. Vegetation waste will consist of herbaceous plant materials scraped from disturbance areas and trees and shrubs removed to facilitate construction, transmission line stringing, and to prevent interference with energized circuits. Vegetation waste will be mulched and spread around on the ground in the site boundary and will not be disposed of off-site as described in Table W-1.

Vegetation waste quantities to be generated by the alternatives are also shown in Table W-1. The percent of vegetation waste to be left on-site or recycled/disposed of off-site is the same as for the Proposed Route. If UEC develops the Alternative Route in lieu of the corresponding segment of the Proposed Route, the net volumes of waste are not likely to deviate substantially from the “total amounts” provided in Table W-1 for the Proposed Route.

### **3.3.1.2 Native Earth Materials**

Native earth materials consist of excess soil, fill material, and aggregates that may be generated from access road construction and foundation excavations along the Proposed Route and Alternative Route. The Project will balance soil cuts and fills to the greatest extent possible to minimize excess, but it is anticipated that some material surplus will remain, which will require disposal. It is estimated that out of approximately 5,532 cubic yards of native material generated, none will need to be hauled off-site (see Table W-1). The native material quantities shown in Table W-1 represent material excavated for foundations and material graded for tower pads and work areas. It is anticipated that 100 percent of material excavated for foundations and the material removed from tower pad and work area grading will be recycled. The construction contractor may also opt to arrange for native material disposal at local sand and gravel/aggregate pits where the materials could be recycled for fill or aggregate sources on unrelated projects. Native material quantities that will be transported off-site by the alternatives are also shown in Table W-1.

### **3.3.1.3 Household-Type Solid Waste**

Household-type solid waste generated during construction will include scrap metal, wire, wood, concrete, incidental litter, and other debris. Much of this waste will be packing material such as crates, pallets, and paper wrapping to protect equipment during shipping. UEC's engineering contractor estimates that approximately 490 cubic yards of solid waste will be generated (see Table W-1). Given the bulk of the materials are wood, wire, and metal, UEC's engineering contractor estimates that 100 percent of solid waste will be disposed of in a landfill. Worker personal items, such as meal residue, cups, cans, etc., represent a very minor amount of household-type waste included in the solid waste going to a landfill. Solid waste quantities to be generated by the alternatives are also shown in Table W-1. The proportion of solid waste to be recycled versus landfilled will be the same for the Alternative Route as for the Proposed Route.

TABLE W-1. MATERIALS GENERATED FROM CONSTRUCTION ACTIVITIES AND ULTIMATE DISPOSITION

DISPOSAL METHOD	WASTE GENERATED IN CUBIC YARDS		
	Vegetation <sup>1,4</sup>	Native Material <sup>2</sup>	Solid Waste <sup>3,4</sup>
Alternative Route A			
Amount Recycled	0	5,532	0
Amount to Finley Buttes Landfill	0	0	485
Alternative Route B			
Amount Recycled	0	5,280	0
Amount to Finley Buttes Landfill	0	0	490
Alternative Route C			
Amount Recycled	0	5,470	0
Amount to Finley Buttes Landfill	0	0	480
Alternative Route D			
Amount Recycled	0	4,536	0
Amount to Finley Buttes Landfill	0	0	450

Notes:

- <sup>1</sup> Vegetation consists of woody vegetation to be removed during construction. It is assumed that approximately 100% can remain within the site boundary such that none will be hauled away to a county landfill for recycling or disposal, as approved by local entities.
- <sup>2</sup> Native material consists of excess soil, large rocks, or other natural materials that cannot be reused on-site. It is assumed that approximately 10% of native material excavated for structure foundations, temporary work areas, or access roads can be recycled on site. Native materials may be suitable for disposal at fill dirt sites, or county construction and demolition (C and D) landfills, as approved by local entities.
- <sup>3</sup> Solid waste is non-hazardous refuse from materials delivered to the Project, and includes containers, boxes, bags, sacks, packing materials, broken insulators, scrap conductor, empty wire spools, and other miscellaneous non-hazardous paper, plastic, or similar materials. None of the solid waste would be recycled.
- <sup>4</sup> Amount Recycled for vegetation is the amount of vegetation that will be left on-site. Amount Recycled for solid waste is the amount of material that goes to a recycling facility for future useful purposes.



