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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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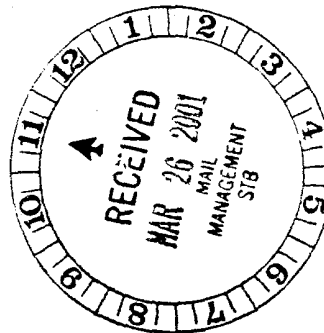
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MAR 20 2001

VIA FAX AND MAIL

Ms. Victoria Rutson, Project Lead
 Section of Environmental Analysis
 Surface Transportation Board
 1925 K Street, NW
 Washington, D.C. 20423

ENVIRONMENTAL DOCUMENT



RE: DM & E Railroad Draft Environmental
 Impact Statement (DEIS) - Surface
 Transportation Board Finance Docket No.
 33407

Dear Ms. Rutson:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, Environmental Protection Agency (EPA) offices of Regions 5 and 8 have reviewed the above-referenced DEIS.

EPA has been an active participant in the extensive Surface Transportation Board (STB) NEPA process since its beginning over two years ago. We appreciate the willingness of the Surface Transportation Board and DM&E Railroad to meet and discuss our questions and concerns. As a result of this cooperation, EPA believes that many of its recommendations in its June 18, 1998 scoping letter have been addressed in the NEPA and Clean Water Act (CWA) Section 404 project documents. We also appreciate the considerable effort the STB has put forth in compiling this document. However, as we expressed to you at our February 22, 2001 meeting, we still have concerns with the alternatives analysis, inadequate information disclosure, water quality issues, wetland impacts, loss of aquatic habitat and water body crossings, mitigation and cumulative impacts.

From our review, we believe that the range of alternatives presented in the DEIS does not include all reasonable alternatives as required in the Council on Environmental Quality's (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR 1502.14). Furthermore for projects that result in the discharge of dredged and fill material into waters of the United States, CWA Section authorization is required through demonstration of compliance with the CWA Section 404(b)(1) Guidelines. These Guidelines require the selection of the least environmentally damaging practicable alternative to satisfy the project purpose. It is our position that the NEPA documentation for this project does not provide adequate information in which the



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decision-makers need to determine what would be the least damaging practicable alternative for the proposed project.

After extensive internal review, EPA has identified a potential alternative which it believes should be analyzed in a revised NEPA document. This alternative, which we described to you in our February 22, 2001 meeting, may reduce the significant impacts of the preferred alternative. This alternative is described in the detailed comments attached to this letter.

The DEIS states that herbicides and soil sterilants will be used along the alignment for weed control. There is no analysis of the potential direct impacts to water quality of streams, ground water, and wetlands. These direct impacts, along with their anticipated indirect impacts, should be analyzed as required in CEQ's NEPA regulations (40 CFR 1502.16).

As previously mentioned, the DEIS does not provide enough information for the public and decision-makers to know whether the least damaging practicable alternative has been selected, so that impacts to aquatic resources have been avoided and minimized. A total of 1,476 stream crossings with 218 major and 1,258 minor stream crossings are identified with the preferred alternative. The DEIS identifies stream bank modification and channelization, changing hydrology, vegetation removal, erosion, increased sedimentation, degraded water quality, and potential loss of habitat for some species as the main impacts expected to streams. Additionally, the DEIS identifies approximately 809 acres of wetlands that are expected to be impacted for the entire project with the preferred alternative.

Significant environmental impacts may result from the large volumes of cut and fill that may be required for the "new construction" portion of this project. However, the DEIS does not provide any information about the expected cut and fill volumes for each alternative, nor does it provide any information on the expected impacts associated with these activities. Without this information it is not possible for the public and the decision-makers to understand the comparative engineering effort required and probable environmental impacts associated with each alternative.

CEQ guidance for NEPA compliance (40 Most Asked Questions Concerning CEQ's NEPA - 40CFR 1500-1508) states that NEPA requires that "reasonable alternative mitigation measures and monitoring programs" should be addressed in the draft and final environmental impact statement. Additionally, NEPA requires the inclusion of mitigation measures either in the alternatives themselves or in the environmental consequences section of the EIS (40 CFR 1502.14 (f) and 1502.16 (h)). The CWA Section 404(b)(1) Guidelines (Guidelines) generally require information on the type mitigation, mitigation plans, monitoring plans, standards for measuring mitigation success, or a contingency plan in case of mitigation failure, information that is lacking in the DEIS in order to make the required Guidelines determination that "appropriate and practicable steps have been taken which will minimize potential impacts" (40 CFR 230.10(d)). Furthermore, there are no mitigation plans identified in any of the project documents for significant impacts to two National Park Class I airsheds, for the cut and fill operations, or for the anticipated impacts to cultural resources. The issue of mitigation is of critical importance

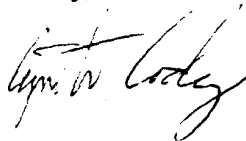
because the cost of environmental mitigation is one of the main criterion the Surface Transportation Board has identified for making its decision about whether this is a viable project. No mitigation cost estimates were presented in the DEIS.

