

Appendix B7
Erosion, Dust Control, and Air Quality Plan

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Acronyms and Abbreviations

BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CIC	Compliance Inspection Contractor
CWA	Clean Water Act
IDEQ	Idaho Department of Environmental Quality
ODEQ	Oregon Department of Environmental Quality
POD	Plan of Development
Project	Boardman to Hemingway Transmission Line Project
U.S.	United States
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFS	United States Forest Service

APPENDIX B7 – EROSION, DUST CONTROL, AND AIR QUALITY PLAN

B7.1 Introduction

This Erosion, Dust Control, and Air Quality Plan addresses regulatory compliance, environmental concerns, mitigation recommendations, and monitoring requirements necessary to ensure that impacts associated with construction activities are minimized as they relate to soil conservation and air quality.

B7.1.1 Plan Updates

This plan will support the National Environmental Policy Act Plan of Development (POD) sufficiently to complete and execute the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) Records of Decision. This plan will be updated and refined through the development of the POD, as detailed engineering design of the Boardman to Hemingway Transmission Line Project (Project) is completed, to meet any stipulations of the Records of Decision and BLM right-of-way grant and USFS special-use authorization before the issuance of the Notice(s) to Proceed and commencement of construction. Idaho Power Company will be responsible for updating the Erosion, Dust Control, and Air Quality Plan for the construction POD and the Construction Contractor(s) will be responsible for implementing the Erosion, Dust Control, and Air Quality Plan and construction POD.

B7.2 Purpose

This plan provides measures to be utilized by the BLM, Compliance Inspection Contractor (CIC), and the Construction Contractor to ensure protection of the soils and air quality that will be affected by the Project. This plan is to be implemented during the construction, operation, and maintenance phases of the Project. These measures are intended to 1) address soil erosion and sedimentation, and 2) minimize dust and air emissions from construction-related activities. This document provides a template for the detailed Final Dust Control and Air Quality Plan to be developed by the Construction Contractor.

B7.3 Regulatory Compliance

Construction, operation, and maintenance activities for the Project are subject to various regulations designed to protect environmental resources and the public from erosion, dust, and other possible effects to air quality. The following permits and documents contain requirements for preventing accelerated erosion and minimizing dust and air emissions. Refer to these documents, along with this plan, when assessing which mitigation measures are appropriate for a specific area. At a minimum, Idaho Power Company and the Construction Contractor will need to adhere to or obtain the following permits.

B7.3.1 Federal Permits

- BLM – Right-of-way grant and temporary use permit: Federal Land Policy and Management Act of 1976 (Public Law 94-579); 43 United States Code (U.S.C.) 1761-1771; 43 Code of Federal Regulations (CFR) 2800
- U.S. Forest Service Special Use Authorization for Right-of-Way. 16 USC 4601–6a, 4601–6d, 472, 551, 580d, 1134, 3210; 36 CFR 251, 261
- U.S. Army Corps of Engineers (USACE) – Clean Water Act (CWA), Section 401: CWA (33 U.S.C. 1344)

- U.S. Environmental Protection Agency National Pollutant Discharge Elimination System Construction General Permit

B7.3.2 State Permits

- Oregon Department of Environmental Quality (ODEQ) – Air Quality Division Construction Permit to control fugitive dust emissions during construction.
- ODEQ – Sections 401, 402, and 404, CWA, Water Quality Certification (State implementation of the USACE permits for air quality and stormwater discharges).
- Idaho Department of Environmental Quality (IDEQ) – Fugitive dust control plan for construction projects.
- IDEQ – State implementation of the USACE CWA Section 401, 402, and 404 permits.

B7.3.3 Local Permits

- County conditional use permits, temporary use permits for staging areas, road crossing permits and/or encroachment permits. May have erosion or air quality considerations. Requirements vary by county.

B7.4 Environmental Concerns

B7.4.1 Soil Conservation and Erosion

Soil conservation for the Project includes minimizing impacts that will affect soils from the construction and operation of the proposed transmission line, such as minimizing wind and water erosion, soil compaction, surface disturbance, and construction activities in wet soils. Prior to ground disturbance, geotechnical studies have been conducted and a report for affected areas has been prepared to provide more specific detail/measures regarding soil conservation for the Project.

Erosion potential is the result of several factors including slope, vegetation cover, climate, and the physical and chemical characteristics of the soil. Increased soil erosion may occur when vegetation is removed during construction, or in areas where the surface is disturbed by heavy equipment. Increased water erosion often occurs during high-intensity or long-duration rainstorms and may reduce the productivity of the soil as well as affect water quality of streams by accelerating sediment loading. Wind is also an erosion factor throughout portions of the Project areas. Soil compaction could also be a concern if there is repeated traffic use on sections of access roads.