### **3.3.2 Construction Wastewater**

The Applicant does not anticipate generating wastewater during construction or maintenance that will require disposal. As needed and where warranted, stormwater in the right-of-way, along project access off the right-of-way, and other temporary construction areas will be controlled to prevent erosion and sedimentation employing standard best management practices (BMPs). Stormwater will be managed as detailed in the National Pollutant Discharge Elimination System permit required Stormwater Pollution Prevention Plan (SWPPP) (ODEQ 1200C Construction Stormwater Permit), which will include BMPs to manage stormwater run-off, such as minimizing and stabilizing disturbed areas, implementing sediment control features, and other run-off control measures as needed according to site conditions (also see Exhibit E).

As stated in Exhibit I, construction of the transmission line may require use of water for control of fugitive dust temporarily generated by construction activities at temporary work areas. If the level of fugitive dust is excessive in localized areas, as determined in coordination with the landowner or agency, water will be applied to disturbed areas to minimize nuisance dust. Information on water use can be found in Exhibit O.

#### **3.3.2.1 Sanitation Facilities**

Portable restrooms will be available for the workers at the construction sites and multi-use areas during the construction activities. A subcontractor will supply and maintain the restrooms on a regular basis. The subcontractor will also be responsible for the disposal of the wastewater according to the local jurisdictional regulations. The construction contractor will ensure adequate provision of restrooms and compliance of the subcontractor with the applicable regulations. The subcontractor will use holding tanks for the biological waste that adhere to the Oregon Department of Environmental Quality (ODEQ) regulations in OAR Chapter 340, Division 71. They will also transport the waste in compliance with Oregon Revised Statute Chapters 465 and 466.

#### **3.3.2.2 Concrete Washout Residue**

The transmission line will be supported on steel monopole and H-frame (two poles) structures, which will require auguring to create the holes for installation. Structure foundation for most of the structure types will be buried directly in the ground; however, a concrete foundation will be used for the steel single-pole tangent and dead-end structures. Therefore, construction of the transmission line is not anticipated to result in new, large, impervious areas that generate significant stormwater runoff. However, stormwater runoff will be addressed in the applicable SWPPPs and Erosion and Sediment Control Plans (ESCPs) developed for the Project in accordance with federal, state, and local requirements. Stormwater BMPs will be implemented to minimize potential effects of stormwater drainage on water and soil resources. Construction will proceed under an approved construction stormwater general permit, as required by the ODEQ. During construction, the following examples of BMPs will be implemented:

- » Any areas of disturbance will contain all spoils to avoid impact on wetlands or waterways.
- » Standard erosion-control measures would be implemented when working within 100 feet of field-verified surface water features if there is any chance for stormwater runoff from the disturbed area to reach the water feature.
- » No work will be conducted within the Ordinary High Water Mark of any waterway.
- » No impact on waterways is permitted (including fill, discharge, or ground disturbance).

- » Refueling vehicles or equipment within a floodplain or within 300 feet of a waterway is prohibited.

Stormwater is not considered to be wastewater. Stormwater management will be in conformance with State of Oregon stormwater management rules. Precipitation that falls on construction areas will be managed as stormwater in accordance with an ODEQ National Pollutant Discharge Elimination System construction stormwater permit (1200-C), preliminary SWPPP, and ESCP (see Exhibit E).

### **3.3.3 Operations and Maintenance Solid Waste and Wastewater**

Insignificant amounts of solid waste and wastewater are expected to be generated during the operation and maintenance of the Project. Solid waste will include replaced equipment and components, packing materials, and soils. The transmission line will be patrolled regularly to inspect insulators, wire and tower conditions, and a small amount of solid waste will be generated during repairs or replacements.

