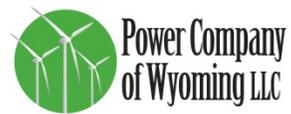


Chokecherry and Sierra Madre Wind Energy Project

Waste Management Plan



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1. Introduction

Power Company of Wyoming LLC (PCW) proposes to construct, operate, maintain and decommission the Chokecherry and Sierra Madre Wind Energy Project (CCSM Project), located in Carbon County, Wyoming. The CCSM Project consists of up to 1,000 wind turbines capable of generating approximately 2,000 to 3,000 megawatts (MW) of clean, renewable wind energy. The primary components of the CCSM Project include the wind turbine generators, an internal road network, a rail facility, a quarry, an internal electrical collection and transmission system, substations, and operations and maintenance buildings.

The CCSM Project is located south of the city of Rawlins, primarily within the bounds of the Overland Trail Ranch (Ranch). The Ranch is owned and operated by PCW affiliate, The Overland Trail Cattle Company LLC (TOTCO). The Ranch is situated within an area of alternating sections of private and federal lands commonly referred to as the “checkerboard.” The vast majority of the private lands are owned by TOTCO and the federal lands are administered by the Bureau of Land Management (BLM) Rawlins Field Office (RFO). A small percentage of the land within the Ranch is owned by the State of Wyoming and is administered by the State Board of Land Commissioners. Finally, Anadarko Land Corporation owns some sections located on the periphery of the northwest boundary of the Ranch.

In 2008, PCW applied to BLM for right-of-way grants to construct, operate, maintain and decommission the CCSM Project on federal land within the CCSM Project Area. On June 29, 2012, the Notice of Availability for the Final EIS concerning the CCSM Project was published in the Federal Register (77 FR 63328). On October 9, 2012 the Secretary of the Interior signed the Record of Decision (ROD). In the ROD, BLM determined that over 200,000 acres within the CCSM Project Area are suitable for wind energy development subject to the requirements described under the Selected Alternative in the ROD. The area that was determined to be suitable for wind energy development consists of two wind development areas (WDAs) in which turbines would be located. The northern WDA is known as Chokecherry and the southern WDA is known as Sierra Madre. The WDAs are located approximately 9 miles apart.

Prior to issuing right-of-way grants for the CCSM Project, BLM will conduct subsequent environmental analysis of site-specific plans of development submitted by PCW. The site-specific plans of development will be screened against the analysis conducted in the EIS and the requirements described under the Selected Alternative in the ROD. PCW anticipates submitting five (5) site-specific plans of development to BLM, consisting of the following:

1. Phase I Haul Road and Facilities
2. West Sinclair Rail Facility
3. Road Rock Quarry
4. Phase I Wind Development
5. Phase II Wind Development (including Phase II Haul Road and Facilities)

Pursuant to requirements of the ROD and the Carbon County Zoning Resolution, as amended, a waste management plan is required for the CCSM Project. This Waste Management Plan (Plan) meets the requirements of Carbon County and the ROD and addresses waste storage, management, minimization and disposal. Categories of materials that will be generated during the CCSM Project include recyclable materials, waste/refuse materials and reusable materials. This Plan will be modified as needed to meet applicable regulations and to address the changing conditions and requirements of the CCSM Project.

1.1 Objectives

The objective of this Plan is to minimize the amount of waste generated by the CCSM Project to the extent practicable. When possible, waste material generated will be recycled, salvaged, re-used or otherwise diverted from direct landfill disposal. Recycling, reusing salvaged building materials and minimizing materials and packaging can reduce waste disposal costs and material expenses. Waste reduction will be achieved through best management practices and recycling or re-use efforts.

PCW and its contractor(s) will be required to follow this Plan for the disposition of the waste generated by their activities. This Plan applies to the construction, operation, maintenance and decommissioning of the CCSM Project.

1.2 Licenses, Permits, Fees, and Taxes

All solid and hazardous wastes related to the construction, operation, maintenance and decommissioning of the CCSM Project will be handled, stored and disposed of in accordance with this Plan and all applicable federal, state, and local laws and regulations. PCW and its contractor(s) will be responsible for any required fees, licenses, permits and taxes.

2. Project Waste Summary

The waste generated by the CCSM Project during construction, operations, maintenance and decommissioning is discussed below.

