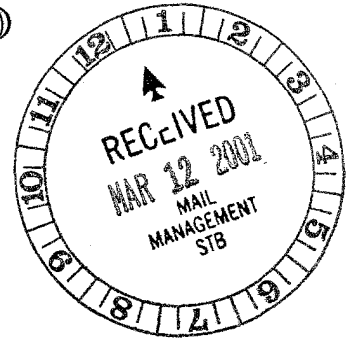


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March 6, 2001

Office of the Secretary
Case Control Unit
STB Finance Docket No. 33407
Surface Transportation Board
1925 K Street, N.W.
Washington, DC 20423-0001

ATTENTION: Ms. Victoria J. Rutson
Environmental Project Director
Environmental Filing

Re: Comments on PRB Expansion DEIS

Dear Ms. Rutson:

The DEIS for the Powder River Basin Expansion Project has completely failed to assess and disclose the critical environmental impacts associated with soil disturbance from railroad construction activities. The quantities of earthworks associated with each alternative must be a primary factor in weighing the desirability of the various alternatives, but so far have not been. The earthworks associated with three critical Pierre shale segments must be investigated in detail: the Pierre bypass, the "Wall Hill", and the Cheyenne River Valley, but again so far have not been. And operational alternatives that reduce design speed on these critical segments in order to minimize earthwork disturbance to unstable Pierre shale formations must also be fully explored, but so far have not been. Alternatives that use trackage rights agreements with other carriers in order to minimize construction-related environmental disturbances have also not been explored. To comply with NEPA, the earthworks for these three critical segments must be fully evaluated in a supplemental draft EIS that is submitted to the public for review and comment.

We urge the STB to study the comments from transportation system analyst Brian Brademeyer submitted on February 25, 2001. As has been shown in Brademeyer's Attachment 1, the Applicant's preferred Alternative C within the Cheyenne River Valley, using the Applicant's proposed engineering constraints of 1 percent maximum grade and 1 degree maximum curvature, provides little transportation benefit over using the existing corridor between Wasta and Smithwick. As shown in Attachment 2, those same geometric constraints preclude leaving the Cheyenne River Valley and climbing the Wall Hill without an excessive amount of soil disturbance to unstable Pierre shale formations. Rather than being the "only practical and feasible solution," the alignment proposed by the Applicant is "unreasonable" under any meaningful consideration of environmental impacts. To remedy these deficiencies, alternative alignment and operating proposals must be explored along the three critical Pierre shale segments identified above.

Environmentally, staying out of the Cheyenne River Valley entirely would be the most desirable solution, since avoidance is the best mitigation measure under NEPA. A second-best environmental alternative would introduce speed reductions on the critical Pierre shale segments in order to significantly reduce the amount of disturbance to these unstable soils. Design speeds of 25 mph and 35 mph are reasonable alternatives that can clearly identify potential tradeoffs to the decisionmaker and the public. If the Applicant is unwilling to investigate these reasonable alternatives, the public would be justified in concluding that this entire proposal has been put forward for other objectives (see Brademeyer's Attachment 3).

NEPA states, "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." [40 CFR 1502.9(a)]. NEPA is clear that analyses must be performed and impacts disclosed before decisions are made and before actions are taken, and that these analyses must be subjected to expert agency comments and public scrutiny. If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, as is the case with the supplemental earthworks analyses recommended here, the agency must include the information in the environmental impact statement. In addition, the people in Rapid City have never been involved in this process, since a meaningful rebuild alternative for the existing corridor between Wasta and Smithwick has never been presented.

Given all of the above, NEPA supplementation is clearly necessary. Such supplementation is required under 40 CFR 1502.9(c)(1)(ii) in the current instance to redress the total lack of assessment of the environmental impacts associated with soil disturbances and subsequent increased sedimentation of streams and wetlands. Because we believe this proposed railroad expansion project will cause unacceptable and unmitigatable impacts, we are also asking that the USCG deny any Missouri River bridge permit and that the USACOE deny the requested 404 permits until such supplementation has been completed. We also ask the Forest Service to deny any easement or special use permit requested by the Applicant until such supplementation has been completed and reviewed by the public.

Until such supplementation has been provided, the No-Action Alternative A is the only option fully complying with NEPA, and therefore the only option available to decisionmakers.

I. Failure to assess earthworks and sedimentation impacts from construction activities.

Our Black Hills Group Chair Brian Brademeyr, who also happens to be a professional transportation system analyst, has written in his February 25, 2001 comments to the STB: "I have never encountered a construction project evaluation that failed to focus on earthworks as a critical cost and impact center, and as a source of potential tradeoffs with future operating and maintenance costs. Until the DM&E expansion project into the Powder River Basin, that is. This is shocking, given that the impacts associated with construction of this project are most pronounced and also most significantly adverse to the environment on the Pierre shale segments along the Cheyenne River Valley." [Brademeyr Comments of February 25, 2001 at page 2]. As a threshold matter, sedimentation impacts to water quality and sensitive wildlife species cannot be assessed without a thorough review of earthworks and disturbance to erodible soils. The DEIS for the PRB Expansion fails to rigorously explore these key earthworks impacts. Compliance with the non-degradation mandate of the Clean Water Act cannot be assured under these significant omissions.