Permanent disturbance areas, including the cleared Proposed Route and Alternative Routes and permanent roads will be managed to limit the type and height of vegetation that is allowed to regrow in these areas or as requested by the landowner. Vegetation management techniques will be implemented in accordance with UEC standard practices using motorized hand tools, clearing and grubbing machinery, and herbicides to retard the growth of trees within the wire and border zones. These methods are described in the Vegetation Management Plan, Exhibit P1, Attachment P1-4.

## **3.4 Waste Management and Disposal Systems**

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

UEC will comply with all applicable waste handling and disposal regulations on all lands associated with the Project. 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-site for recycling or disposal, as appropriate. The following sections describe the handling and disposal of solid waste, wastewater, and stormwater anticipated throughout the duration of the Project.

### **3.4.1 Management and Disposal of Construction Waste, Wastewater, and Stormwater**

The multi-use areas will serve as the collection points for solid waste generated at each of the pole construction sites along the site boundary.

Excavation for the Project will generate excess excavated soil that will be used as fill as much as possible; however, some of the excavated material may be removed for disposal. Surplus excavated material may be used to construct shallow earthen berms on the edge of the route or spread along access roads in layers to raise the road profile and improve drainage. The volumes shown in Table W-1 reflect the waste that will be hauled away or recycled in the site boundary during construction of the Project.

Stockpile protection measures will be in place to reduce the potential for air and stormwater pollution originating from stockpiles of construction materials, including:

- » Stockpiles will be located a minimum of 100 feet away from storm drains, ditches, streams, and other water bodies.
- » Physical diversions will be provided to protect stockpiles from concentrated runoff.
- » Stockpiles will be covered with plastic or comparable material prior to a rain event and during the rainy season.
- » Silt fence, fiber filtration tubes, or straw wattles will be placed around stockpiles to limit sediment migration.
- » When disposal of surplus excavated material is necessary, the first option will be to utilize acceptable sites within the route and/or roadway rights-of-way and in the general proximity of the source as a disposal site. Disposal sites will have undergone adequate review and consideration for environmental and cultural issues.

On-site disposal options may include:

- » Construction of shallow earthen berms on the exterior of the route; and
- » Construction of access road embankments, spreading materials in layers over existing road bed to fill ruts to raise road profile and improve drainage. Materials shall be consolidated and shaped to form a smooth travel surface.

If no disposal sites are readily available or the area is environmentally sensitive, UEC contractor will haul surplus material to disposal sites on UEC-controlled property or other available private or public property. All soil stockpiles will be managed in accordance with ODEQ stormwater requirements. The preliminary ESCP provides BMPs for management of material stockpiles.

Above-grade waste will consist of packing material such as crates, pallets, and paper wrapping to protect equipment during shipping. A waste hauling subcontractor will be used to manage recycling and waste disposal. Project recycling or disposal containers will consist of roll-offs or dumpsters supplied by the waste handling subcontractor. Containers storing food wastes will be covered, leak-proof, and maintained to prevent a nuisance (e.g., odor, sight) and control vectors such as animals and insects. Materials such as wood pallets, plastic, metal, and paper will be separated from disposable wastes for recycling. Disposable waste will be disposed of by the subcontractor at nearby landfills. Interim recycling or disposal for solid waste prior to final disposition may be at county transfer stations.

Vegetation waste will be crushed, chipped, burned, spread, or stacked and left on-site as vegetation growth medium, erosion and sediment control, or wildlife habitat; any such waste not used on-site will be disposed of at a landfill.

Sanitary wastewater from portable toilets will be handled by a sanitary system subcontractor used to provide the sanitary facilities. This will consist of scheduled removal of the sanitary waste using a vacuum truck and disposal in accordance with the sanitary system subcontractor's permits.