2.1 Construction

During construction, the CCSM Project will generate municipal solid waste and construction waste from activities such as foundation installation and turbine erection. The amount of waste generated during construction ranges from 9 tons per year (tpy) to a peak of 476 tpy. Annual estimated construction waste is detailed in Attachment A.

2.2 Operations and Maintenance

During operations and maintenance of the CCSM Project, the estimated annual municipal solid waste generation is approximately 60 tpy.

2.3 *Decommissioning*

PCW anticipates recycling as much of the decommissioned CCSM Project components and materials as possible. The options for wind turbine recycling are evolving, and are expected to be very different at the time of decommissioning than they are currently. Many of the wind turbine components and electrical materials have a high scrap value and will therefore be recycled. The current expectations for the recycling or landfilling of major CCSM Project components and materials are summarized below. The Plan will be updated prior to decommissioning to account for the options available at the time of decommissioning.

- **Wind Turbine Nacelles:** Transported to scrap yards where they will be disassembled, with components reused, scrapped, or landfilled.
- **Wind Turbine Blades/Nacelle Covers:** Most likely broken down and either landfilled or recycled depending upon options available at the time of decommissioning.
- **Wind Turbine Towers:** Transported to scrap yards where they will be recycled.
- **Substation Components:** Resold to reuse if possible, otherwise transported to scrap yards where they will be disassembled, with components reused, scrapped, or landfilled.
- **Recovered Aggregate:** Taken to nearby quarries where they will be reused locally.

The amount of waste generated during decommissioning is estimated to be 85,000 tpy over the three year decommissioning schedule for a combined total of approximately 255,000 tons of decommissioning waste.

2.4 *Hazardous Waste*

PCW anticipates that small amounts of hazardous waste may be generated during construction, operations, maintenance and decommissioning of the CCSM project. PCW will review any hazardous materials to be used on-site prior to authorizing their use on the Project and will monitor and limit the quantities of hazardous materials brought on-site to minimize the amount of hazardous waste generated. PCW will develop procedures for the storage, use, transportation, and disposal of hazardous materials as part of the Health and Safety Program prior to introducing the hazardous materials on-site. The procedures will identify all hazardous materials that will be used, stored, or transported on-site and will establish requirements for inspection, storage, inventory control, product substitutions, and disposition of excess materials. The procedures will also identify requirements for notices to emergency response agencies.

3. Waste Minimization

PCW and their contractor(s) will minimize the amount of construction waste and debris disposed of in landfills to the extent possible. PCW and their contractor(s) will be responsible for communication and training of field personnel and subcontractors regarding waste management.

3.1 *Packaging*

All vendors and their suppliers will be encouraged to minimize the packaging for materials and equipment and to identify opportunities for the return of packaging materials for reuse. Packaging materials will be evaluated and their selection will take into consideration opportunities for reuse and recycling.

3.2 *Maintenance and Housekeeping*

Maintenance and housekeeping activities will be evaluated to identify opportunities to minimize the amount of waste and maximize the amount of recyclable material. PCW and their contractor(s) will manage housekeeping and waste management activities to identify opportunities for waste reduction.

3.3 *Materials Storage*

All materials will be stored in a manner to prevent contamination, expiration and deterioration. This ensures that the material will meet the specified requirements and that unused or outside-specification products will not become a waste. Inventory control procedures will be implemented by PCW and its contractor(s) to insure that excess materials are not brought on site.

4. Material Disposition

All waste will be stored within designated temporary waste collection areas until it is collected for transport to an approved landfill. Materials that can be recycled will be stored and transported separately. Used oil will not be mixed with other solid or hazardous waste and will be stored separately within appropriate secondary containment in accordance with all applicable rules and regulations. Any concrete waste will be hauled and disposed of at a permitted site (Attachment B). Sanitary waste will be handled by a licensed sanitary waste vendor or disposed of in a permitted wastewater treatment facility.

4.1 *Recycling*

Recyclable materials for the CCSM Project may include paper, aluminum cans, corrugated cardboard, glass, aerosol cans, wood, plastic, and metals. To the extent local recycling programs are available and can be implemented, these materials will be recycled.

PCW and its contractor(s) will provide containers for waste that is to be recycled. Containers will be clearly labeled as such with a list of acceptable and unacceptable materials and will meet all applicable rules and requirements for the recycling program. Attachment B lists current information for area recycling centers.