The environmental impacts associated with soil disturbance through railroad embankment construction activities are critical to an informed decision on the best choice of alignment for the proposed expansion project. A majority of the impacts evaluated in Appendix L are proportional either to the area of disturbed soil or to the volume of disturbed soil. Yet no measures of either of these two primary indicators are presented in the DEIS, either for the alternatives as a whole or for critical segments where earthworks are the key criterion, such as the Pierre shale segments. The maps in Volume 5 present no information on extent of soil disturbance. And while the aerial photos of the various segments in the Corps of Engineers file materials do indicate the cut and fill slope boundaries, these are not summarized for the decisionmakers in any helpful way. Moreover, these USACOE materials were not made widely available to the general public.

Yet the unsuitability of Pierre shale formations for grade embankments is widely known and reported. For example, Professor Emeritus at the SDSM&T John Paul Gries has documented the notorious instability of these soils in his recent book, where we find the following:

"The bumpy and undulatory pavement across western South Dakota emphasizes the difficulties engineering geologists have in building structures of earth or concrete on the Pierre formation. The shale has a high content of the swelling clay mineral montmorillonite, often called bentonite. So the Pierre shale swells when it is wet and shrinks when it dries.

Such shales are typically impervious. However, water can and does enter the upper few feet of the shale through dehydration cracks, animal burrows, and the numerous small faults that formed when the original soft clay compacted into shale. ...

...the Pierre shale is very unstable on steep slopes, and surface creep and landslides are common. Most earth movements occur in the spring, when the surface shales are saturated with water. Landslides are common along highways built on steep hillsides. The lower edge of the grade frequently fails, and entire sections of highway may move downslope overnight."

[Roadside Geology of South Dakota, John Paul Gries, Mountain Press Publishing Company, Missoula, MT, 1996, pp. 100-101.]

Similar warnings are presented in a recent letter to the STB by McGhie & Betts Environmental Services, Inc. [MBES], wherein professional geologists assessed the feasibility and associated geologic

hazards of constructing DM&E's proposed Alternatives B and C between Wall and Smithwick, SD, along the Cheyenne River Valley. Excerpts from the geologists' report include the following:

"Heaving, shrinking and swelling of a rail line, regardless of the extent, poses a threat to rail bed stability and operational safety. In our professional opinion it will be difficult or impossible to design and construct a new rail bed grade for Alternative B or C that will prevent the hazards associated with heaving shale of the Pierre Shale Formation. ...

"The drastic changes to topography and vegetation necessary to create a rail bed grade within the Cheyenne River valley would cause damage to the land and the vegetation that anchors the soil. The impact to the vegetation may be impossible to rehabilitate. ...

"The DEIS does not disclose the amounts of cutting, filling and loading, does not adequately characterize the risk and geologic hazards of construction, does not adequately define the changes to surface hydrology and stormwater runoff that may cause or influence shrinking and swelling, does not adequately inventory soil and bedrock conditions or the plant communities that serve to stabilize erosion and mass wasting, does not adequately define or characterize the reliability of design or mitigation measures and does not have adequate information for the public or approval agencies to evaluate the environmental impact or environmental risk associated with a new rail bed grade through the Pierre Shale.

"The cumulative effect of increased erosion rates, geologic hazards of shrinking and swelling clay and disruption of the native ecosystem and the probability of rail accidents in areas now undisturbed make the feasibility of the construction of Alternatives B and C a rail line through the Cheyenne River valley difficult to comprehend and lead to the conclusion that Alternatives B and C are not feasible or prudent and do not meet the minimum NEPA standards for minimizing environmental impact on the environment or future generations."

[Excerpted from McGhie & Betts letter to STB from Jeffrey S. Broberg, Certified Professional Geologist, dated March 2, 2001.]

The DEIS merely takes the Applicant's word that rail line construction and operation along these Pierre shale formations will not be a problem. Earthworks impacts are not disclosed, and construction costs taken as "typical" throughout the new build extension. The Applicant is instructed to confine all project-related construction traffic to a temporary access road, to the extent possible, yet no assessment is presented of the damages that will be caused by these access roads. Most heavy haul railroads have a permanent all weather road along the track so that train crews can be relieved, maintenance conducted, derailments dealt with, etc. The DEIS presents no discussion of permanent all weather road along the track, or of the soil disturbance tradeoffs from such access vs. temporary road construction. How will these options impact soil disturbances to the three critical Pierre shale segments? The DEIS is silent on this important issue.