The cumulative impacts of shipping coal to the upper Mississippi River market have not been analyzed. The information in the DEIS is not adequate enough to determine whether all coal shipped to the upper Mississippi River market will go to utilities solely by rail or whether it also will be shipped by barge. If coal is to be shipped via barge, then a cumulative impacts analysis of the effects of delivery of DM&E coal to barges and effects of those deliveries on Mississippi River barge traffic should be analyzed. Delivery of coal to the barges is considered a connected action (40 CFR 1508.25).

Based on our concerns EPA has rated the DEIS preferred alternative EO-2 (Environmental objections, Insufficient information). EPA recommends that the proposed action should not proceed as proposed and that a draft supplement to the DEIS should be issued. The EO indicates that EPA's review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. EPA has identified a new alternative which may be less damaging to the environment. The "2" indicates that the DEIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment and that we have identified a new reasonably available alternative that is within the spectrum of the alternatives analyzed in the DEIS, which could reduce the environmental impacts of the proposal. We likewise are recommending to the Corps of Engineers to hold the permit decision in abeyance on the associated CWA Section 404 permit until the necessary information has been provided. A copy of EPA's rating criteria is enclosed.

Thank you for the opportunity to comment and for coming to Denver to meet with us to discuss these issues. We look forward to working with your office to address our concerns. If you have any questions, please contact Jim Berkley of my staff at (303) 312-7102.

Sincerely,

A handwritten signature in dark ink, appearing to read "Cynthia Cody", written in a cursive style.

Cynthia Cody, Chief
NEPA Unit

Enclosures

EPA's Detailed Comments on the DM&E Railroad Draft EIS

General Comments

Alternatives

The project documents present four main alternatives. These main alternatives also contain sub-alternatives within them. These sub-alternatives consist of bypasses around cities, along the proposed alignment and modified alignments within alternatives. Some of these modified alignments were designed to avoid natural resource features that are of particularly high environmental sensitivity. There is not enough information to determine which of the sub-alternatives is least damaging.

As mentioned in our letter, the project documents do not present a reasonable range of alternatives for the "new construction" portion of the proposed alignment as required by The Council on Environmental Quality's regulations for implementing the procedural provisions of NEPA (40 CFR 1502.14). There is only one practicable alternative presented by the STB in the project documents: alternative "C." The STB also has also presented alternative "D," and as presented in the DEIS is not practicable for three reasons, the travel distance to market is too long for DM&E to preserve its competitive position in all proposed markets. Additionally, the grade and curvature of alternative "D" are too steep and too high, respectively, to meet desired standards set forth in the project documents for coal trains.

EPA has identified an alternative that may be practicable and less damaging for wetlands and aquatic resources than either of the "B" or "C" alternatives. At our February 22, 2001 meeting, EPA suggested that a modified "D" alternative should be presented in the draft supplement. DEIS Figure 2-7 is enclosed and shows the approximate alignment of the "D" alternative we suggested. This alternative would bypass Rapid City to the south and then generally follow the existing DM&E right-of-way between Rapid City and Smithwick, South Dakota. The alignment would be cut and filled to a one (1) percent grade with one (1) degree or less curvature which would meet the grade and curvature requirements for heavy haul coal trains. Once the alignment reached the Smithwick area, it would pick up the proposed alternative "C" alignment and head west toward the Powder River Basin as presented in the preferred alternative. This proposed alternative would preserve DM&E's competitiveness in all markets with respect to "distance to market." Without analysis of this additional alternative it is not possible for the public and decision-makers to know what probable reduced impacts to wetlands, water quality, air quality and other natural resources could possibly be achieved and whether the preferred alternative is the least damaging practicable alternative.

Each alternative needs to have cut and fill calculations provided for comparison of relative engineering effort required for each alternative. Additionally, each alternative should present total costs and the detailed costs of each alternative. In particular, the DEIS does not make clear but, from conversations with DM&E, it is our understanding that all existing rail will be rehabilitated,

including the existing route from Rapid City to Smithwick. This information should be taken into consideration when estimating and presenting the costs for each alternative. This is important, because the public and decision-makers need to understand that DM&E already is planning to spend the money to rehabilitate its existing line between Rapid City and Smithwick, and it may be less costly to implement EPA's proposed version of alternative "D" than DM&E's current proposal to rehabilitate the existing portion between Rapid City and Smithwick and build the Cheyenne River alignment "C."

The project documents do not provide a comparison of the proposed alternatives to the no-action alternative. The draft supplement needs to include this comparison, so the public and decision-maker can understand the difference in environmental impacts among the alternatives.

