

Appendix A

Stormwater Pollution Prevention Plan

Wyoming Department of
Environmental Quality
Template for the
Storm Water Pollution Prevention Plan
(for the Large Construction General Permit)



Print Form

Reset Form

PLEASE READ THIS PRIOR TO COMPLETING THE TEMPLATE. While use of this template is optional, your project SWPPP must follow the format set forth in Part 8.2 of the Large Construction General Permit (LCGP) for storm water discharges. SWPPPs that do not follow the required format will be returned to the applicant and processing will be delayed until a compliant SWPPP is submitted to the WDEQ. This template is intended to assist operators in developing a compliant SWPPP. For your convenience, each section below references the relevant paragraph of the LCGP. If there is any question about what is required for a section, refer to the LCGP for information.

The SWPPP is a site-specific, dynamic plan which, when implemented, will control erosion and sedimentation, prevent storm water contamination and comply with the requirements of the federal Clean Water Act and Chapter 2 of the Wyoming Water Quality Rules and Regulations. It is the permittee's responsibility to ensure all required items in the LCGP are adequately addressed and in compliance with all the requirements of the LCGP.

Project/Site information

WYPDES Authorization Number: WYR10

Project/Site Name:

Project Location - Enter either:
Quarter/Quarter, Section, Township, Range
OR
Street Address and City
OR
Latitude and Longitude

Teckla Substation: 43.56256, -105.367510
Osage Substation: 43.971942, -104.411603
WY/SD Border Crossing: 43.969484, -104.055310
Lange Substation: 44.121069, -103.260250

Weston and Campbell County Wyoming
Pennington County South Dakota

SWPPP Administrator (8.2.1)

Company or Organization:

Name of Individual:

Title:

Phone:

Cell Phone:

Fax:

E-mail:

Narrative Site Description (8.2.2)

A brief description of the nature of the construction activity (8.2.2.1):

Black Hills Power (BHP) is going to construct and operate a 144 mile 230 kV transmission line from northeastern Wyoming to the Rapid City area in South Dakota. It would connect the Teckla Substation in Campbell County, Wyoming to the Osage Substation in Weston County, Wyoming and the Lange Substation located in Pennington County near Rapid City, South Dakota. This transmission line is being developed to strengthen the transmission network, improve transmission system reliability, and to help meet future demand for electricity and economic development in the region.

Proposed sequence of major activities including an estimated completion date (8.2.2.2)

The construction of the 230 kV line would follow the sequence of: 1) centerline surveyed and staked; 2) environmental clearance surveys; 3) identifying and constructing access roads; 4) work areas cleared as needed; 5) materials distributed along centerline; 6) pole holes and/or foundations installed, and poles framed and erected; 7) clearing of pulling, tensioning, and splicing sites; 8) OPGW ground wire or static wire and phase conductors installed; and 9) the site would be cleaned-up and reclaimed. Various phases of construction may occur at different locations throughout the construction process. This may require several crews operating at the same time at different locations.

Expected completion date for the activity is December 1, 2016, however could be extended later based on delays related to final regulatory approvals, weather delays, and wildlife considerations.

It is anticipated that the project will occur in three Phases.

1. Teckla Substation to Osage Substation
2. Osage Substation to WY/SD border
3. SD border to Lange Substation

An estimate of the total area of the project site (8.2.2.3):

Including ROW and Support Facilities = 3,244 acres

An estimate of the area expected to undergo clearing, excavation or grading, including off-site materials sources, access roads, areas for support activities and staging/storage areas (8.2.2.3) Note that areas included under a separate WYPDES storm water permit authorization do not need to be included here:

42 acres (33 WY, 9 SD)

Describe storm water discharges from support activities dedicated to the construction site (and permitted under the construction site LCGP) including, but not limited to, off-site materials borrow areas, concrete or asphalt batch plants, equipment staging yards, material storage areas and access roads constructed for the project (8.2.2.4):

6 material staging areas (2 South Dakota, 4 Wyoming) will be developed as part of the project. These areas will consist of material laydown yards only, no ground disturbance. Access to the right of way (ROW) will be accomplished using established roads and overland travel in an around the ROW. There will be minimal roads construction to access the ROW. The SWPPP site maps will be modified as those roads are built, as needed to access structure locations.