The DEIS also fails to assess right-of-way needs all along the route. In dismissing Alternative D, the DEIS proclaims that "SEA expects that additional right-of-way would be required along DM&E's existing rail line in order to optimize the alignment so that it would be suitable for unit coal trains." [DEIS at III-B 4.4-25]. Such impacts should be assessed for all alternatives. The DEIS also concludes that Alternative C is preferred because it avoids sensitive areas of the Cheyenne River, even though the data presented [DEIS at III-B 4.4-28] shows only a 1.1 mile difference with Alternative B. Why were no alternatives investigated that minimized the impacts to the Cheyenne River and its perennial stream drainages. For impacts to critical wetlands, we are informed that "[t]hese indirect impacts are difficult to quantify due to lack of final design information." [DEIS at III-B 4.4-29]. How can NEPA possibly be

satisfied when decisions are based on a "lack of final design information?" Another draft must be prepared that reveals all of the design information with its associated soil-disturbance impacts. The likelihood of derailments due to landslides and slumping soils on the Pierre shale segments is also dismissed without meaningful analysis.

We urge the STB to study the comments submitted by Mr. Brademeyer on February 25, 2001, and to deny any permit request(s) until sedimentation impacts from disturbance of unstable Pierre shale formations are completely documented and the quality of US waters and wetlands are assured to remain at current levels.

II. Failure to address all reasonable alternatives.

To achieve the purposes of the Clean Water Act and the National Environmental Policy Act, it is essential that the NEPA document consider all reasonable and less-damaging alternatives. This includes alternative ways of achieving the same objectives, alternative ways of reducing conflict, and alternative ways of mitigating impacts. [See, e.g., 40 CFR 1508.25(b), 1501.2(c), and 1502.14]. The DEIS focuses solely on reducing rail haul length for the Applicant on minimal grade and curvature alignments. The potential for reducing soil disturbance from these alternatives is not used as a major public issue on which to develop alternatives, as it should have been.

Earthworks-associated impacts have been used indirectly to dismiss alternatives in the DEIS. The Pierre Bypass was deemed "unreasonable" in part because the topography "would require extensive cuts and fills to establish a safe and suitable grade for operation of unit coal trains" [DEIS at 2-65]. Yet these earthworks were never documented for the public or the decisionmaker to compare to impacts on other critical segments. Suppression of such information prevents fully-informed decisionmaking, since neither the public nor the decisionmaker can determine whether other critical segments are also "unreasonable". Similarly, the route proposed by the Applicant for the "Wall Hill" was claimed to be "the only practical and feasible solution to the operational problems at Wall" [DEIS at 2-16, footnote 7], without any supporting evidence whatsoever. And the existing corridor between Wasta and Smithwick was dismissed from evaluation in all "existing corridor" alternatives due to concerns outside the Wasta to Smithwick segment [DEIS at 2-47 to 2-49]. The Applicant had initially alleged this segment could not be reconstructed because "the Black Hills are in the way" [Applicant's Alternative Routes Analysis, p. 11].

As an example of the arbitrary nature of these dismissals, Alternative D-6 was dismissed primarily because it "followed the Alternative C alignment through the State of Wyoming," including over 30 miles of the Thunder Basin National Grassland. [DEIS at 2-48]. This is accompanied by the unsupported assertion that this alternative would not provide construction or operational advantages over Alternative C, totally ignoring the reduced amounts of Pierre shale formations that would be disturbed on the existing corridor between Wasta and Smithwick. That leaves only the 20-mile difference in length between preferred Alternative C and the existing corridor (with the outer bypass at Rapid City described in Brademeyer's Attachment 1) as justification for dismissal of the existing corridor alternatives. This is less than 3% of the 810-mile total project length along the preferred alternative, and is certainly no basis for ignoring the potential environmental benefits of avoiding the Pierre shale formations along the Cheyenne River Valley as much as possible.

The analysis in Brademeyer's Attachment 1 suggests that both construction and operational advantages might accrue from avoiding the unstable soils along the Cheyenne River Valley. In that analysis, earthworks and other construction parameters were compared along a reasonably rebuilt existing corridor to the proposed DM&E Alternative C. These calculations show that a rebuild of this section (with a bypass at Rapid City) can meet the geometric constraints of 1% maximum grades and 1 degree maximum curvature at reasonable cost, *i.e.*, that this "obvious" route is in fact a reasonable alternative under the terms of the National Environmental Policy Act (NEPA) and must be analyzed at the same level of detail as all other NEPA alternatives in the Environmental Impact Statement. A supplemental DEIS is needed that fully discloses the difference in earthworks impacts between the existing corridor and the Cheyenne River Valley routes.