Finally, as mentioned previously, the CWA 404 (b)(1) Guidelines require the selection of the least environmentally damaging practicable alternative for the project. There is not sufficient information presented in the project documents to make a reasonable judgment as to whether the proposed discharges into waters of the United States comply with the CWA Section 404(b)(1) requirements that the least damaging practicable alternative has been selected. A practicable alternative is defined as one that "is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes" [40 CFR: 230.10 (a)(2)]. The burden of proof is always on the applicant to demonstrate that there are no available practicable alternatives.

Water Quality Impacts

The potential impacts to water quality from all potential alternatives were not completely identified. The use of herbicides and soil sterilants may result in water quality impacts. The project documents do not identify direct or indirect impacts to aquatic resources that may result from the use of these products along the railroad right-of-way for each alternative. Information should be provided in the project documents that identifies the type of herbicide and sterilant that will be used and their characteristics in relation to how they interact with the natural environment (e.g. fate and transport information). We recommend that the draft supplement contain the EPA registration number for the products to be used and a copy of the label for each product in the document. The document also should describe the purpose for the use of the herbicides and sterilants.

There were no cut and fill operations' water quality impacts identified for each alternative. The project documents need to identify the direct and indirect impacts these operations may have on water quality of aquatic resources.

The project documents also should identify impaired waterbodies (as defined in CWA Section 303 (d)) traversed by each alignment, so that appropriate Best Management Practices can be identified to ensure that these impaired water bodies are not further impaired by the project.

Mitigation

The NEPA (40 CFR 1502.16) and CWA 404 (b)(1) Guidelines require identification of environmental impacts and the means to mitigate adverse environmental impacts caused by the each alternative. Additionally, the STB has identified the cost of mitigation as one of the main criterion in deciding whether this project is viable.

General Recommendations for Wetland Mitigation

When selecting potential mitigation sites, we strongly urge DM&E to select former wetland sites that were legally altered (i.e., prior converted cropland) and can be restored to wetland. Restoring former wetlands has a much greater chance of success than trying to create wetlands where none existed previously, and only as a last resort will we consider attempts at wetland creation as acceptable mitigation. DM&E also should consider other factors in the selection process that may influence or enhance success and the functional value of the wetland upon completion of the mitigation effort. These factors include, but are not limited to, adjacency to streams, waterbodies, or other wetlands, basin morphology, landscape position, location in the watershed, and opportunities to combine the mitigation with enhancement, restoration, or preservation efforts by state, local, or private resource agencies.

The conceptual wetland mitigation plans and the list of potential mitigation sites in the project documents provide little specific information on how the applicant will ensure that the mitigation sites will have the inundation or saturation conditions necessary to meet the hydrology criterion of the 1987 Corps of Engineers Wetland Delineation Manual. As site selection progresses, the CWA will require DM&E to provide specific information on means to keep water on the site for the required period of time. These means may include plugging or breaking drain tiles, installing liners or check dams, or diverting water to the site from adjacent areas. However, wetlands should have self-sustaining hydrology as much as possible rather than relying on artificial systems such as irrigation or pumping.

We recommend a mixture of wetland vegetation types similar to the existing mixture of wetland types. This will require the applicant to seed or plant wetland vegetation, to monitor the mitigation site for planting success, and to have replanting plans in case of planting failure. The applicant has not presented detailed plans that include site preparation, plant species selection, planting densities, plans for control of alien or invasive species, or standards for measuring planting success. As site selection progresses, the applicant must provide specific information on specific planting plans to achieve specific wetland vegetation types, measures of success, and corrective measures in the event of not achieving all required measures of success.

All selected mitigation sites must contain easements, deed restrictions, or similar measures to ensure that they will remain jurisdictional waters of the U.S. and not be altered for any purpose.

Environmental Impacts Quantification for Mitigation Estimates

To meet the requirement of identifying and estimating mitigation for each alternative, quantification of environmental impacts associated with each alternative is needed. None of the project documents include this information. The DEIS has not identified the forecasted impacts from stream bank modification and channelization, changing hydrology, vegetation removal, erosion, increased sedimentation, degraded water quality, and potential loss of habitat for some species, loss of cultural resources and cut and fill operations. Without this information, the public, and decision-makers do not know if the environmental impacts are acceptable. The project documents have identified these impacts occurring as a result of selection of particular alternatives, but have not provided estimation of the magnitude of these impacts to the critical resources.

