



March 6, 2020

Sara Ploetz
Cathryn Hanson
Enbridge Energy
1409 Hammond Avenue
Superior, WI 54880

Dear Ms. Ploetz and Ms. Hanson,

The Department of Natural Resources (DNR) has reviewed your application, submitted on 2/11/2020, for authorization to place fill in wetlands, place temporary structures in and across navigable waterways, and to remove bed material from navigable waterways, pertaining to the Line 5 Wisconsin Segment Relocation Project located in Ashland, Bayfield, and Iron Counties.

The application has been determined incomplete, and the following additional information is requested:

1. Water Resources Application for Project Permits (WRAPP) Supplemental Information Attachment B (Aerial Route Maps/Delineated Wetlands and Waterbodies map) – Provide the following revisions to this map set:
 - a. Differentiate between installation methods (i.e. directional bore and trench),
 - b. Add labels and outline (including associated permanent access roads) for the 5 new mainline block valves, and provide each site an identifying name/number,
 - c. Add a label for the existing Ino station,
 - d. Add call-out boxes for the steep slope areas,
 - e. There appear to be some missing labels for waterways between Mileposts 39.4 and 39.2.
 - f. There are a few areas where it appears to be a single waterway intersection with the project, but multiple labels are shown (sasv001p and sasv007i on page 23, and sasa071p on page 21). If these are multiple crossings of the same waterway, please revise the labels (and corresponding waterway tables) to provide a different unique ID for account for each crossing.
 - g. There appear to be some missing labels for wetlands. Per WRAPP Supplemental Information Attachment F (wetland crossing table), the table shows 2 coniferous swamp wetlands (wasv019f2 and wasv019f1), but only f2 was found in the map.
2. WRAPP Supplemental Information Attachment D (Waterbody Crossing Table) – Provide the following edits to this and the corresponding waterbody crossing table in the Environmental Impact Report (EIR) Attachment H. The revised table should also be provided as an Excel version:
 - a. Revise the Location column for the waterways within the pipeyards and access roads to note which specific pipeyard (east or west) and access road.

- b. Add another column to note other regulated activities occurring, such as driving on the bed, bore tracking cable, placement of riprap, stream relocation, etc.). If any of these other regulated activities would be done for all waterways, add a footnote to the table to note that.
 - c. For the waterways where a navigability determination is requested, add the proposed crossing method and bridge type that would be used, until the navigability determination has been conducted by DNR.
 - d. Features sasa069i (2 rows in the table) and sird009p have crossing widths significantly greater than their water widths, please clarify. If this because they are waterways that meander within the ROW, creating several intersections of the same waterway, clarify with a footnote.
 - e. Per the WRAPP Supplemental Information Attachment B (Delineated Wetlands and Waterbodies map), page 1 of 47, feature WDH-01 is shown within workspace assumed to be for a new valve location (permanent structure). The table however lists WDH-01 as being located within the construction ROW and only lists an impact of a timber mat bridge. Clarify if the map or the table is correct and revise accordingly.
 - f. Several waterways meander in and out of the ROW (including off-ROW access roads). To ensure each intersection of each meander is accounted for and each meander location can easily be identified, make the following edits (note edits may also be required to corresponding maps):
 - i. Feature WDH-102 appears to have 2 (possibly 3) meanders that intersect the pipeline centerline, but the table only includes 1 row for this feature. Add a row for each meander intersection and provide each row its own unique ID (i.e. WDH-102a, WDH-102b, etc.).
 - ii. Feature WDH-26 appears to have 3 meanders that intersect the pipeline centerline, but the table only includes 2 rows for this feature. Add a row for the third meander intersection and provide each row its own unique ID.
 - iii. Feature sasa069i appears to have 4 meanders that intersect the pipeline centerline, but the table only includes 2 rows for this feature. Add a row for the third and fourth meander intersections and provide each row its own unique ID.
 - iv. Feature sird009p appears to have 3 meanders that intersect the pipeline centerline, but the table only includes 1 row for this feature. Add a row for the second and third meander intersections and provide each row its own unique ID.
 - v. Edit the 2 rows for feature WDH-10 to provide each row its own unique ID (i.e. WDH-10a, WDH-10b).
 - vi. Edit the 2 rows for feature WDH-13 to provide each row its own unique ID.
 - vii. Edit the 3 rows for feature WDH-27 to provide each row its own unique ID.
 - viii. Edit the 2 rows for feature WDH-107 to provide each row its own unique ID.
 - ix. Edit the 2 rows for feature sase005p to provide each row its own unique ID.
 - x. Edit the 3 rows for feature sasw011 to provide each row its own unique ID.
 - xi. Edit the 2 rows for feature sird010e to provide each row its own unique ID.
3. WRAPP Supplemental Information Attachment F (Wetland Crossing Table) – Provide the following edits to this and the corresponding wetland crossing table in the Environmental Impact Report (EIR) Attachment H. The revised table should also be provided as an Excel version:
- a. Combine tables F1 and F2 into 1 table and revise the table title to “Field Delineation and Desktop Mapped Wetlands Crossed or Affected by the Project Facilities”.