4.1.1 Empty Containers

A container that held any chemical or hazardous material, except a substance identified as an acute hazardous waste, is defined as an empty container if: 1) all material has been

appropriately removed by pumping, pouring, or aspirating; and 2) no more than 3% by weight of the total capacity of the container remains in the container.

Containers with a capacity of 25 gallons or less that meet the above criteria may be placed in the appropriate recycling container. Empty containers with a capacity of more than 25 gallons shall be managed separately and marked with the words “Empty Container” until they have been inspected.

4.2 *Salvage and Reuse*

Salvage is the recovery of materials for on-site reuse, off-site sale, or donation to a third party. Reuse is making use of a material without altering its form. Materials can be reused on-site or reused on other projects off-site. To the extent practicable, materials will be salvaged and/or reused to divert them from landfills.

4.3 *Refuse Disposal*

Refuse materials will be removed from the CCSM Project Site on a regular basis. PCW and its contractor(s) will not allow refuse to accumulate on-site for extended periods of time. Refuse materials will be transported off site and legally disposed of. Landfill locations and accepted materials are listed in Attachment B. Burning of refuse material will not be permitted.

5. Training

PCW will implement an Environmental Awareness Program (EAP) for CCSM Project personnel to support compliance with environmental requirements, including waste management. PCW’s EAP will be designed to consistently communicate the CCSM Project requirements to individuals working on the CCSM Project so that both managers and workers understand PCW’s expectations, applicable permit requirements, and how to incorporate them into their daily work activities. All personnel working on the CCSM Project will be required to attend EAP training prior to working on-site, as described in the CCM Project Environmental and Construction Compliance Monitoring Plan. EAP training related to waste management will include general topics such as permit requirements, best management practices, spill prevention and cleanup measures, solid waste disposal, and recycling expectations.

Attachment A. Construction Waste Estimate

Category	TOTAL	2015	2016	2017	2018	2019	2020	2021	2022
PROJECT TOTAL WASTE	1,726.37	8.94	30.70	97.95	447.40	395.41	79.22	354.64	312.11
PROJECT TOTAL CONSTRUCTION W.	1,437.40	0.77	1.83	69.37	396.70	338.04	54.92	309.34	266.43
Road Construction	16.92	0.77	1.83	3.27	2.21	1.63	3.32	2.26	1.63
WTG Foundation	300.00	-	-	47.10	69.30	33.60	51.60	62.40	36.00
Collection System	159.08	-	-	-	35.13	45.47	-	40.50	37.98
WTG Install	710.00	-	-	-	162.59	192.41	-	183.18	171.82
Collection Substation	75.00	-	-	-	30.00	15.00	-	15.00	15.00
Interconnect Station	30.00	-	-	-	30.00	-	-	-	-
Transmission Line	37.39	-	-	-	7.46	19.93	-	6.00	4.00
On-Site Buildings	90.00	-	-	-	60.00	30.00	-	-	-
Rail Facility	19.00	-	-	19.00	-	-	-	-	-
PROJECT TOTAL MSW	288.98	8.18	28.88	28.58	50.70	57.38	24.30	45.30	45.68
General Supervision	288.98	8.18	28.88	28.58	50.70	57.38	24.30	45.30	45.68

SPOD 1 TOTAL WASTE	18.89	4.37	14.15	0.36	-	-	-	-	-
SPOD 1 TOTAL CONSTRUCTION W.	2.76	0.62	1.78	0.36	-	-	-	-	-
Road Construction	2.76	0.62	1.78	0.36	-	-	-	-	-
SPOD 1 TOTAL MSW	16.13	3.75	12.38	-	-	-	-	-	-
General Supervision	16.13	3.75	12.38	-	-	-	-	-	-

SPOD 2 TOTAL WASTE	47.05	2.55	8.03	26.73	4.88	4.88	-	-	-
SPOD 2 TOTAL CONSTRUCTION W.	19.00	-	-	19.00	-	-	-	-	-
Rail Facility	19.00	-	-	19.00	-	-	-	-	-
SPOD 2 TOTAL MSW	28.05	2.55	8.03	7.73	4.88	4.88	-	-	-
General Supervision	28.05	2.55	8.03	7.73	4.88	4.88	-	-	-