No Mitigation Estimated

Impacts to Wind Cave National Park and Badlands National Park were quantified, but no mitigation was proposed. DM&E, the EPA and the National Park Service (NPS) have been conducting discussions about mitigation for air visibility impacts to the Parks. No formal agreements have been completed thus far. However, in Volume IV, Chapter 7, page 7-23, the document states, "Applicant shall comply with the final recommendations of the Air Quality Working Group, consisting of agencies with appropriate technical expertise which was established for this project, to minimize the impacts of regional haze on Class I airsheds resulting from locomotive emission of Applicant's Powder River Basin coal trains." It further states, "Applicant shall comply with the U.S. Environmental Protection Agency emissions standards for diesel-electric railroad locomotives (40 CFR Part 92) when purchasing and rebuilding locomotives." Because DM&E qualifies as a small business, it is exempt from certain provisions of 40 CFR 92. As stated in EPA fact sheet EPA420-F-99-037, which describes the applicability of 40 CFR 92, "The regulations do not apply to existing locomotives owned by railroads that are classified as small businesses, as defined below, because these locomotives are not considered to be new locomotives when remanufactured." "Line haul railroads with fewer than 1500 employees and switch railroads with fewer than 500 employees are classified as small railroads." Any mitigation agreement should clarify whether DM&E is agreeing to subject itself to regulations from which it would normally be exempt.

Cumulative Impacts

One of the four markets DM&E has targeted for coal delivery is the Upper Mississippi River Market. There appears to be contradictory information about how the coal is to be transported to the utilities in this market. We have been provided with information that all utilities receiving DM&E coal in this market will be received by rail. Conversely, from meetings and conversations with DM&E representatives, coal will be delivered by rail to barges on the Mississippi River and then transported to the utilities. The project documents need to clarify if

delivery will be by rail, barge or both. This information should be supported with a verified statement by a representative of DM&E railroad. If a portion or all of the coal is delivered by barge, then that action would be considered a connected action as defined in NEPA and would need to be included in the cumulative impacts analysis. The analysis should identify impacts associated with the delivery of coal to the barges on the River. The analysis should also contain information on the effects of coal delivery on Mississippi River barge traffic and the direct and indirect impacts associated with that.

Environmental Justice Concerns

The CEQ Guidance (12/97) provides all federal agencies with guidance with regard to determining what constitutes a minority and low-income population. That guidance (page 23) sets forth two thresholds: a) greater than 50% of the population as compared to an appropriate geographic unit of analysis or b) a percentage that is meaningfully greater than an appropriate geographic unit of analysis.

No National EPA EJ guidance exists that provides more specificity. In Region 5, "Region 5 Interim Guidelines for Identifying and Addressing a Potential Environmental Justice (EJ) Case" applies. US EPA Region 8 has employed a four-point framework for considering whether an environmental justice situation exists, which is based on the CEQ Guidance.

Region 8's approach is to examine factors which include the percent minority and the percent low-income within the impacted area, as percentages of the state average. Although a number of criteria can be used, EPA Region 8 has generally used population concentrations of 20% (or greater) (as a percentage of the general population), as a general guideline to determine minority communities, and concentrations of 20% (or greater) above the state average for poverty as a guideline for determining low-income communities.

Region 5's approach to the determination of low income and minority communities is more conservative than Region 8's, so to avoid the use of two approaches in identifying these communities, we recommend the use of Region 5's policy.

Determination of Environmental Justice Communities

EPA recommends basing low income determinations upon a formula that looks at one and one-half (1½) times (Region 5 Interim Guidelines for Identifying and Addressing the Potential Environmental Justice (EJ) Case) the poverty level as the criteria to determine if a community meets the low income definition under the EJ Executive Order. This more inclusive criteria seems to be the level commonly claimed by the scientific community as the level of income needed to maintain an acceptable level of living.

Additionally, the DEIS uses the county as the basis of comparison. Both Region 5 and

Region 8 use the state as the basis of comparison to determine both poverty levels and minority populations in any given EJ determination. Use of a county comparison uses a much smaller area and may cause some areas to look as if they are not an EJ community, when compared to the entire State population to make the determination. The Regions' recommended procedures are to compare the block group with the relevant state percentages and only declare an EJ area if the minority and/or low income percentages are at least one and one-half (1½) (Region 5 Interim Guidelines for Identifying and Addressing the Potential Environmental Justice Case) times the State percentage. This seems to be a more reliable criteria because counties are relatively small areas which often have relatively homogeneous populations. Thus, for example, in an area dominated by an Indian Reservation, it would take an exceptionally high minority percentage to be declared EJ according to the minority population criteria in the DEIS as it is written. In order to minimize the impacts of excessively high State percentages any area which is more than 50% minority and/or low income may be declared potentially an EJ area. Our main point is best summed up by CEQ's Environmental Justice Guidance, "The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population."

Further, numbers are not the only criterion that should be used in determining what area should be considered an EJ area. Demographic indicators can be used also. The NEPA document should describe what indicators were used as (i.e., percent of children or elderly) a part of the analysis. Any disproportionate impacts should be evaluated such as the potential for adverse health or other environmental impacts.