In his October 9, 1999 letter to STB (mistakenly dated as September 9, 1999 -- see Attachment 2), Brademeyer pointed out that DM&E has failed to meaningfully respond to the federal agencies' explicit requests regarding analysis of their existing corridor, including the "Wall Hill" climb out of the Cheyenne River Valley beginning near Wasta and ending at Wall, SD. The DEIS continues to ignore this critical segment of the project: "This realignment of the existing system was determined the only practical and feasible solution to the operational problems at Wall, considering the Cheyenne River, engineering requirements to cross Interstate 90, and straighten the overall segment." [DEIS at 2-16, footnote 7]. In his analysis of the Wall Hill proposal in Attachment 2, Brademeyer found that the amount of earthworks necessary to exit the Cheyenne River Valley, and the unstable Pierre shale and badlands areas that are encountered along much of the proposed Alternative C alignment between Smithwick and Wall, SD, raise the question of whether it is desirable to enter the Cheyenne River Valley at all, just from an engineering cost perspective, let alone from an environmental impact perspective.

None of these excuses meets the NEPA mandate to analyze all reasonable alternatives. It is imperative that the earthworks quantities be presented using both area and volume measures, and for all routing and operational alternatives, on all three of the critical Pierre shale earthworks segments: the Pierre Bypass, the "Wall Hill", and the Cheyenne River Valley between Wasta and Smithwick, SD. The DEIS needs supplementation on the major public issue of earthworks disturbance to the unstable Pierre shale soils, and the extent to which utilizing the existing corridor can reduce these soil disturbance impacts.

In addition, the DEIS failed to explore any alternatives that would alter train operations in order to minimize the earthworks-related impacts of railroad construction. It is simply not "reasonable" under NEPA to ignore the potential benefits of speed reductions along the sensitive Cheyenne River Valley area. Yet the DEIS ignores the potential for reduction in disturbance to unstable soils that can be achieved by reducing design speed (*i.e.*, relaxing geometric constraints) along the Cheyenne River Valley from Smithwick to Wall, SD. For example, reducing the operating speed on preferred Alternative C between Smithwick and Wasta to 35 mph would eliminate the travel time advantage that Alternative C enjoys over a rebuilt existing corridor route (72.7 miles at 35 mph taking 125 minutes vs. 92.7 miles at 45 mph taking 124 minutes; the inner bypass route would only take 7 minutes longer at 131 minutes -- see Brademeyer's Attachment 1). The DEIS simply did not explore any possible reductions in soil disturbance that would accompany such speed reductions and the reductions in adverse environmental impacts that would accrue as a result of the reduced earthworks. This is not fully-informed decisionmaking.

In fact, all loaded trains were to move at 45 mph, with unload trains moving at 49 mph [DEIS at 1-28]. Geometric constraints of a maximum 1% grade and 1 degree of curvature were determined to allow these design speeds. These geometric design constraints are apparently to be met everywhere except in Pierre and Ft. Pierre, where the existing corridor exceeds the degree of curvature constraint considerably. Elimination of any bypass option in Pierre leaves these localized curvature exceptions in place near the Missouri River crossing. Yet the DEIS fails to explain why geometric constraints should be rigid everywhere else. If these constraints can be violated in Pierre, why not on the Wall Hill? Why not along the Cheyenne River Valley? Why not along the existing corridor between Wasta and Smithwick? The DEIS never addresses these points. In fact, the DEIS does not explore at all the tradeoffs between construction and operational constraints, such as the interrelations between design speed and the magnitude of earthworks construction impacts. Yet these operational constraints are clearly reasonable alternatives under NEPA, especially since they would be critical only on a relatively small portion of the overall project comprising the three critical Pierre shale segments.

To clearly define the tradeoffs to the public and the decisionmaker(s), the affects of design speed on earthworks quantities should be fully investigated along the three critical Pierre shale segments. For specificity, design speeds of 25 and 35 mph, with associated grade and curvature constraints, must be explored as ways to minimize earthworks-related impacts on the Pierre shale segments. If 18,000 horsepower [DEIS at 1-28] can move loaded trains around a 1 degree curve at 45 mph, then what curvature can those same engines negotiate with speeds reduced to 35 mph? Or to 25 mph? Relaxing the geometric constraints can dramatically reduce the earthworks impacts, and might even make the Pierre bypass "reasonable" to construct. Without a supplemental DEIS, neither the public nor the federal agencies will ever know which combination of operational and construction tradeoffs would yield the best overall project design.

Furthermore, the Applicant never explored acquisition of trackage rights on the rail lines currently serving the Powder River Basin. Trackage rights on the Union Pacific Powder River Basin to Crandall, WY line would give the DM&E access to the PRB without any new construction. The DM&E owns rail right-of-way from Crawford, NB to Crandall Junction, WY. Why did the DM&E tear up the rails and remove the ties during the summer of 1997? If they were truly interested in a UP connection to the West Coast for transporting grain (as they have asserted in numerous meetings with farm groups), why was this connection allowed to deteriorate? This would also have been a viable alternative route for hauling coal. There are only approximately 47 miles from Crandall Jct. to Shawnee Junction of UP track. At Shawnee Junction the joint line with BNSF begins. This joint line was mandated by an ICC decision (January 9, 1976) that stated, "Two railroads serving the same territory over separate lines would result in wasteful and improvident expenditures for construction which are not necessary to insure adequate service, especially in view of the environmental and financial considerations involved."