SPOD 3 TOTAL WASTE	24.35	2.02	5.83	5.18	6.38	4.95	-	-	-
SPOD 3 TOTAL CONSTRUCTION W.	0.20	0.15	0.05	-	-	-	-	-	-
Road Construction	0.20	0.15	0.05	-	-	-	-	-	-
SPOD 3 TOTAL MSW	24.15	1.88	5.78	5.18	6.38	4.95	-	-	-
General Supervision	24.15	1.88	5.78	5.18	6.38	4.95	-	-	-

SPOD 4 TOTAL WASTE	890.12	-	2.70	65.69	436.15	385.59	-	-	-
SPOD 4 TOTAL CONSTRUCTION W.	784.75	-	-	50.01	396.70	338.04	-	-	-
Road Construction	6.76	-	-	2.91	2.21	1.63	-	-	-
WTG Foundation	150.00	-	-	47.10	69.30	33.60	-	-	-
Collection System	80.60	-	-	-	35.13	45.47	-	-	-
WTG Install	355.00	-	-	-	162.59	192.41	-	-	-
Collection Substation	45.00	-	-	-	30.00	15.00	-	-	-
Interconnect Station	30.00	-	-	-	30.00	-	-	-	-
Transmission Line	27.39	-	-	-	7.46	19.93	-	-	-
On-Site Buildings	90.00	-	-	-	60.00	30.00	-	-	-
SPOD 4 TOTAL MSW	105.38	-	2.70	15.68	39.45	47.55	-	-	-
General Supervision	105.38	-	2.70	15.68	39.45	47.55	-	-	-

SPOD 5 TOTAL WASTE	745.97	-	-	-	-	-	79.22	354.64	312.11
SPOD 5 TOTAL CONSTRUCTION W.	630.69	-	-	-	-	-	54.92	309.34	266.43
Road Construction	7.21	-	-	-	-	-	3.32	2.26	1.63
WTG Foundation	150.00	-	-	-	-	-	51.60	62.40	36.00
Collection System	78.48	-	-	-	-	-	-	40.50	37.98
WTG Install	355.00	-	-	-	-	-	-	183.18	171.82
Collection Substation	30.00	-	-	-	-	-	-	15.00	15.00
Interconnect Station	-	-	-	-	-	-	-	-	-
Transmission Line	10.00	-	-	-	-	-	-	6.00	4.00
On-Site Buildings	-	-	-	-	-	-	-	-	-
SPOD 5 TOTAL MSW	115.28	-	-	-	-	-	24.30	45.30	45.68
General Supervision	115.28	-	-	-	-	-	24.30	45.30	45.68

Attachment B. Waste Facilities

Company Contact & Location	Distance from Project Entrance	Cost per Ton	Construction Materials Accepted?	Contaminated Soils Accepted?	Hazardous Materials Accepted?	Other Items not Accepted? (tires, bulbs, size restrictions)	Recycling at Facility?	Jurisdiction Limits	Current Capacity of Facility
Rawlins Landfill Department 915 3rd Street Rawlins, WY 82301	10 miles	\$60/Ton	Yes	No	No	Yes, extra charges.	Aluminum, cardboard, Plastic #1 and #2	Carbon County	Several Years
Sweetwater Rock Springs Landfill Rock Springs, WY 82901	110 miles	\$55/Ton	Yes	Yes, in small amounts	No	No	Limited, metal, batteries, oil	All of Sweetwater County, western Carbon County, southern Sublette and Fremont Counties	400,000 cubic yards, building additional capacity
Moffat County Municipal Solid Landfill 1850 County Road 107 Craig, CO 81625	118 miles	\$70/Ton (out of state)	Yes	No	No	Yes, extra charges.	No	None, extra charges apply outside of Colorado.	Unidentified
Saratoga Landfill 110 E. Spring Avenue Saratoga, WY 82331	43 miles	\$60/Double axel load	Yes	No	No	Yes	Metal, paper, plastic, glass	District extends from Encampment to I-80. No map is publically available.	2 years
Laramie Landfill 1167 N. 4th Street Laramie, WY 82072	101miles	\$40/Ton	Yes	No	Household Only	Yes	Green waste and metals	Albany County Only	40 years
Cheyenne Landfill 1461 Happy Jack Road Cheyenne, WY 82009	150 miles	\$49/Ton	Yes	Contaminated with gasoline is accepted	No	No bulbs	Wood, metal, pvc, plastics	Southern Laramie Only	Unidentified