Concrete washout stations will be distributed throughout the Project and will generally be located within each structure work area. The construction contractor will obtain any necessary permits for concrete washout and will comply with applicable permit requirements. The procedures for constructing, maintaining, and disposing of concrete debris and washout water at washout stations will also be covered in the preliminary ESCP. The locations of concrete washouts will be provided in the preliminary ESCP. The preliminary ESCP is a part of the 1200-C stormwater permit required

by ODEQ. UEC will submit a 1200-C permit application, including a preliminary ESCP prior to construction. Construction stormwater will be managed in accordance with the 1200-C permit and preliminary ESCP, as provided in Exhibit E.

### **3.4.2 Management and Disposal of Operations and Maintenance Waste, Wastewater, and Stormwater**

The amount of operations-derived solid waste will be minimal compared to construction waste. Any solid waste generated during replacement of insulators, hardware, splices, or tower retrofits will be collected by the maintenance crews and transported to appropriately permitted, off-site facilities that handle the disposal or recycling of these items. Vegetation waste will be crushed, chipped, spread, or stacked and left on-site as vegetation growth medium or wildlife habitat.

Permanent stormwater structures will minimize Project-derived erosion or sedimentation using stormwater BMP processes, as appropriate and in accordance with ODEQ stormwater requirements. Permanent BMPs will be selected based on location and need and will be described in the preliminary ESCP. Examples of permanent stormwater BMPs include, but are not limited to, vegetation-covered slopes, stormwater detention ponds, rock-lined or armored drainages, permanent drainage ditches, grass-covered swales, and properly installed and maintained culverts.

### **3.4.3 Solid Waste Disposal Facilities**

Several municipal solid waste landfill facilities are located along the Project. All municipal solid waste landfill facilities must comply with the federal regulations in 40 Code of Federal Regulations Part 258 (Subtitle D of the Resource Conservation and Recovery Act), or equivalent state regulations. The disposal of solid waste in Oregon must be conducted in accordance with Oregon Revised Statute Chapter 459 and OAR Chapter 340, Divisions 93 through 97. The state rules were re-written in 1993 to conform with new federal standards for solid waste facilities, contained in 40 Code of Federal Regulations Part 258.

Solid waste suitable for disposal at municipal facilities will be transported by a disposal subcontractor. The following provides waste disposal information for the area crossed by the Project:

- » **Finley Buttes Landfill:** Located in Boardman, Oregon and permitted by ODEQ. Finley Buttes Landfill can accept municipal solid waste, construction/demolition waste, and special waste (including liquids) with proper approvals. Waste will either be hauled directly to the landfill, or first moved to transfer stations located near populated areas.

**TABLE W-2. WASTE MATERIALS GENERATED FROM RETIREMENT**

ALTERATIVE ROUTE	NUMBER OF STRUCTURES	STRUCTURE STEEL (TONS)	CONDUCTOR STEEL (TONS) <sup>1</sup>	CONDUCTOR ALUMINUM (TONS) <sup>1</sup>	OHGW 7/16" EHS STEEL (TONS)	OPGW (TONS)	COPPER GROUNDING MATERIALS (TONS)	MISCELLANEOUS HARDWARE (TONS)	INSULATORS (TONS)	CONCRETE WASTE (CUBIC YARDS) <sup>2</sup>
A	101	2,064	215	604	0.54	46	1.6	10	47.8	1,010
B	101	1,977	215	602	0.54	46	1.6	10	46.9	1,010
C	102	2,023	214	600	0.54	46	1.6	10	47.9	1,020
D	92	1,786	202	565	0.54	43	1.4	10	41.1	920

Notes:

<sup>1</sup> 1,272 thousand circular mils 54/19 ACSS-HS285 "Pheasant" is composed of 1,204 pounds aluminum per 1,000 feet and 429 pounds steel per 1,000 feet.

<sup>2</sup> Approximately 10 cubic yards of concrete will be completely removed at each structure during retirement.

## **4.0 WATER MINIMIZATION**

OAD 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.