These relatively short trackage rights on UP and the joint line would provide DM&E with access to the PRB with very little increased environmental damage from soil disturbance due to new construction activities. Alternatively, the STB could grant trackage rights on the BNSF line from Crawford, NB, to the PRB, since the DM&E has an interchange with BNSF in Crawford. This alternative is partially considered as Alternative D; however, Alternative D does not consider trackage rights, as it should have done.

In addition, the roughly 30,000 megawatts that could be produced from the 100 million tons of coal that DM&E claims it will transport each year is of the same order of magnitude as the potential wind

energy that could be produced on each county in western South Dakota. Many of the IRA Indian Reservations could provide comparable amounts of clean, renewable energy, as opposed to the "dirty" power that only exacerbate global warming problems. The DEIS failed to look at "soft energy" alternatives, including conservation and renewables, to this massive coal rail line construction and transportation project, in violation of NEPA.

Since the USACOE is obligated to deny a 404 permit if reasonable alternatives exist that would cause less environmental harm (see, e.g., 40 CFR 230.10(a)), it is crucial that the Corps thoroughly study the February 25, 2001 comments from Mr. Brademeyer about the ready availability of routing and operating alternatives to the Preferred Alternative C. In particular, the Corps cannot simply accept the cavalier dismissals and overlooking of reasonable alternatives by the Applicant and/or the STB. Instead, the Corps has a responsibility to ensure any information used in the EIS is accurate and to "independently evaluate" any information submitted by the Applicant (see, e.g., 40 CFR 1506.5(a)). We do not believe that these requirements were satisfied in drafting the current DEIS and developing the alternatives.

The 404(b) regulations indicate that an alternative is only practicable "if it is available and capable of being done after taking into consideration costs, existing technology, and logistics..." [40 CFR 230.10(a)(3)]. We have serious concerns over the technical feasibility of operating the route proposed by the Applicant for the "Wall Hill" and along the Cheyenne River Valley, due to unanalyzed landslide and slumping banks potential. (See Brademeyer's Attachment 2). If all the costs were properly considered, none of the action alternatives considered in the DEIS could be deemed "practicable." The USACOE should not permit a project which is more costly than beneficial, and further degrades the waters of the United States.

III. Failure of the Forest Plan Amendments to address the significance of rail construction and operational impacts.

The proposed Forest Plan Amendments for the Buffalo Gap and Thunder Basin National Grasslands confuse significance with amount of federal acres affected directly by rail line construction. This is contrary to NEPA direction to include all connected actions [see 40 CFR 1508.25(a)(1)] in the evaluation of impacts. This confusion is explicitly used as a rationalization for an "insignificant" amendment on the BGNG, where the PRB expansion "will be less than 10 miles in length on the grasslands but approximately 1,000 miles in length in its totality." [DEIS at Proposed Amendment 8, unnumbered page in Attachment A to the Executive Summary]. This amendment is purportedly needed because existing Management Prescription 1D applies only to rail lines greater than 10 miles in length [Ibid]. This entire line of reasoning is wrongheaded, since the PRB expansion will not in any sense be comparable to passive utility corridors or pipelines, either in its construction impacts or operational impacts. Rather, this expansion is comparable to strip mining in that it will render the affected areas largely incompatible with surface uses identified by law as "multiple use" activities.

On the BGNG, the determination of significance is to be determined concurrently with the decision on the PRB permit. On the TBNG, the amendment has already been declared insignificant. Both of these determinations should be altered to acknowledge the significance of the (unmitigatable) impacts associated with construction and operation of this heavy haul coal rail line. These impacts include much more than the earthworks-related impacts that have already been identified above as being totally inadequate in their analysis. These impacts also include much more than the direct, indirect, and

cumulative impacts that would follow from an adequate evaluation of earthworks impacts. These larger impacts also include direct impacts via noise, light, and visual pollution, and fragmentation of wildlife habitat, due to effects of train operations.

For example, in the discussion of sage grouse populations we learn noise from train operations would "diminish to background daytime noise levels" range from 4.4 to 7.4 miles for wayside noise and horn soundings, respectively. At night, these distances would increase to 6.1 and 9.3 miles [DEIS at III-B 4.4-88]. These noise pollution impacts would be introduced all along the 260 miles of new construction under the preferred alternative B, impacting from 2,288 to 48,36 square miles, or from 1.5 to 3.1 million acres! This can hardly be classified as an insignificant impact, and the Forest Plan Amendment that authorizes such noise pollution also cannot be considered insignificant. The noise issue highlights the dramatic changes that this project would force upon an unwilling (the vast majority of the landowners in the area) and innocent (the birds and beasts of the prairies) populace.