Economic Impacts

Appendix D-5 contains an analysis of the economic impact of building the railroad. These economic impacts should be extended to cover a larger spectrum of human impacts. The impacts to communities along the route for which the distribution of wildlife may be impacted and its significance to local cultures and populations (e.g. Tribes along the route) should be analyzed. Also, reasonable foreseeable increases in industrial development and their impacts on EJ communities along the rail corridor in urban areas as a result of increased freight capacity should be analyzed.

National Historic Preservation Act (NHPA) Concerns

Cultural and Historical Sites

The impacts and possible mitigation of cultural and historical sites are not clearly defined in the DEIS. The DEIS acknowledges that impacts to cultural resources would occur if these project areas are damaged or destroyed during rail line reconstruction. (See 4.3.15 of the DEIS.) However mitigation of these impacts is not discussed.

Tribal Concerns

The DEIS states that actions taken concerning Tribal cultural or historical sites would be in accordance with the Memorandum of Agreement (MOA) and Programmatic Agreement (PA). These documents have not been signed by any Tribes. The draft supplement should discuss how NHPA consultation requirements will be met for Tribes that do not sign either of these agreements.

Additionally, the draft supplement should include information describing how the concerns of Tribes and tribal organizations, that are opposed to the building of the railroad, will be addressed. (See enclosure, Resolution No. 99-18, Resolution of the Oglala Sioux Tribal Council Expressing Total Opposition to Plans of DM&E to Construct a Railroad Across South Dakota), (See also enclosure, Resolution of the Black Hills Sioux Nation Council - - March 25, 1998). Section 106 of the 1966 NHPA, "requires that historic preservation concerns be considered in the Federal Agency's decision making process." Further mitigation measures should be considered.

Non-Indian Concerns

Although project personnel have consulted with the State Historic Preservation Officers (SHPO) in the respective states, additional consultation should be conducted with the full range of interested/affected parties through the NHPA 106 process. The goal of this effort would be to identify all potentially affected properties and to develop measures to avoid or mitigate impacts. Without proper consultation and information gathering it will not be possible to provide the public and decision-makers with the information necessary to understand the anticipated impacts and the mitigation necessary to address those impacts.

Section 106 Guidelines, 36 CFR 800.2 (d) requires involvement of the affected public in the Section 106 consultation process. "The agency official shall seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, the likely interest of the public in the effects on historic properties, confidentiality concerns of private individuals and businesses, and the relationship to the Federal involvement to the undertaking." Additionally, in 36 CFR 800.8 (c)(iii) the guidelines state, "During preparation of the EA or draft EIS (DEIS) the agency official shall: (iii) Consult regarding the effects of the undertaking on historic properties with the SHPO/THPO, Indian tribes, and Native Hawaiian organizations that might attach religious and cultural significance to affected historic properties, other consulting parties, and the Council, where appropriate, during NEPA scoping, environmental analysis, and the preparation of NEPA documents."

Specific Concerns

Aquatic Resources

Wyoming and South Dakota

Below are the detailed comments for the South Dakota and Wyoming portions of the DM&E project. We have subdivided our comments on aquatic resources based on geographic location and focus of concerns. Wyoming and South Dakota are in the more arid west of the United States and also fall within the jurisdictional boundaries of the EPA Denver regional office, while Minnesota is in the more wet and humid region of the midwest and within the jurisdictional boundaries of the EPA Chicago regional office.

For the South Dakota and Wyoming comments we mainly focus on the 265 mile "new construction" portion of the project, which are Alternatives "B", "C", "D" and their associated sub-alternatives.

Alternatives

Alternative "B"

Alternative "B" has been identified to impact 62.1 acres of palustrine wetlands, 16 acres of aquatic bed, 8.7 acres of unconsolidated bottom and 3.7 acres scrub/shrub or forested areas. It crosses 643 streams, creeks and rivers, 790 acres of Buffalo Gap National Grassland, 1,726 acres of Thunder Basin National Grassland and Special Interest Areas and 276 acres of BLM land.

Alternative "C" (Propose Build)

Alternative "C" has been identified by DM&E as the proposed alternative in the CWA Section 404 permit application because it appears to address the purpose and need established in the Section 404 application. However, EPA has several concerns with this alternative. In South Dakota and Wyoming, Alternative "C" impacts 587 acres of wetlands, it crosses 534 drainages, creeks, streams and rivers and its alignment is being proposed for construction within 500 feet of the Cheyenne River in several locations. Allowing railroad alignment construction in such close proximity to the Cheyenne River may result in the need for DM&E to apply to the Corps for bank stabilization and channelization authorizations to protect the railroad bed, as the river meanders across the valley.

Bank stabilization and channelization are known sources of many environmental problems. Bank stabilization usually leads to erosion in areas of the stream that are not stabilized. This usually leads to the eventual need to stabilize more and more of the stream. Channelization and stabilization

destroy habitat and decrease bio-diversity in the riparian system.