Where disturbance is anticipated in areas of steep terrain with high potential for erosion; vegetation clearing and grading will be conducted in a manner to minimize these effects. Soil stabilization and reclamation practices will also be implemented to reduce erosion. In select locations, helicopter construction may be used to further reduce these impacts. In areas of soil compaction (e.g., temporary access roads) soil treatment and reclamation will be implemented as directed in Appendix D – Framework Reclamation Plan. In these areas, care should be taken to avoid any installed grounding or counterpoise.

B7.4.2 Air Quality and Dust Control

Construction of the transmission line and related facilities will cause a temporary and minimal increase in fugitive dust. Ambient levels of nitrogen oxides, hydrocarbons, and carbon monoxide near the construction zone will also be temporarily increased due to emissions from heavy construction equipment. Related facilities will cause a minimal increase in fugitive dust.

Air quality control measures are intended to minimize fugitive dust and air emissions and to maintain conditions as free from air pollution where practical. All requirements of those entities having jurisdiction

over air quality matters will be adhered to, and any permits needed for construction activities will be obtained. The Construction Contractor will not proceed with any construction activities without taking reasonable precautions to prevent excessive particulate matter from becoming airborne and creating nuisance conditions.

Excessive exhaust emissions from vehicles and heavy equipment will be prevented by proper maintenance, and no open burning of construction trash or other open fires will be allowed.

Where necessary, water may be used as a BLM-approved dust control method during construction, including the grading of roads or the clearing of land and of the right-of-way, and will be applied on unpaved roads, material stockpiles, and other surfaces, which can create airborne dust. Upon request, BLM may consider application of magnesium chloride (MgCl₂), which would need to be approved by the agency prior to its application. Where application of water is not possible, material stockpiles will be enclosed or covered. In addition, open-bodied trucks transporting materials likely to become airborne will be covered. Earth or other materials that may become airborne will promptly be removed from paved roads. Matting will be used in rock blasting operations to minimize and control dust (see Appendix C6 – Blasting Plan Framework).

B7.5 Mitigation Measures

The mitigation measures described in this section are applicable to Project construction, reclamation, operation, and maintenance. If new disturbances occur during the operation and maintenance phases of the Project, or if erosion control and air quality measures implemented during construction and reclamation are not effectively minimizing accelerated erosion and reducing dust, then the mitigation measures described below will be reviewed and may be reapplied where necessary as directed by the respective federal land-management agencies' Authorized Officers or their designated representatives, the CIC, and Construction Contractor(s).

Several measures may be required to mitigate both particular impacts and/or potential impacts associated with construction activities. The following measures include design features of the Project for environmental protection, selective mitigation measures, and other specific stipulations and methods that will be adhered to during construction on a Project-wide basis.

The following erosion, dust control, and air quality mitigation measures described below include design features of the Project for environmental protection and selective mitigation measures derived from the Final EIS and other specific stipulations and methods.

B7.5.1 Design Features of the Project for Environmental Protection

Applied Project-wide, Project design features for environmental protection have been developed in accordance with federal land-management agencies' standards and will address many of the concerns associated with erosion, dust control, and air quality. Following is a description of design features, which address construction and operation of Project facilities that may affect erosion, dust control, and air quality.

- **Design Feature 5.** The spatial limits of construction activities, including vehicle movement, would be predetermined with activity restricted to and confined within those limits. No paint or permanent discoloring agents indicating survey or construction limits would be applied to rocks, vegetation, structures, fences, etc.
- **Design Feature 6.** In construction areas (e.g., staging areas, material laydown yards, fly yards, and wire pulling/splicing sites) where there is ground disturbance and where recontouring is required, surface reclamation would occur as required by the Reclamation, Revegetation, and Monitoring Plan or the landowner. The method of reclamation may consist of, but not be limited

to, returning disturbed areas to their natural contour, replacement of displaced rocks and boulders in a manner that does not create strong edge conditions, reseeding, installing cross drains for erosion control, placing water bars in permanent roads, use of vertical pitting and mulching used for clearings in sage areas, and filling ditches where they were installed for temporary roads.

All areas disturbed as a part of the construction and/or maintenance of the proposed transmission line would be seeded with a seed mixture appropriate for those areas as identified in the Reclamation, Revegetation, and Monitoring Plan. The federal land-management agency or landowner(s) would approve a seed mixture that is compatible with the affected Ecological Site Description. Seeding methods typically would include drill seeding, where practicable; however, the federal land-management agency or landowner(s) may recommend broadcast seeding as an alternative method in some cases.

In construction areas where disturbing the existing contours is not required, vegetation would be left in place wherever possible, and original contours would be maintained to avoid excessive root damage and allow for resprouting in accordance with the Reclamation, Revegetation, and Monitoring Plan or landowner approval.