A brief description of the existing vegetation at the site and an estimate of the percent of vegetative ground cover (8.2.2.5):

The 144 mile project traverses through 36.3 miles of the Black Hills National Forest, 4.7 miles of Thunder Basin National Grassland, 2.6 miles of BLM land, 10.3 miles of state of Wyoming land, and 90 miles of private land in SD and WY. Existing vegetation varies by location from rangeland in the western portion north and east of the Teckla substation to the Osage substation. The land east of the Osage substation to the Lange substation crosses the Black Hills National Forest. Percent estimates of existing native ground cover vary significantly from perhaps 20% to 100%, depending on the geographic locations. For the SD portion, soil types fall within the Stovho-Trebor Complex (STC) and the Pactola Rock Outcrop-Virkula Complex. The STC is well drained, silty soils formed from weathered limestone and sandstone. The PRO-VC are well drained loamy soils from weathered metamorphic rock.

Provide the location and a description of any other potential pollution sources including, but not limited to, vehicle fueling, equipment maintenance, storage of fertilizers, chemicals or paint (8.2.2.6):

Other than sediment from disturbed areas, any other potential pollutant sources will have appropriate BMPs installed. Fueling of equipment will be performed by mobile refueling trucks. Any chemicals needed for the project will be stored in appropriate containers and within enclosed trailers on the identified laydown areas.

Provide the name of drainages or other surface water(s) of the state that may receive a storm water discharge from the construction activity. Identify the size, type and location of any outfall.

- Where a discharge is to an unnamed drainage, provide the name of the first named drainage within 1000 feet downstream of the discharge. If there is no named drainage within 1000 feet, indicate unnamed drainage.
- If the discharge is to a municipal separate storm sewer, indicate the owner of the system, the location of the storm sewer outfall and the name of the receiving water.
- If more space is needed, attach additional sheets (8.2.2.7).

There will be no discrete outfalls for discharge of stormwater from this project. The expected surface waters receiving stormwater discharge from this project include:

Several unnamed drainages. Named creeks in WY include: Porcupine, Black Thunder, Iron, Skull, Poison, Oil, Salt, Turner, Beaver, Sheep Canyon, Buffalo, Hay, and Lone Tree. Named creeks in SD include: Dutchman, Castle, Horse, and Rapid.



Identify any receiving water(s) that is listed on the state's most recent 303(d) report as impaired due to, or has an approved TMDL for, sediment, suspended solids or turbidity that is: 1) within 2000 feet of the construction site and that may receive runoff from the construction site or; 2) will receive construction site storm water discharges that enter a storm sewer system regardless of the distance from the receiving water. See 3.5.11 for additional information. (8.2.2.8)

There are no receiving waters in WY within 2000ft of the project area that are listed on the state's 303(d) report. One creek, Castle Creek (SD), is listed on the SD 303(d) report. The proposed project crosses Dutchman Creek, which is a tributary of Castle Creek.

Site Map(s) (8.2.3)

Attach one (or more) map(s) that provide, at a minimum, the following information. The map(s) should be prepared so that all of the required information is clearly displayed and it is clear what BMPs will be installed in each major stage of construction, including the time between the cessation of active construction and final stabilization. Provide multiple maps as necessary to clearly describe BMP timing and placement. The scale of the map(s) must be sufficient to identify the location of all the items listed below:

1. Preconstruction topography and location of surface waters of the state
2. Construction site boundaries.
3. All areas of soil disturbance and areas that are to remain undisturbed.
4. The location of surface waters of the state including any unnamed drainages.
5. Areas used for storage of building materials, soils, wastes, fuel, and concrete washout areas.
6. Locations of all existing or planned temporary or permanent erosion and sedimentation controls.
7. Locations of all other structural and non-structural best management practices for pollutants other than sediment, including but not limited to, fueling/maintenance areas and concrete washout disposal areas.
8. Site topography or storm water drainage patterns including lines showing boundaries between different drainage areas in the project area(s).
9. Areas where dedicated support activities (e.g. operations producing earthen materials such as sand and gravel, staging areas, portable asphalt or concrete batch plants) occur and are to be covered under the same general permit authorization. **Include all the same information requested in this section on these off site maps.**
10. Storm water discharge locations. Include discharge locations for offsite operations covered under this permit.
11. North Arrow. Include a legend where needed for clarity.

Best Management Practices (8.2.4)

At a minimum, structural storm water best management practices (BMPs) are expected to withstand and function properly during precipitation events up to, and including, a 2-year, 24-hour storm event. Visible and measurable erosion (see Part 7.4 of the LCGP) that leaves the site from such storm events should be minimal. The 2-year, 24-hour event in Wyoming ranges from 0.8 to 2.6 inches. An isopluvial map of the 2-year, 24-hour storm depth for the state of Wyoming is available on the WDEQ storm water website. Permittees may substitute equivalent data published by the local municipality or regulatory agency.