Constructing this alternative will cause significant impacts to the existing riparian corridors and wildlife habitat along the Cheyenne River. Along the Cheyenne River, Alternative "C" and its sub-alternatives permit 62.2 acres of wetland impacts, approximately 14 perennial stream crossings and 520 intermittent stream crossings "new construction" portion of the project.

Wetland Delineation and Mitigation

EPA suggests that the mitigation plan be submitted to the resources agencies for review and comment prior to any Section 404 authorizations. In the case that the Section 404 permit is issued, EPA Region 8 will request that DM&E be required to change construction design and wetland mitigation plans during construction as necessary to provide a wetland mitigation area that is environmentally sensitive, functional and beneficial to the aquatic resources.

The EPA recommends that the development of the wetland mitigation plan is done so that site location, preparation and hydrologic functions and values of the impacted wetlands are preserved through the design of the mitigation sites and wetland types. Hydrologic sources for mitigated wetlands should be natural instead of artificial sources (i.e. no Coal Bed Methane production water). We also request that the mitigation sites be constructed to mitigate the chemical, biological and physical characteristics of the impacted wetland.

In the Section 404 permit application (Appendix to Volume III B, pages 15 and 16 and Appendix to Volume IV, page 15), DM&E proposes to mitigate wetland impacts caused by the construction of the new rail line and the rehabilitated existing section. The wetland mitigation ratio for wetland impacts has been described at 2:1 for all wetlands, or two (2) acres of mitigation for each acre of wetland impacted. EPA recommends that the wetland mitigation plan be adjusted to better fit the type and value of the wetland being impacted. Therefore, we recommend that all wetlands in Wyoming and South Dakota, and any currently unanticipated future wetland impacts that are subsequently identified as having a high functional value (HV), be mitigated at a 3:1 ratio. Similarly, wetlands classified as being PFO using the Cowardin system should be mitigated at a 3:1 ratio because of the length of time it takes this type of wetland to reach full functional capacity and the difficult time achieving a satisfactory function and value. The recommended mitigation ratios for South Dakota and Wyoming are higher than some for the same type wetland in Minnesota. Because wetlands are much more rare in occurrence and much more difficult to restore in the arid west, higher mitigation ratios are required.

Presently, EPA has calculated approximately 90 acres of wetlands in Wyoming and South Dakota as having a high functional value, raising the mitigation acres for these particular wetlands to 270 acres of high functional value and 62 acres being classified as palustrine forested wetlands (PFO), raising the mitigation acres to 186 acres classified as PFO. All other impacted wetlands should be mitigated as suggested by the applicant at a 2:1 ratio. We recommend that all wetland mitigation be performed within the state and drainage in which it occurs. We also recommend that

all wetland mitigation be constructed in the acreages and Cowardin Types identified below.

South Dakota	Wyoming
PEM 398 - 87 HV=311 X 2.0 = 622 ac.	12 - 3 HV= 9 X 2.0 =18.0 ac.
PFO 62 X 3.0 = 186.0 ac.	0.0
PSS 13 X 2.0 = 26.0 ac.	0.6 X 2.0 =01.2 ac
PUB 03 X 2.0 = 06.0 ac.	03 X 2.0 = 06.0 ac.
PUS 01 X 2.0 = 02.0 ac.	02 X 2.0 = 04.0 ac.
L, R 22 X 2.0 = 44.0 ac.	20 X 2.0 = 40.0 ac.
Wetland Acronym Definitions PEM - Palustrine Emergent; PFO - Palustrine Forested; PSS - Palustrine Scrub Shrub; PUS - Palustrine Unconsolidated Shore; L - Lacustrine; R - Riverine; HV - High Value	

Ground Water Protection

EPA is concerned about the potential impacts to ground water that may result from construction or maintenance of rail yards that are located over sensitive aquifers or within "wellhead or sourcewater protection areas." Therefore, we recommend DM&E coordinate with local and state water resource and environmental agencies when determining the actual locations of rail yards. It is necessary to ensure that the proposed sites are compatible with Federal, state and local requirements that govern the use of land within wellhead and "sourcewater protection areas." In particular, EPA is concerned about the sensitivity of the Big Sioux aquifer in eastern South Dakota. This regional aquifer is a critical water supply for agricultural and public water supply systems.

The ground water protection plan should include preventive measures that will be employed by DM&E to prevent ground water and surface water contamination. All rail yards should be required to incorporate Best Management Practices (BMP) in and around the yards to reduce the potential of ground water and surface water contamination. Information on ground water table effects due to construction should be presented the next set of project documents. Ground water table fluctuations can greatly affect the viability of wetland complexes.

Inadequate Information

Because this project has the potential to destroy or adversely affect 587 acres of wetlands in South Dakota and Wyoming, we must have assurance that these impacts will be avoided, minimized and mitigated to the maximum extent possible. Based on the uncertainty that the applicant has selected the least damaging alternatives in all cases and the apparent absence of commitments to specific acreage and types of mitigation, the necessary assurances do not currently exist.