Similar concerns would arise regarding light pollution from nighttime trains. Visual pollution also cannot be limited to only the acres underneath the tracks, but must instead be broadened to include a tally of all federal and non-federal acres from which the trains will be visible, both for daytime and nighttime. Only in this way can true recreation and visual impacts be assessed. Therefore, the wilderness and roadless area impacts must be re-evaluated considering all acres from which trains on the various routes will be visible and thus degrade the recreational experience. The review must also include RNAs that were improperly omitted from the Black Hills Forest Plan Revision, including in particular the proposed Pilger Mountain and Craven Canyon RNAs.

From a wilderness recreation standpoint, Alternative B is totally unacceptable due to its impacts on the proposed Red Shirt Wilderness Area and Indian Creek and Cheyenne River RARE-II areas. Preferred Alternative C is also unacceptable for management of these roadless areas for wilderness, solitude, and wildlife security values, since the DEIS admits that "it would be within 500 feet of the Red Shirt and Cheyenne River RARE II areas and the Red Shirt Roadless Area." [DEIS at III-B 4.4-147]. The noise, dust, light pollution and change in the character of the land from remote to industrial is not going to be mitigated by a distance of 500 feet -- at less than one tenth of a mile, it is virtually the same as passing through these RARE-II areas! In the noise topic section it was noted that whistle noise is at a "noisy urban residential" level for 3 miles and yet the preferred Alternative is less than one tenth of a mile from the RARE II areas!

The DEIS goes on to assert that "No parks, wild and scenic rivers, or natural landmarks would be affected by this alternative" without recognizing the long-distance impacts of noise and light pollution that this expansion will inflict all along its route. Badlands National Park will certainly be impacted by all alternatives that use the proposed Wall Hill route. The significant impacts to recreation are dismissed in remote areas by asserting that "impacts to recreation would generally occur to a small number of individuals." [DEIS at III-B 4.5-29], and dismissed in non-remote areas since roads and agricultural activities already present. In other words, in undeveloped areas the railroad is no problem because no one is there and in more developed areas it is no problem because people are already there? Actual impacts to recreation are simply ignored in this discussion. Where are the studies that show that tourists, hunters, and hikers will be attracted to a coal-hauling rail line?

Despite the obvious long-distance impacts associated with construction and operation of the proposed PRB expansion project, the DEIS assures us that impacts would be limited to "12 to 25 acres

per linear mile of new railroad, depending on the right of way width required" [DEIS at III-B 4.4-11]. This would limit cut and fill slopes to a mere 100 feet each side of the centerline, while cuts and fills will be many times this amount in the Cheyenne River Valley and on the Wall Hill. Many cuts will require 500 or more ft of right-of-way, impacting more than double the amount claimed in the DEIS.

It is clear that these significant impacts cannot be reduced to only the federal acres underlying the right-of-way and cut-fill areas, yet the DEIS proclaims that "[o]n the overall landscape the loss would be relatively small." [DEIS at III-B 4.4-10]. Similar misinformation is presented for big game: the "only measurable impact to big game is the amount of habitat lost due to conversion to rail line right-of way." [DEIS at III-B 4.4-85]. Fragmentation effects are also ignored for the black-tailed prairie dog, even though this species is clearly not "well distributed" on federal lands and persecuted on private and state lands. Indirect impacts will flow to species associated with prairie dogs, such as swift fox and black-footed ferret populations, which also cannot be well distributed or even viable. Fragmentation impacts to these species are simply ignored in the DEIS.

Once again we repeat, the biggest impacts to wildlife are in the unmitigatable fragmentation of the large, undeveloped grassland habitat. The DEIS has completely missed the cumulative impact of crossing a relatively undeveloped region with a massive linear construction scar routinely traversed by massive mobile sources of sound and light pollution (trains). The impact to recreation and wildlife is not in the relatively small amount of land directly consumed by the railroad but in the division of the two largest intact grasslands left in the United States. Instead, these connected-action impacts must include the effects on the entire landscape, as well as to the federal grasslands acres. Any decision authorizing such a massive intrusion into the Cheyenne River Valley simply cannot be made under an insignificant Forest Plan Amendment. Both the BGNG and TBNG Amendments must be reconsidered as significant amendments to their respective Forest Plans.

IV. Failure of the Biological Evaluation and DEIS to assess significant adverse and unmitigatable impacts to wildlife and plant species.

The impacts from sedimentation and soil-disturbance to wildlife species and aquatic and riparian ecosystems cannot be adequately addressed in the absence of a focus on earthworks and soil disturbance areas and volumes. The gross deficiencies of the DEIS in quantifying these critical impacts precludes any meaningful determination of direct, indirect, and cumulative impacts to wildlife and plant species of concern. The DEIS must reassess the biological impacts of the various alternatives following the needed supplementation of soil disturbance levels.