The plan shall clearly describe the relationship between the stages of construction and the implementation and maintenance of controls and measures. For example, which controls will be implemented during each stage of construction, such as, clearing and grubbing necessary for perimeter controls, initiation of perimeter controls, remaining clearing and grading, road grading, storm drain installation, final grading, stabilization and removal of control measures.

The description of controls shall address the following minimum components. If the space provided below is inadequate, please attach additional sheets.

Erosion Prevention BMPs (8.2.4.1a). Clearly describe in detail the storm water erosion control BMPs that will be used at each major stage of construction. Indicate the location of the described measures on the site map(s) as required above. Examples of erosion control BMPs include, but are not limited to, preserving existing vegetation, scheduling (i.e., minimizing site disturbance at a given time), surface roughening, temporary and permanent seeding or planting, soil binders or tackifiers, erosion control blankets/mats, wind erosion control, storm water diversion practices upslope of a construction site, pipe slope drains and outlet protection.

Due to the large project area, certain installed BMPs are going to be field fit as the project progresses based on site conditions. However, several control practices will be implemented project wide to prevent erosion. Project disturbances will be scheduled, areas will only be open when construction is expected to occur in the immediate future. Existing access roads will be utilized to the greatest extent practicable and will be improved when necessary. Existing vegetation within the ROW will only be disturbed to the extent required to facilitate construction, primarily at the base of each structure, and therefore will serve as one of the primary BMPs utilized. All areas that are disturbed will be surface roughened to minimize erosion from precipitation and runoff.

Sediment Control BMPs (8.2.4.1b). Clearly describe in detail the sediment controls that will be used at each major stage of construction. Indicate the location of these BMPs on the required site map(s). Examples of sediment control BMPs include, but are not limited to, sediment barriers (such as straw bales, gravel/rock berms, silt fences, fiber rolls and wattles), undercut lots where curb and gutter is installed, exit tracking controls, vegetated buffer strips, grassed waterways, water bars and water wings.

Due to the large project area, certain installed BMPs are going to be field fit as the project progresses based on site conditions. However, several control practices will be implemented project wide to prevent erosion. Vegetated buffer zones will be utilized to the greatest extent practicable. In areas of more concentrated flow, rock berms, or brush berms may be used to catch sediment and to slow erosive runoff velocities. Water bars may be used on access roads. If temporary controls are needed for sediment, straw or compost wattles will be utilized.

Stabilization Measures (8.2.4.1c). Describe temporary or permanent stabilization measures (which include, but are not limited to, cover crop plantings, mulching, rolled erosion control products or surface roughening). Refer to the permit at Part 7.14 for additional information. Please note that implementation of stabilization measures is required in areas where further clearing, grading, excavating or other earth disturbing activities have permanently ceased or temporarily ceased and are not expected to resume for more than 14 days. See the permit at part 7.14 for further discussion and limited exceptions.

Temporary and permanent stabilization practices will be implemented within 14 days of termination of active construction. Temporary stabilization practices implemented on the project will include surface roughening on disturbed areas. For vertical areas, slope tracking may also be utilized. When construction is complete in an area, and weather conditions allow, temporary stabilized areas will be finally stabilized and seeded. Appropriate native forbs and grasses will be utilized for revegetation efforts, as recommended by local authorities.

Construction site dewatering (8.4.4.2) Describe the specific BMPs that will be used for discharges from construction site dewatering. Discharges must meet the conditions specified in Part 7.13 of the LCGP including the use of appropriate settling or filtering techniques and the use of velocity dissipation devices at the outlet. This section addresses accumulated storm water only. Discharge of ground water is subject to another WYPDES discharge permit for wastewater.

Construction site dewatering is not anticipated for this project. If dewatering is later discovered to be needed, the appropriate permitting and BMPs will be implemented. The SWPPP will also be updated accordingly.

Operational Controls (8.2.4.3)

Good Housekeeping (8.2.4.3a). Describe in detail the good housekeeping BMPs/procedures that will be implemented to maintain a clean and orderly facility. At a minimum, this section shall address litter, debris, chemicals, fertilizers and sanitary waste. Also include measures to remove sediment that has left the construction site.