UEC will minimize water use by implementing appropriate BMPs to the greatest extent feasible. Construction water will be purchased from off-site sources, and UEC will take actions to minimize water uses. Water for dust abatement will be minimized to prevent surface water migration and accompanying erosion or sediment transport, and to maximize the efficiency of the water trucks used to control dust. The construction contractors may also elect to use eco-sage, biodegradable, liquid copolymers to stabilize road surfaces where extended use is anticipated. Water used at concrete washout stations is typically provided by the concrete truck, and it is in the interest of drivers to conserve water to minimize water fill-ups.

## **5.0 MINIMIZING, RECYCLING, OR REUSING WASTE**

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

### **5.1 Minimization, Recycling, and Reusing Construction Solid Waste and Wastewater**

UEC will promote a recycling program to minimize waste to be disposed of in landfills. UEC's construction contractor will submit a plan for approval by UEC on how solid waste materials will be reused, recycled, or disposed of. That plan will specify the number and types of waste containers to be maintained at construction sites, multi-use areas and substations, and how solid waste or wastewater will be segregated for recycling or disposal. It will also specify the names and locations of recycling and waste disposal facilities that will be used for the Project, as well as collection and hauling requirements.

Wastes generated during construction along the Proposed Route or the Alternative Routes or access roads will be collected in recycling and disposal containers at the multi-use areas.

Separate 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. Landfill-supplied containers, such as 20- or 30-cubic-yard roll-offs, will be used to collect scrap metal, wood and paper products, concrete waste, and other recyclable materials. Paper products and other materials, such as chemicals, batteries, glass, metals, and plastic will be recycled when practical in a method recommended by landfills or disposal subcontractors. 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. Transportation of wastes will comply with OAR 340-093-0220. UEC waste hauling contractor will be responsible for overseeing waste management, transporting waste to appropriate disposal facilities, and managing disposal and recycling containers.

Most excess spoils generated during road cut and fill and foundation excavation activities will be incorporated into Project grading activities as fill material. Excess spoils areas will be identified in the preliminary ESCP. Solvents and thinners will be filtered and reused whenever possible.

## **5.2 Minimization, Recycling, and Reusing Operations and Maintenance Solid Waste and Wastewater**

The amounts of waste materials and wastewater generated during operations are expected to be minimal. Wastes derived during this part of the Project will likely be recycled or disposed of off-site by individual operations and maintenance crews. Any vegetation waste will remain on-site as chips or stacked logs.

## **6.0 IMPACTS OF WASTE ON SURROUNDING AREAS**

OCAR 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.

No adverse impacts are expected during construction and operations from the Project accumulation, storage, disposal, and transport of solid waste, wastewater, or stormwater. Project waste will be stored only on a temporary basis, and then disposed of or recycled off-site in ODEQ-permitted municipal solid waste landfills that comply with Subtitle D of the Resource Conservation and Recovery Act and equivalent Oregon regulations and recycling facilities. Transportation of wastes to landfills or recycling facilities will involve periodic truck trips over public and private roads between the Project and the nearest transfer station, landfill, or recycling facility. 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 area. It was estimated that the landfill will receive waste for approximately nine to 12 months.

Exhibit W, Table W-2 provides the current volume of waste generated by the retiring of each facility and will be distributed to the local landfill (tons per year). The total estimated solid waste from this land clearing and construction during the Project (tons per year) in Table W-1. The combined volumes in Tables W-1 and W-2 will not exceed the volume of waste permitted to be received at the landfills (tons per year) The landfill does not have any permitting restrictions on the amount of waste they can receive. Finley Butte Landfill stated that they currently receive 500,000 tons of waste per year with an operational life of the landfill projected for 300 years (Clark County Solid Waste Management Plan, 2015). Finley Butte Landfill appears to be able to handle the increased loads during Project construction.

The majority of Project water will be used for dust abatement. It will be applied in quantities sufficient to minimize dust from construction vehicles, but not sufficient to result in runoff. Water will also be used in the application of hydromulch to help stabilize disturbed slopes. Minimal water will be used by concrete trucks to wash their chutes and drums after delivering concrete. Concrete washout will occur at dedicated concrete washout stations. Their locations will be described in the preliminary ESCP, and their operation will be in accordance with ODEQ stormwater requirements. Concrete washout water will be allowed to evaporate.