The following information deficiencies need to be addressed. We recommend no issuance of permits until the concerns listed below are addressed.

- Further discussion on alternative alignments as disclosed in this letter
- Revising jurisdictional crossings
- Revising BMPs (wood mats used in place of earthen fill for work platforms)
- Identification of additional temporary and permanent wetland impacts
- Revision of wetland mitigation ratios and types
- Identification of open water impacts
- Identification of wetland mitigation site selections
- Identification/development of wetland mitigation plans
- Identification of TMDL waters/watersheds and mitigative measures
- Locating the rail yards and their impacts to surface and ground water

Minnesota

Below are the detailed comments for the Minnesota aquatic resources portion of the DM&E project.

Alternatives

The information presented in the project documents for alternatives through and around Mankato, Owatonna and Rochester, Minnesota does not contain adequate information to determine whether the least environmentally damaging practicable alternative has been selected as required in 40 CFR 230.10(a). According to the DEIS, the Middle East Staging and Marshaling Yard Option B would destroy approximately 10.5 more acres of wetland and 109.4 more acres of prime farmland than would Option A. However, Option A would claim 116.4 acres of land identified for potential acquisition for Minneopa State Park. DM&E has selected Option B as the preferred alternative. From a point of impacts to wetlands, Option A is the practicable alternative that is less damaging to the aquatic ecosystem. Therefore, to comply with the CWA and to pursue Option B, DM&E will need to provide additional information to indicate that Option A is not practicable or that Option B is less damaging to the aquatic ecosystem.

Wetland Delineation and Mitigation

The Section 404(b)(1) Guidelines state that “no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem (40CFR 230.10(d)). Therefore, it is important that the applicant provide an accurate estimate of total wetland acreage impacted in order to determine the total impacts to wetland functions and values, and thus the total amount and type of mitigation required. The DEIS indicated that 187.8 acres of wetland would be impacted, but the appendix to Volume 2 and the Corps public notice indicated that 240 acres of wetland will be impacted.

Furthermore, additional medium value wetland impact acreage should be added to DM&E's totals that were provided in the Section 404 permit application. The information originally provided was:

High	78 acres
Medium	105 acres
Low	48 acres
Not rated	10 acres
Total	241 acres

We understand that the 10 acres of Lacustrine or Riverine wetland were not rated. However, the loss of these water bodies must be mitigated as well as that of the vegetated wetlands. Assuming that they are of neither high nor low value, we recommend that they be given a value of Medium, thus increasing the total of medium value wetlands to 115 acres, but not changing the total acreage of wetlands and waterbodies to be mitigated.

Consistent with our previous recommendations for mitigating wetland losses in Minnesota, where wetlands are more common than in South Dakota or Wyoming, we recommended in our letter of January 3, 2001 to the St. Paul District of the U.S. Army Corps of Engineers an absolute minimum of 1.5 acres of mitigation for each acre of wetland impacted. However, we recommended a mitigation ratio of at least 2:1 for the 78 acres of wetlands rated as high value as well as any PFO wetlands that were not included in the 78 acres rated as high value. Mitigating a minimum of 78 acres at 2:1 will require a minimum of 156 acres of mitigation, and mitigating the remaining 162 acres at 1.5:1 will require 243 acres of mitigation, for a minimum total of 399 acres, at a ratio of at least 1.66:1.

U.S. EPA Region 8 has recommended a ratio of 2:1 for wetlands in South Dakota and Wyoming. Consistent with our Regional goals of no net loss of wetland acreage, function, or value, we would not object to an overall mitigation ratio of 2:1. In addition, if it is the policy or the recommendation of the State of Minnesota to require a higher mitigation ratio for some or all of the impacted wetlands, we defer to that ratio.

Inadequate Information

Review of the DEIS indicates that adverse impacts to the aquatic ecosystem in Minnesota could occur in protected waters such as Garvin Brook, Rollingstone Creek, and streams in western Minnesota that may be habitat for the Federally endangered Topeka shiner. We recommend that DM&E include the conditions and recommendations of the U.S. Fish and Wildlife Service and the Minnesota Department of Natural Resources regarding the protection of these areas in their Best Management Practices.

Because this project has the potential to destroy or adversely affect 240 acres of wetlands

in Minnesota, we must have assurance that these impacts will be avoided, minimized and mitigated to the maximum extent possible. Based on the uncertainty that the applicant has selected the least damaging alternatives in all cases and the apparent absence of commitments to specific acreage and types of mitigation, the necessary assurances do not currently exist. DM&E needs to provide additional information before we can conclude that the project will comply with the Section 404(b)(1) Guidelines. In the absence of sufficient information to make such a determination, Section 230.12(a)(3)(iv) requires the Corps to specify the project as failing to comply with the Guidelines. We recommend no issuance of permits until the concerns listed below are addressed.