Without such quantification of earthwork disturbances, the DEIS is left with handwaving statements such as "However, it is anticipated that amphibians and reptiles would return once construction is completed and right-of-way become revegetated." [DEIS at III-B 4.4-93]. No evaluation of the likelihood of revegetation is presented, especially on the disturbed Pierre shale formations along the Cheyenne River Valley, where presumably there are amphibians and reptiles. The effects of vegetation suppression through plowed fireguards is also not assessed. Nor are the effects of toxic engine fumes assessed: "Since this information will not be determined until operation, the amounts of pollutants cannot be estimated for these track sections." [DEIS at III-B 4.7-6]. NEPA requires full disclosure of the environmental impacts. If this information can be estimated, it should be done using various levels of

tonnage, etc. If such basic assessments cannot be even estimated prior to rail line operation, then the permit application should be denied.

The DEIS fails to explore the impacts of increased sedimentation along the Cheyenne River Valley on native threatened and endangered fish species, even though the Biological Evaluation cited turbidity as a factor in sturgeon chub surveys. [DEIS at App. K 3-25]. The BE admits that no investigation for Topeka Shiner within the Cheyenne River Valley on any of the new construction alternatives, even though these rare fish were found at the mouth of the Cheyenne River in the late 1960s. [App. K at 3-8]. The DEIS mentions possible impacts to these species, but does not recognize that their populations are so precarious that additional significant impacts should be deemed unacceptable. Moreover, many of these impacts cannot be mitigated.

While native fish species are the obvious species that would be impacted by the alignments proposed along the Cheyenne River Valley and other areas of unstable Pierre shale formations, we are also concerned about impacts to invertebrates and rare and sensitive plant species. The DEIS does not present an assessment of invertebrate diversity along the various routes or how invertebrates could be impacted, especially along the new construction disturbances to the Cheyenne River Valley. The same is true of plant species. There is a brief discussion on a couple of plant species: Ute Ladies' Tresses orchid, prairie bush-clover, Leedy's roseroot, and western prairie fringed orchid. But this is inadequate and ignores a host of plant species that may be in trouble and may occur in the project area. Moreover, the search for the Ute Ladies' Tresses Orchid was conducted during September [DEIS at Appendix K] when the plant blooms in late July through August. Had frost occurred in the project area before or during the search? Could the plant be positively identified without bloom? Could the plant be positively identified after the foliage was frosted? The DEIS also ignores the severity of disturbance to Pierre shale and the likelihood of revegetation failures on these unstable soil formations. Impacts to rare plant species along the Cheyenne River Valley are likely unmitigatable due to the special and precise conditions these species need to grow and reproduce. This is also true of medicinal and ceremonial herbs and plants of importance to traditional gatherers. The DEIS fails to disclose impacts to such plant species.

But perhaps the most significant failure of the BE is the failure to assess fragmentation impacts to grasslands ecosystems from new construction and the current failure of black-tailed prairie dog populations to be "well distributed" in the project area as well as their former historic range. "It is difficult to determine the exact amount of prairie dog habitat crossed by the Extension Alternatives." [DEIS at III-B 4.4-109]. Why is this difficult? Why are the total suitable acres made accessible to various impact vectors (plague, predators, shooters, etc.) not calculated along each of the new construction alternatives? How can fragmentation effects be adequately addressed if impacts are restricted to existing occupied colonies?

The BE and DEIS err in limiting the project impacts only to acres of existing prairie dog colonies. This ignores the need to increase the distribution of prairie dog colonies to assure viable, well distributed populations of the rodents and associated species. The majority of the new construction route in Wyoming and South Dakota could be potential prairie dog habitat, especially along the Cheyenne River Valley. The prairie dog is under consideration for protected status and yet the BE could not find the time to determine the direct, indirect, and cumulative impacts to the amount of prairie dog habitat along the new construction alternatives! The BE merely asserts that "Long-term impacts include fragmentation of black-tailed prairie dog colonies' habitat, increased mortality by train and vehicular traffic, increased predation and disease from predators traveling along the rail line, and increased recreational shooting

from increased human activities." [App. K at 4-28]. This is merely a mentioning of impacts, not an assessment of impacts!

The same is true of cumulative impacts. Coal bed methane development on the TBNG "could impact this species due to fragmentation of prairie dog colonies", as will state and private lands general hostility to prairie dogs. [App. K at 5-8]. And these impacts "in turn influence black-footed ferret populations". [Ibid], since "fragmentation of prairie dog colonies could impact the reintroduction of black-footed ferrets". [App. K at 4-29]. Table 5-1 assures us that impacts to potential black-footed ferret habitat are mitigatable, even though impacts to occupied black-tailed prairie dog colonies are not! [App. K at 5-9, 5-10]. The DEIS never resolves this contradictory information.

And the impacts to sensitive and threatened species from increased barge traffic on the Mississippi River as a result of this project have not been considered.

V. Failure of the DEIS, MOA, PA and IP to adequately address Treaty issues, and to utilize NEPA to resolve resource conflicts.