Stormwater and erosion will be managed via the 1200-C permit and preliminary ESCP. No wastewater discharge is proposed. Water used for dust abatement will be applied at rates to maximize infiltration and minimize runoff.

## **7.0 EVIDENCE THAT IMPACTS WILL LIKELY BE MINIMAL**

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 materials, needs, and employing efficient construction practices. Waste generated during construction, operation, or retirement of the Project will be recycled when feasible.

Because waste generation will be minimal, there is little anticipated adverse impact on surrounding or adjacent areas from solid waste or wastewater associated with Project construction, operations, or retirement. As discussed in this Exhibit, waste will be reused or recycled, or, when necessary, disposed of at permitted disposal facilities. Any waste disposed of on-site (e.g., wood chippings from clearing operations) will be inert and disposed of in a manner consistent with applicable regulations and protective of human health and the environment.

Solid wastes will be disposed of in ODEQ-permitted landfills. Disposal of native construction 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 permit requirement for disposal of inert wastes (such as soil, rock, and concrete) that do 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 of on-site will be separated from other debris that is not inert.

Water will be used primarily for dust control and concrete mixing. Water will be transported to the Project via water trucks and will be used only as needed. No on-site sewage treatment system is proposed.

Based on the summary above, material adverse impacts from Project waste are not expected.

## **8.0 WASTE MINIMIZATION MONITORING**

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

UEC solid waste and wastewater plans will minimize generation of solid waste and wastewater in the construction and operations of the Project and maximize recycling and reuse of any such wastes that are generated. UEC plans to manage accumulation, storage, disposal, and transportation of waste generated by the construction, and operation of the Project will also result in minimal adverse impact on the surrounding and adjacent areas.



UEC expects that no significant adverse impacts from waste or wastewater will occur on the adjacent or surrounding areas, and accordingly, no monitoring program is proposed. Waste minimization activities will be maintained.

## 9.0 HAZARDOUS WASTE

Hazardous waste management is addressed in detail in Exhibit G, which is incorporated by reference here. The Exhibit G discussions are summarized below:

- » Exhibit G, Table G-3a and Table G-3b provides the identities and estimated quantities of the explosives and hazardous materials that will be used on the Project.
- » As discussed in more detail in Exhibit G, Section 3.3, hazardous materials will be segregated when stored within the multi-use areas. Hazardous materials will be stored in approved containers and clearly labeled. The construction contractor will maintain an inventory of all hazardous materials used and corresponding safety data sheets (SDS). The construction contractor will maintain copies of the required SDSs for each hazardous chemical, and will ensure they are readily accessible during each work shift, to all employees when they are in their work areas. SDSs will also be kept in service and refueling vehicles. The SDSs will provide basic emergency response information for small and large releases of each hazardous material. If bulk hazardous materials are used, the Emergency Response Guidebook, produced by the United States Department of Transportation, also will be used to prepare for emergencies.
- » UEC and construction contractors will minimize the amount of hazardous materials needed for the Project by using alternative nonhazardous substances when available, recycling usable material such as oils, paints, and batteries to the maximum extent feasible, and filtering and reusing solvents and thinners whenever possible. Pesticides and herbicides will be used according to labeling and in accordance with UEC Noxious Weed Plan (Exhibit P1, Attachment P1-5) and applicable regulations.
- » Persons responsible for handling or transporting hazardous materials for the Project will be familiar with State Fire Marshal and ODEQ laws, policies, procedures, and mitigation measures related to handling and transportation.
- » The Project may generate small quantities of hazardous waste. Hazardous waste may include small remnants of hazardous substances remaining in containers. Accidental spills or leaks of motor fuel, vehicle fluids, or chemicals may also result in small quantities of hazardous waste. Hazardous waste spills will be cleaned up promptly. Spill kits containing items such as absorbent pads will be located on equipment and in each multi-use area containing hazardous materials to ensure a quick response to spills. If hazardous spills in excess of reportable quantities, as identified in OAR 340-142-0050, contact the ground surface, ODEQ and the Oregon Department of Energy will be notified, and excavation of contaminated soil initiated. Hazardous materials and cleanup equipment will be stored in approved containers until they can be properly transported and disposed of at an approved treatment, storage, and disposal facility. Hazardous waste will be disposed of by a licensed contractor.
- » The Spill Prevention, Containment, and Countermeasure (SPCC) Plan: UEC does not anticipate that it will need an SPCC Plan for any of its Project facilities or activities during operation. However, to the extent required by ODEQ statutes or regulations, UEC will develop an operations SPCC Plan.