Contractors will utilize dumpsters for the disposal of solid wastes. Any chemicals or fertilizers for the project will be stored under cover to prevent contamination of stormwater runoff. It is likely that portable toilets will be required for various locations on the project area. If this occurs, all sanitary facilities will be appropriately sited and contained to prevent stormwater contamination. 3rd party contractors will be utilized to dispose of sanitary wastes in accordance with all state and federal regulations.

Regarding sediment, any sediment that has left the project site and poses potential to impact surface water resources will be excavated and replaced on site and stabilized to prevent further erosion. Routine inspections will document and problem areas and identify corrective actions needed.

Bulk Storage of Petroleum Products (8.2.4.3b). Describe in detail the specific practices that will be used for storage of bulk petroleum products. Include spill handling procedures. Those sites that are covered by and in compliance with other relevant plans (such as a Spill Prevention Control and Countermeasure (SPCC) plan) may reference that plan below as fulfillment of this requirement. See the permit for more information.

If bulk storage of petroleum products is required, where practicable, it will be stored under cover in a job trailer. Larger quantities of petroleum exceeding 55 gallons will be stored in secondary containment with adequate freeboard for precipitation. Any areas of petroleum storage will be identified in the SWPPP site maps.

Petroleum spills exceeding 25 gallons outside of containment, chemical spills exceeding 5 gallons, OR any oil or chemical spill that reaches a water of the state, will be immediately reported to the project manager Mark Carda at (605) 390-2181 and the BHP Environmental Manager Mike Pogany at (605) 390-3657. The environmental manager will institute spill response reporting requirements as outlined in the BHP Emergency Response Matrix.

Concrete Washout and other Related Waste (8.2.4.3c). Clearly describe the specific practices that will be used to contain concrete wash waters. Where applicable, management of concrete grindings and slurry must also be described. Include relevant operations at portable concrete batch plants that are covered under the same authorization as the construction activity.

In places where concrete will be used, trucks will direct concrete washout into shallow depressions in the permanent disturbance area at the structure and the hardened concrete will be incorporated into the backfill for the structure. In no case will concrete washout be allowed to enter a water of the state.

Employee Training (8.2.4.3e). Describe your training program to inform personnel of their responsibility in implementing the practices and controls in the SWPPP, including, but not limited to, spill response, good housekeeping and sediment control.

Training will be provided to BHP and contractor staff regarding stormwater permitting and SWPPP requirements at the initiation of the project activities at the preconstruction meeting. Training will include company expectations for site conditions, BMP maintenance, housekeeping and inspections.

Maintenance (8.2.5)

Maintenance. Describe the schedule, intervals or conditions upon which BMPs described in the SWPPP will be maintained. Each type of structural BMP (e.g., wattles, silt fence, rolled erosion control products, basins/ponds, etc.) described in the SWPPP should be addressed. Please note that BMPs found to be in need of maintenance must be repaired, maintained or replaced in accordance with Appendix C, Part 2.

All BMPs will be maintained in effective operating condition. Maintenance will be performed on all installed BMPs when sediment accumulation reaches 1/3 (WY) or 1/2 (SD) of the capacity of the device or as recommended by manufacturer's recommendations. On areas of active construction, the repairs will be made within 24 hours (WY) or within 7 days (SD) of discovery and as field conditions allow access. On areas of the project that are inactive, repairs will be made within 14 days.

Inspections (8.2.6)

Inspection Schedule. Describe an inspection program and schedule that meets the requirements of the LCGP, Part 9.

The Wyoming portion of the project under active construction will be inspected once per week, by the construction inspector, or his designee. The South Dakota portion of the project will be inspected at least weekly and within 24 hours of a 0.5" storm event. Weekly inspections will be emailed to the SWPPP administrator for filing and initiation of corrective actions when needed.

SWPPP Certification (8.2.7):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In addition, I certify that I am aware of the terms and conditions of the large construction general permit and I agree to comply with those requirements.

IVAN VANCAS

Vice President, Operations Services

Printed Name of Person Signing

Title



Ivan Vancas

8/10/15

605 721 1428

Signature

Date

Telephone

Authorized signatories for this notice of intent are the following. Please note that the permittee may authorize other parties to SWPPPs and inspection reports as described in the permit at Part 10.7:

For corporations:	A principal executive officer of at least the level of vice president, or the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the overall operation of the facility from which the discharge originates.
For partnerships:	A general partner.
For a sole proprietorship:	The proprietor.
For a municipal, state, federal or other public facility:	Either a principal executive officer or ranking elected official.