- Selection of final route from among the alternatives:
 - Mankato
 - Mankato Staging Area
 - Owatonna
 - Rochester
- Identification of TMDL waters/watersheds and mitigative measures
- Identification of Best Management Practices for protected waters and endangered species
- Identification of additional temporary or permanent impacts to wetlands
- Identification of wetland mitigation ratios and types
- Identification of wetland mitigation site selection, plans, and monitoring

Air Quality

The Air Quality Technical report for the DEIS projects that the cumulative visibility impacts to Badlands National Park and Wind Cave National Park will be significant. The impacts expected from this project are from the train locomotive exhaust. The alternative scenarios modeled with existing locomotive technology in place were at the 20 million tons of coal hauled per year (MNT), the 50 MNT and the 100 MNT level. Results for Badlands National Park were 0 days, 15 days and 22 days of impairment per year at 10% extinction, respectively. Wind Cave results were 0 days, 28 days and 32 day of impairment per year at 10% extinction, respectively. Results for Badlands National Park were 0 days, 52 days and 57 days of impairment per year at 5% extinction, respectively. Wind Cave results were 0 days, 79 days and 84 days of impairment per year at 5% extinction, respectively.

Incremental air quality visibility impacts to Badlands National Park and Wind Cave National Park will be also be significant. The alternative scenarios modeled with existing locomotive technology in place were at the 20 million tons of coal hauled per year (MNT), the 50 MNT and the 100 MNT level. Results for Badlands National Park were 0 days, 0 days and 0 days of visibility impairment per year at 10% extinction, respectively. Wind Cave results were 0 days, 0 days and 1 days of impairment per year at 10% extinction, respectively. Results for Badlands National Park were 0 days, 0 days and 9 days of impairment per year at 5% extinction, respectively. Wind Cave results were 0 days, 1 day and 3 days of impairment per year at 5%

extinction, respectively. The negotiations for mitigation of these air visibility impacts are continuing. No written agreement has been reached yet.

Alternative "D" modeled impacts, as presented in the DEIS, resulted in more days of impact than those of the preferred alternative. However, a major reason for this is that the alignment is approximately 88 miles longer than "C" and double backs on itself up wind of the Parks. Our suggested alignment is 31 miles longer than "C" according to the DEIS and this is with the existing curvature and grade and does not double back on itself up wind of the Parks. It should be less than 31 miles when regraded with a bypass south of Rapid City and less curvature. This alternative should be modeled so that air impacts of this alternative can be compared to the others.

For clarification we recommend modification of the following information, page 4.3-26, middle paragraph, second sentence. The sentence currently reads, "They are the amount emissions of a particular pollutant can be increased above the existing emission levels for that pollutant in a particular county." We suggest the following language, because this paragraph confuses "air emissions" with "air concentrations":

PSD Class II increments are ambient air concentrations that are not to be exceeded above background concentrations. The Class II increment for NO_x is 25 $\mu\text{g}/\text{m}^3$ averaged over a year. If the baseline concentration for the area of concern is 10 $\mu\text{g}/\text{m}^3$, then the state implementation plan should protect the area from degrading beyond (10 + 25 = 35 $\mu\text{g}/\text{m}^3$). In this case, the PSD Class II increment could be violated prior to any violation of the NAAQS. Even though a locomotive is a mobile source and therefore, not subject to permitting, mobile sources can cause a PSD Class II increment violation.

DEIS Tables 4.4-11 through 16 need clarifying statements so that it is clear to the reader whether the visibility impacts to the Class I and Class II areas are based upon new diesel-powered locomotive standards or other technologies. This will enable the public and decision-makers to understand whether mitigation for the identified impacts is appropriate for the locomotive technology being used at a particular stage of the project. We recommend including this information on page 4.4-56. Any mitigation agreement should be included in the final binding air mitigation agreement or if there is not a final agreement, in the Record of Decision for this project.

From page 4.10-4: "Escaping fumes during refueling could contribute to air quality impacts." EPA recommends investigating Stage I and Stage II vapor controls as mitigation for refueling operations. EPA recognizes that vapor controls are not required for operations at the Central Yard. However, there may be significant fuel savings, from reduced fuel losses due to evaporation. Vapor controls also may reduce potential employee exposures to hazardous air pollutants during refueling operations. Please provide the costs for Stage I and Stage II vapor controls at the Middle West Yard.

DEIS Table 4.10-1 needs clarifying information about whether the emissions for the Central Yard are included in the Calpuff modeling of visibility impacts.

Table 5.1-1 is not a cumulative impacts table and should not be included in a "Cumulative Impacts" chapter. Instead, these tables address project related impacts summed over the various locations. We recommend that the table title be changed to "Summary of Total Project Related Environmental Impacts."

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO -- Lack of Objections

The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC -- Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO -- Environmental Objections

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU -- Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 -- Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 -- Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 -- Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