- **Design Feature 7.** In work areas where ground-disturbing activities would occur, topsoil would be salvaged and segregated prior to construction, to be redistributed and contoured evenly over the surface of the disturbed area to be removed following completion of construction. The soil surface would be seeded with an agency- or landowner-approved seed mix and left rough to help reduce the potential for erosion and loss of seeded surface as specified in the reclamation plan.
- **Design Feature 8.** Grading would be minimized by driving overland in areas approved in advance by the land-management agency and/or land owner in predesignated work areas (e.g., staging areas, material laydown yards, fly yards, and wire pulling/splicing sites) whenever possible
- **Design Feature 9.** All vehicle movement outside the right-of-way would be restricted to predesignated access, contractor-acquired access, public roads, overland travel routes, or crossings of streams approved in advance by the applicable land-management agency or landowner.
- **Design Feature 10.** To minimize vehicle collisions with wildlife or livestock and reduce amount of dust generated from construction related activities, a speed limit of 25 miles per hour would be employed on Project access routes, unless the applicable land-management agency has designated an alternative speed limit.
- **Design Feature 23.** Open burning of construction trash would not be allowed unless permitted by the appropriate authorities
- **Design Feature 24.** All internal- and external-combustion engines would be operated per 36 CFR 261.52, which requires all such engines to be equipped with a qualified spark arrester that is maintained and not modified.

B7.5.2 Selective Mitigation Measures

The selective mitigation measures to be applied on a site-specific basis to minimize potential adverse effects regarding erosion, dust control, and air quality during construction, operation, and maintenance of the Project are included below. In selective areas, and on a case-by-case basis, the following selective mitigation measures will be implemented by the Construction Contractor(s) (refer to Volume II – POD Map Sets of the POD):

- **Selective Mitigation Measure 1 (Limit Widening of Existing Roads in Areas of Sensitive Soils, Vegetation and/or Stream Crossings).** In areas where soils, vegetation, and/or streams are sensitive to disturbance, existing roads to be used for construction access and/or Project maintenance would not, as much as possible/practicable, be widened or otherwise upgraded except in areas necessary to make existing roads passable and safe.
- **Selective Mitigation Measure 4 (Minimize Slope Cut and Fill for Access and Work Areas).** The alignment of new access roads would follow the landform contours where practicable to minimize ground disturbance and/or reduce scarring (visual contrast) of the landscape.

Modification to the size and/or configuration of the structure work areas facilitated by minor structure design adjustments (e.g., altering leg length) would be used to minimize cut and fill slopes and blend contours with existing topography.

Additionally, soil amendments or mineral emulsions would be applied, or grading techniques such as slope rounding and slope scarification would be used to blend road and structure work area cuts into the landscape in areas of steep terrain where grading is necessary, in rocky areas, or where soil color would create strong landscape contrasts.
- **Selective Mitigation Measure 5 (Minimize Vegetation Clearing for Operational Clearances).** Removal of vegetation in the right-of-way would be minimized to limit disturbance to timber resources, reduce disturbance to agricultural production, reduce visual contrast, and protect sensitive habitat, subject to structure- and conductor-clearance requirements. Trees and other vegetation would be removed selectively (e.g., edge feathering) to blend the edge of the right-of-way into adjacent vegetation patterns, as practicable and appropriate. Refer to EIS Section 2.3.3.2 for more description of vegetation management.
- **Selective Mitigation Measure 11 (Helicopter-assisted Construction).** Helicopter-assisted placement of towers during construction and maintenance may be used where practicable to reduce surface impacts in environmental constraint areas or steep terrain locations.
- **Selective Mitigation Measure 14 (Overland Access).** In addition to using overland travel in work areas, overland access to work areas may be used to reduce resource impacts. The construction contractor would use overland access in areas where no grading would be needed to access work areas. Overland access would consist of drive-and-crush (i.e., vehicular travel to access a site without significantly modifying the landscape, cropping vegetation, or removing soil) and/or clear-and-cut travel (removal of all vegetation while leaving the root crown intact to improve or provide suitable access for equipment). Prior to commencement of work activities, overland access routes would be staked. Routes would be specified in the POD. Use of overland access routes would be restricted based on dry or frozen soil conditions, seasonal weather conditions, and relatively flat terrain.

B7.6 Monitoring Measures

Monitoring of erosion control mitigation measures will continue until reclamation efforts are considered complete and successful, and any potential accelerated erosion and air emissions have been controlled. Project specific monitoring plan will be developed and included with the construction POD.

B7.7 Operation and Maintenance Phase

After construction and reclamation, monitoring the erosion control mitigation measures will continue on an annual basis during the operation and maintenance phase until affected soils have been stabilized. Monitoring should continue until there is no or minimal accelerated erosion or air emissions and until reclamation efforts are considered complete and successful.