- b. Remove the wetland impacts – operation column.
 - c. Revise the Project Component Name column for the wetlands within the pipeyards to note which specific pipeyard (east or west).
 - d. The installation method is not noted. If some wetlands will be switched to directional bore installation, add a column to show the installation type (trench or bore). If no wetlands will be directionally bored, add a note to indicate all wetlands within the pipeline centerline will be trenched.
 - e. Columns “wetland impacts – construction” and “permanent/conversion impacts” do not provide the wetland impacts in enough detail. Revise the table to clearly note impact from each construction activity: construction matting, trenching, bore pits, grading outside of the trench line, temporary clearing, permanent clearing, and permanent fill.
4. WRAPP Supplemental Information Attachment K (Landowners and Adjacent Landowners List) - Confirm if the street address for each landowner would be the same as the mailing address. If not, add a column for the mailing address.
 5. Wetland Practicable Alternatives Analysis (PAA) – Create a dedicated Wetland PAA section to pull together the areas within several different narratives that discuss route siting and wetland impact minimization techniques. In this section, also provide additional discussion on the following:
 - a. Will frozen ground conditions be utilized to minimize wetland impact? If so, will frozen ground conditions be utilized in conjunction or in-lieu of construction matting?
 - b. How wetland trench widths were minimized (i.e. use of trench boxes, etc.),
 - c. Why no wetlands are proposed to be installed across via directional bore,
 - d. Can the directional bores planned at road and railroad crossings be extended to bore across adjacent wetlands?
 - e. Can the alternate temporary workspaces be reduced to minimize temporary fill and conversion?
 - f. Why permanent fill at new valve sites and permanent access roads cannot be avoided, and if cannot be avoided, how the permanent fill was minimized and will not impede wetland hydrology in the remaining wetland complex.
 6. Permanent wetland fill – The amount and location of permanent wetland fill is unclear:
 - a. WRAPP Supplemental Information Section 5.2 page 14 states “The Project will require permanent fill of less than 0.1 acre of PEM wetland associated with the installation of two mainline block valves near MP 33.09 and MP 2.53.” However, EIR Section 6.4.2.1 page 101 states “The Project will require permanent fill of less than 0.1 acre of PEM wetland associated with the installation of one mainline block valve near MP 2.53”. Clarify which is correct. Also include the amount of permanent wetland fill in square feet.
 - b. WRAPP Supplemental Information Attachment F (Wetland Crossing Table), under the permanent access roads row header, lists 2 wetlands (wasa039e and wasa040e) as impacted by access road RSV2. These wetlands correspond to page 5 of 47 in the WRAPP Supplemental Information Attachment B (Delineated Wetlands and Waterbodies map), but there is not a label near the wetlands for access road RSV2. Per the map, it’s also unclear if this permanent access road is associated with a new valve location or not.
 7. EIR – The document’s page numbers are no longer present past page 113 (end of Section 6.6.0), please revise.
 8. EIR Section 4.3, page 36 – This section states “In the typical pipeline construction scenario, each construction crew will proceed along the pipeline right-of-way in one continuous operation from

staking to backfilling and final grading. The process will be coordinated to minimize the total time an individual tract of land is disturbed to the extent practicable.” Provide additional details regarding the construction sequencing in order to ensure resource impacts are minimized.

