

Davis College of Agriculture, Natural Resources, and Design

22 February 2017

Clyde N. Thompson Forest Supervisor, Monongahela National Forest 200 Sycamore Street Elkins, WV 26241

Dear Clyde:

As you know, the Monongahela National Forest has contracted with me to serve as a third-party reviewer for the ongoing Atlantic Coast Pipeline Project. For over a year now I have been participating in meetings and teleconferences with the various interested parties in this project, as well as reviewing assorted documents associated with the project. Following the latest teleconference on Friday, February 17, 2017, I feel that it is necessary to share with you some concerns that I have regarding Dominion/ACP's lack of transparency and responsiveness in providing requested information to the Forest Service—information that is necessary to adequately assess the environmental effects of the Atlantic Coast Pipeline Project. The Forest Service has made repeated requests for information to Dominion/ACP over the course of several teleconferences and inperson meetings; however, Dominion/ACP has not yet adequately responded to these requests. The conference call on February 17, 2017, is just the latest example of what I conclude to be Dominion/ACP's unwillingness to respond to what I consider to be reasonable requests and, more generally, an inability to work collaboratively with the Forest Service to ensure that this review process progresses in an efficient and effective manner.

The formal dialogue regarding slope stability and Dominion/ACP's geohazard program began with a teleconference on November 21, 2016; which came after the Forest Service provided written comments on the Geohazard Analysis Program Phase 1 and Phase 2 Reports. This was followed by a second teleconference on December 8, 2016, then a third and most recent teleconference on February 17, 2017. The stated purpose of the meeting on November 21, 2016, was for Dominion/ACP to present their proposed "Best in Class" (BIC) Steep Slopes Program and solicit Forest Service feedback. In particular, prior to the November 21 meeting the Forest Service had requested that Dominion/ACP develop site-specific stabilization plans for two areas along the project right of way to serve as a proof of concept for how anticipated hazards would be specifically addressed during construction and reclamation. (These two locations were selected to allow Dominion/ACP to develop site-specific designs that, once fully developed and properly vetted, could be used by Dominion/ACP to guide similar detailed design plans for the remaining steep slope areas associated with the project.) At that meeting, it was made clear to Dominion/ACP that the existing Land and Resource Management Plans for the Monongahela National Forest dictated how any project that could affect steep slopes or landslide-susceptible areas must comply with certain standards. Unfortunately, this meeting provided few specific answers, but instead raised numerous additional questions about how Dominion/ACP will ensure compliance with Forest Plan Standards and Guides.

The teleconference on December 8, 2016, was held to provide Dominion/ACP a second opportunity to respond to Forest Service questions and concerns regarding slope stabilization, particularly site-specific plans at the two proof-of-concept sites. Once again, Dominion/ACP failed to provide specific and targeted evidence of the effectiveness of the so-called "Best in Class" Steep Slopes Program. Furthermore, the design plans that were presented to the group lacked sufficient detail to properly assess appropriateness or efficacy of the plans. During this meeting Tom Collins with the Forest Service requested a narrative of the

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construction sequence to accompany revised design plans. Again, this meeting provided few specific answers, but instead raised additional questions about how Dominion/ACP will ensure compliance with Forest Plan Standards and Guides.

The teleconference on February 17, 2017, was held so Dominion/ACP could have a third opportunity to provide the requested site-specific and detailed design plans for the two proof-of-concept sites. Unfortunately, the construction designs that were presented were no more specific than what had been presented in previous meetings—despite the fact that during those previous meetings the Forest Service stated the designs were incomplete and unsatisfactory in their level of detail. In particular, the site-specific designs that would be used at each of the two example locations were not described in any of the drawings or other ancillary information. Additionally, simple questions that had been raised during the first two meetings were not answered. For example, it was asked previously where segregated topsoil would be temporarily stored, yet the information provided by Dominion/ACP did not include the necessary detail to determine whether there was sufficient area available in the right of way for storage without creating surface loads that could contribute to hillside instability. As Tom Collins noted many times throughout the meeting, the drawing schematics were either wrong or lacked enough detail to understand what specific measures were planned for each site to ensure soil and hillside stability following disturbance. Furthermore, the construction drawings were unnecessarily confusing due to inconsistent labeling of cross-sectional areas on route maps and construction schematics. In other words, the labels for a cross section on the route maps referred to a different location on the construction schematics.

Despite the previous request (during the December 8 meeting), Dominion/ACP still had not provided construction narratives to accompany the design plans. Developing construction narratives were one of the action items requested following the meeting on December 8 and were expected to be submitted by Dominion/ACP for the February 17 conference call. Surprisingly, during the meeting on February 17 Dominion/ACP indicated that they were not planning on providing construction narratives and seemed unaware that they had previously agreed to prepare and provide construction narratives following the meeting on December 8. This is but one of a series of instances where Dominion/ACP has minimized. obfuscated, or ignored critical issues related to compliance with Forest Plan Standards and Guides. The effectiveness of the proposed "Best in Class" Steep Slopes Program has been an on-going concern for the Forest Service; however, Dominion/ACP has not been forthcoming with clear and detailed information that directly addresses Forest Service concerns related to compliance with Forest Plan Standards and Guides. In fact, the effectiveness of "Best in Class" Steep Slopes Program was on the agenda for the meeting on February 17, but it was not discussed nor were any documents regarding effectiveness provided in advance of the meeting. These requests have been clearly stated during previous meetings and then formally recorded in the meeting notes; however, there continues to be no resolution on this fundamental issue even after three meetings on the subject because Dominion/ACP has chosen to not provide the requested evidence or substantive justification.

While the topic that has dominated the discussion during these three meetings to address slope stabilization has been the efficacy of the "Best in Class" Steep Slope Program, there are two additional issues—one technical, one procedural—that I recommend be confronted to improve this ongoing vetting of the Atlantic Coast Pipeline Project. From a technical standpoint, the analyses and documentation that have been provided by Dominion/ACP regarding slope stability and sediment control during construction and reclamation has not clearly included any data or information derived from the Order 1 Soil Survey that was previously prepared for national forest lands along the route. One important piece of information that could have a significant effect on soil and hillslope stability following disturbance is the presence of expansive clays (i.e., 2:1 clay minerals) in the soils along some portions of the proposed route. It seems that the Order 1 Soil

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Survey has generally been ignored by Dominion/ACP throughout this planning process even though it provides some very valuable information. In addition to site stabilization information, the Order 1 Soil Survey information could have been included in the restoration plan for prescribing the seed and soil amendments (lime, fertilizer, etc.) to be applied to the right of way following trench backfilling. However, there is no mention that the soil chemical information in the Order 1 Soil Survey is being employed for that purpose or any other purpose other than to meet their requirement to have conducted the soil survey. Procedurally, it is becoming problematic to have critical documents associated with topics on the agenda for our teleconferences be made available to me and other participants less than 24 hours before the start of the meeting. If Dominion/ACP cannot provide materials in a timely manner prior to these critical discussions, then I suggest that they request that the meetings be postponed to ensure that when we do meet that we can have productive discussions that move this process forward.

I hope that this information is useful to you, Clyde. Even more, I hope that Dominion/ACP will begin to provide appropriate answers and specific details regarding construction designs, particularly on steep slopes where concerns of hillslope instability, excessive soil erosion, and sediment transport are known to be significant. Please let me know if you have any questions, comments, or concerns about what I have included here.

Sincerely,

James A. Thompson, Ph.D.

Professor of Pedology and Land Use