The signatory Tribes of the 1851 and 1868 Fort Laramie Treaties, including the Brule, Oglala, Miniconjou, Yanktonai, Hunkpapa, Blackfeet, Cuthead, Two Kettle, Sans Arcs, and Santee Sioux Tribes, must be consulted on a government-to-government basis regarding historical and cultural impacts of the proposed railroad construction. The Cheyenne River Valley is a natural landscape with Sacred Cultural significance that gives it superior claim to reverent treatment and preservation of its natural integrity. The United States Government stewardship has in the past failed to sustain the natural integrity of the Cheyenne River Valley and has failed to assure that activities which it sanctions there are compatible with the Spiritual and Cultural beliefs and practices of the Tribes of the Sioux Nation. The United States Government continues to promote programs and activities which will further desecrate this Sacred place. The United States Government bound itself in the Fort Laramie Treaty of 1868 to recognize the Cheyenne River Valley as the land of the Sioux Nation. United States Government policies, in disregard of the Fort Laramie Treaty obligation, have historically disposed of resources and use of land in the Cheyenne River Valley without meaningful consultation with the Sioux Nation.

The building of railroads and wagon roads across the Great Sioux Reservation has been conducted for over a century in violation of 1851 and 1868 Treaty obligations. The United States Government's approval of the Dakota, Minnesota, and Eastern Railroad construction and expansion project along the Cheyenne River Valley would continue the historic pattern of disregard for its 1851 and 1868 Treaty obligations and the territorial integrity of the Great Sioux Reservation. In a resolution of March 25, 1998, signed by Treaty Council Chairman Chief Oliver Red Cloud, the Sioux Nation Council opposed final approval by the United States Government's Surface Transportation Board allowing implementation of the construction and expansion of the Dakota, Minnesota and Eastern Railroad along the Cheyenne River Valley and any other lands of the Great Sioux Reservation.

The Memorandum of Agreement [DEIS at Appendix I] fails to recognize the above signatory tribes of the Fort Laramie Treaties as having special concerns over the proposed PRB project that transcend those of the other concurring parties. In fact, the MOA fails to address treaty issues at all. The only mention of Indian Treaties is in the March 4, 1999 meeting with the Great Sioux Nations (sic) Treaty Council, which refers to "discussion about treaty infringement". [Tribal Consultation Summary at 4].

The opposition of the Oglala Sioux Tribal Council is mentioned [TSC at 5], but the text of their resolution is not included. In OSTC resolution 99-18 of January 28, 1999, the Oglalas clearly stated that their opposition to the new railroad construction was because "such construction is in violation of the 1851 Treaty between the Oglala Sioux Tribe and the United States of America." Yet the MOA continues to totally disregard the existence of the Fort Laramie Treaties which the Sioux Nation asserts are still binding on the US Government.

The Programmatic Agreement proposes an Identification Plan that consists of "a literature review to identify previously recorded sites along the proposed alignment" and "an intensive survey for identification and evaluation of cultural resources." [Appendix J at 3]. These literature reviews and surveys should have already been completed and included in the DEIS. In addition, the proposed response to changes in ancillary areas and rights-of-way [App. J at 8] fails to acknowledge the severe constraints that are being placed on the alignment by the one degree maximum curvature constraints. Any significant shift of the centerline to avoid cultural resources will have impacts for miles in each direction due to the relative "rigidity" of the alignment and its resistance to alterations. Given the inability to easily alter the alignment, these literature reviews and surveys should all be completed before any construction permit is given to the Applicant.

The draft Identification Plan also disregards the Fort Laramie Treaties. In addition, the IP limits its scope to "properties of traditional religious and cultural importance to an Indian Tribe" [App. J at IP-1], but at the same time fails to recognize the areal nature of "historic properties" to the Sioux Tribes. To the Sioux, the entire Cheyenne River Valley is a sacred place, as are the Black Hills. The IP will never be able to incorporate tribal views until it shows some minimal level of respect for their concept of place.

To achieve the purposes of NEPA, the analysis must address alternative ways of reducing conflict. The failure of the Applicant and the STB to address the Treaty concerns of the Sioux Nation in any of the alternatives renders the entire DEIS inadequate. The DEIS is deficient for failing to include any alternative that recognizes the resolution of the Black Hills Sioux Nation Treaty Council calling for the return of all federal grasslands within the boundaries of the Great Sioux Reservation established by the Fort Laramie Treaties to be returned to trust status for the benefit of the Great Sioux Nation.

The unmitigatable loss of cultural resources is just glossed over with no expenditure of resources to discover likely impacts: "The lack of known sites along the alternatives is most probably due to the lack of archeological survey and study in the area due to its remoteness and undeveloped character." [DEIS at III-B 4.6-38]. No explanation is provided as to why a comprehensive archeological study has not been completed, even though some of the value of cultural sites is because they are in remote, undeveloped regions. Only the No-Build Alternative A will retain these cultural resources.

Sincerely,



Brian Brademeyer
Chair, Black Hills Group

on behalf of Commentors