9. EIR Section 4.3.2, page 36 – This section states “An environmental crew will also work in conjunction with the clearing crew to install erosion and sediment control devices following vegetation removal and prior to grubbing and grading activities.” Considering factors such as the time of year the clearing will take place, type of clearing, type of vehicles, rutting potential, proximity to wetlands and waterways, slope steepness, and erosion potential, confirm erosion and sediment control devices would also be implemented prior to conducting clearing activities if there is potential for erosion and sediment discharge during or as a result of clearing activities.
10. EIR Section 4.3.2, page 38 – This section appears to discuss grading and topsoil segregation activities within the right-of-way outside of the trench line, and states “The Contractor will segregate topsoil in croplands, hay fields, pastures, residential area, unsaturated wetlands...”. Section 7.5 of the Environmental Protection Plan (EPP) states “Grading activities will be confined to the area of the trench”. Clarify the following:
 - a. Where grading and topsoil segregation activities would occur in wetlands, either just within the trench or outside of the trench line as well. Also discuss if this activity would differ in wetlands actively row-cropped/hayed/pasture or for wetlands not actively cropped but surrounded by row cropped fields.
 - b. For wetlands where grading is confined to just the trench line, clarify this also means topsoil will be segregated from subsoil when trenching. If any wetlands wouldn’t have soils segregated in the trench line (such as inundated wetlands, forested wetlands, etc.), clarify that as well.
11. EIR Section 4.5, page 44 – State the anticipated width of the trench within waterways. If the width at the bottom of the trench would differ from the width at the top of the trench, indicate that as well.
12. EIR Section 4.5, page 44 – This section states “Enbridge proposes to use typical open cut (wet trench) construction techniques to cross waterbodies if no flow is present at the time of the crossing.” However, the text written under the Applicability column for the wet trench method in Table 4.5-2 on page 47 seems contradictory, where it lists waterway types/regimes that can have perennial flow present. Clarify which statements are correct for waterways that would be wet trenched.
13. EIR Section 4.5, page 46 – Table 4.5-1 notes typical span type bridges may cause interference on navigable waterways. Confirm bridges will comply with the requirements in NR 320.04(3), Wis. Admin. Code, if a 5-foot clearance is not maintained.
14. EIR Section 4.5, page 46 – Table 4.5-1 notes typical span type bridges may require a cap. Explain what a cap is, and why utilizing a cap may cause sediment release.
15. EIR Section 4.6, page 53 – State the anticipated width of the trench within wetland. If the width at the bottom of the trench would differ from the width at the top of the trench, indicate that as well.
16. EIR Section 4.6, page 53 – Provide the following:
 - a. Clarify the type of material that would be considered “hydro-axe debris”,
 - b. Confirm if left in wetland, hydro-axe debris:
 - i. will also not alter surface elevations and will not obstruct water flow, in addition to not restricting revegetation growth,
 - ii. State how wetlands will be monitored to ensure revegetation, surface elevations, and water flow is not impacted,

- iii. If revegetation growth becomes impeded, surface elevations become altered, and/or water flow becomes obstructed, state how the impacts would be addressed and corrected.
 - c. State if clearing activities will be conducted in certain times of year to minimize impacts to wetlands and other sensitive resources.
- 17. EIR Section 4.6, page 53 – Regarding access in wetland:
 - a. Clarify when matting in would be placed (before which specific construction activity),
 - b. State the anticipated duration for matting in wetlands.
- 18. EIR Section 4.6.1, page 54 – This section states “After backfilling the trench with subsoil, the Contractor will spread the previously segregated topsoil over the trench area and mound no more than 6 inches...”. However, Section 14.0 of the EPP states mounding will be no more than 12 inches. Clarify which mounding measurement is correct, and if the mounding measurement would be modified per site specific conditions (i.e. soil type, time of year backfill occurs, etc.) or land type (i.e. wetlands, waterways, uplands, etc.).
- 19. EIR Section 6.4.2, page 100 – Provide the results of the 2020 growing season wetland delineation survey, once completed.
- 20. EIR Section 6.5.3.1, page 107 - Add discussion regarding feature WDH-01, which is shown on the WRAPP Supplemental Information Attachment B (Delineated Wetlands and Waterbodies map), page 1 of 47, as being within workspace assumed to be for a new valve location (permanent structure). If this indeed is a new valve location, describe if the valve station would be relocated or the footprint modified to avoid impacting this waterway (if determined to be a navigable waterway).
- 21. EIR Section 6.5.3.1 page 108 – The timing restriction listed for “all other waterbodies” is incorrect. The correct restriction period is March 1 to June 15, please revise.
- 22. EIR Section 6.5.4.2, pages 110-111 – When describing rare species locations, location information can only be provided on a township or higher level when providing the specific species name. There are several instances where a specific species name is provided and is associated with a specific Milepost location. As Mileposts are shown on the project maps, the language in this section needs to be revised to protect confidentiality of rare species data.
- 23. EIR Section 6.8.4 – Provide the results of the additional archaeological surveys to be completed in 2020, once completed.
- 24. EIR Attachment C (Route Alternative Maps) – Revise this map to add parcel boundaries and landowner names. The map scale may need to be modified to show parcel data clearly.
- 25. EIR Attachment D (Environmental Protection Plan) Sections 23.3.2 and 23.3.3 - Provide details on how dry trenching across wide waterways (such as sasc039i, sase022p, and sirb012p) would be accomplished (i.e. staged cofferdam systems, working during low flow conditions, etc.).
- 26. EIR Attachment E (Blasting Plan) – Provide the following:
 - a. State if any wetlands are anticipated to require blasting, given the information known at this time.
 - b. Understanding that a more specific Blasting Plan will be developed by the Contractor, are there any requirements Enbridge would consider necessary for the Contractor’s Plan in regard to minimizing impacts to wetlands and waterways?
 - c. Clarify if local approvals would be required for this activity per local ordinances.

If you have any questions, please feel free to call me at (608) 535-2602 or email me at Lindsay.Tekler@wisconsin.gov.

Sincerely,

Lindsay Tekler
Environmental Analysis and Review Specialist

cc: Bill Sande, U.S. Army Corps of Engineers
Tim Drake, ERM
Tracy Brunner, ERM
Adam Ingwell, PSC
Ashland County Zoning
Bayfield County Zoning
Iron County Zoning
James Yach, DNR