## **10.0 CONCLUSIONS**

Exhibit W includes the application information provided for in OAR 345-021-0010(1)(v). Further, the evidence set forth in this exhibit establishes that in compliance with the Waste Minimization Standard, OAR 345-022-0120(1), UEC solid waste and wastewater plans are likely: (a) to minimize generation of solid waste and wastewater in the construction of the Project, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes; and (b) to result in minimal adverse impact on surrounding and adjacent areas.

## **11.0 COMPLIANCE CROSS-REFERENCES**

Table W-3 identifies the location within the application for site certificate of the information responsive to the application submittal requirements in OAR 345-021-0010(v), the Waste Minimization Standard at OAR 345-022-0120(1), and the relevant Second Amended Project Order provisions.

**TABLE W-3. COMPLIANCE CROSS-REFERENCES**

REQUIREMENT	LOCATION
<b>OAR 345-021-0010(1)(w)</b>	
Exhibit 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 shall include:	
(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.	Exhibit W, Section 3.3
(B) A description of any structures, systems and equipment for management and disposal of solid waste, wastewater and stormwater.	Exhibit W, Section 3.4
(C) A discussion of any actions or restrictions proposed by the applicant to reduce consumptive water use during construction and operation of the facility.	Exhibit W, Section 4.0
(D) The applicant's plans to minimize, recycle or reuse the solid waste and wastewater described in (A).	Exhibit W, Section 5.0
(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.	Exhibit W, Section 6.0
(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.	Exhibit W, Section 7.0
(G) The applicant's proposed monitoring program, if any, for minimization of solid waste and wastewater impacts.	Exhibit W, Section 8.0
<b>OAR 345-022-0120(1)</b>	
(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;	Exhibit W, Section 3.3 and 3.4 and Sections 4.0 through 8.0
(b) The applicant's plans to manage the accumulation, storage, disposal, and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.	Exhibit W, Section 6.0 and Section 7.0

REQUIREMENT	LOCATION
<b>Second Amended Project Order, Section III(v)</b>	
The application shall demonstrate compliance with the applicable standards, including the waste minimization standard and public services standard. Include in the application evidence that identified landfills have the capacity to accept the generated quantities of non- recyclable/non-reusable waste.	Exhibit W, Section 3.4.3,
The applicant shall comply with ODEQ regulations concerning the storage and management of hazardous materials and the clean-up and disposal of hazardous waste. Compliance with the DEQ regulations is independent of the EFSC process. Exhibit W shall include a list of all hazardous materials that would potentially be stored or used at the facility site during construction and operation, and a description of the applicant's plans and programs for storage of hazardous materials and management of hazardous waste. If the applicant proposes any on-site fuel storage during construction, the fuel storage areas and management plan shall be described in detail in the application.	Exhibit W, Section 9.0; and Exhibit G
The proposed facility will entail clearing activities through forested lands. Exhibit W shall contain information on how the applicant will manage or dispose of the debris generated by clearing activities, including brush disposal, as well as excess material from cut and fill.	Exhibit W, Section 3.3.1.1, Section 3.3.3, Section 3.4.1, Section 3.4.2, Section 5.2, and Table W-1

## **12.0 REFERENCES**

Clark County Regional Disposal System. 2015. Solid Waste Management Plan for Finley Buttes and Wasco County Landfill in Eastern Oregon. 2015.