

John W. Morrison
400 East Broadway, Suite 600
P.O. Box 2798
Bismarck, ND 58502-2798
701.223.6585
jmorrison@crowleyfleck.com

September 9, 2013

via hand delivery

Mr. Darrell Nitschke
Executive Director
North Dakota Public
Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480



In re: PU-12-683
Hess Corporation
RTF Tie-In 14" Crude Oil Pipeline Project
Our File No.: 11-024-1056

Dear Mr. Nitschke:

Enclosed for filing in the captioned case by Hess Corporation are the original and 10 copies of Proposed Findings of Fact, Conclusions of Law and Order.

Very truly yours,

A handwritten signature in blue ink, appearing to be "John W. Morrison", with a long horizontal flourish extending to the right.

John W. Morrison

bw
Enc.
cc: Mitch Armstrong (via email)
Patrick Fahn (via email)
Vicki Sund (via email)

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF NORTH DAKOTA

Hess Corporation
14" Crude Oil Pipeline
Williams County
Siting Application

CASE NO. PU-12-683

PROPOSED FINDINGS OF FACT

CONCLUSIONS OF LAW, AND ORDER

_____, 2013

Appearances

Commissioners Brian P. Kalk, Randy Christmann, Julie Fedorchak

Brian R. Bjella, Attorney at Law, Crowley Fleck PLLP, 400 East Broadway, Suite 600, Bismarck, North Dakota 58501 on behalf of the Applicant, Hess Corporation.

Mitchell D. Armstrong, Special Assistant Attorney General, P. O. Box 460, Bismarck, North Dakota 58502-0460, Legal Counsel for the Public Service Commission.

Patrick Fahn, Director-Compliance and Competitive Markets Division, North Dakota Public Service Commission, 600 East Boulevard, Bismarck, North Dakota 58505

Patrick J. Ward, Administrative Law Judge, Office of Administrative Hearings, 316 North 5th Street, Bismarck, ND 58502-1695, as Procedural Hearing Officer.

Preliminary Statement

Under North Dakota Century Code §49-22-07, a utility may not begin construction of a transmission facility in the state without first having obtained a route permit. The facility must be constructed, operated, and maintained in conformity with the permit and any terms, conditions, or modifications of the permit.

On August 13, 2012, Hess Corporation ("Hess") filed a Letter of Intent with the Public Service Commission ("Commission") and a revised Letter of Intent was filed on August 24, 2012. Hess proposes to convert three existing pipeline segments, currently used as gathering pipelines, into a crude oil transmission pipeline which will connect the Ramburg Truck Facility

("RTF") to the Tioga Rail Terminal ("TRT;" said pipeline the "Project"). The gathering line would total 10.2 miles in length, and would consist of 14 " nominal diameter steel pipe. The pipeline will provide firm, reliable service for 54,000 barrels of crude oil to be delivered from the RTF to the TRT, where the product will be shipped via rail to end users throughout the United States and Canada.

On November 26, 2012, Hess filed applications for a certificate of corridor compatibility and for a route permit authorizing the construction of the Project. On April 24, 2013, Hess filed an application requesting that the Commission waive the procedures set forth in North Dakota Century Code §§49-22-08 and 49-22-08.1 to allow a single consolidated application for a corridor certificate and a route permit for the Project.

On December 14, 2012, the Commission requested the designation of an Administrative Law Judge from the Office of Administrative Hearings to preside as a Procedural Hearing Officer ("Hearing Officer") in this case. On December 17, 2012, Allen C. Hoberg was designated to conduct the hearing, make recommended findings of fact and conclusions of law, and issue a recommended order. On May 10, 2013, Patrick J. Ward was designated as a Administrative Law Judge to serve as a Procedural Hearing Officer.

On May 8, 2013, the Hearing Officer issued a Notice of Filings and Notice of Hearing scheduling a public hearing on July 31, 2013 at 10:00 a.m. CDT at the Tioga City Hall, 12 1st Street NE, Tioga, North Dakota, 58852.

The issues to be considered in Hess' request for a waiver of procedures and time schedules are as follows:

1. Are the proposed facilities of such length, design, location, or purpose that they will produce minimal adverse effects such that adherence to the procedures and time schedules may be waived?
2. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?

The issues to be considered in Hess' applications for certificate of corridor compatibility and route permit are as follows:

1. Will the location, construction, and operation of the proposed facilities produce minimal adverse affects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all the evidence presented, the Hearing Officer makes the following:

Findings of Fact

1. Hess is a Delaware corporation authorized to transact business in the State of North Dakota.
2. Hess is the operator of both the RTF and the TRT.

Size, Type and Preferred Location of Facility

3. Substantial volumes of crude oil are delivered by truck to the RTF and transferred to existing pipelines operated by third parties, including Enbridge and Tesoro. In 2011, Hess constructed a gathering pipeline to gather crude oil from Hess' Red Sky gathering system to the Tioga Rail Terminal, from which the crude oil is transported by rail. The gathering system was constructed by utilizing a 6.1 mile existing 14" gas pipeline and adding two new segments of 14" pipeline, one 1.9 miles in length and one 2.2 miles in length. This line is currently used to carry crude oil to the TRT, but currently constitutes a gathering line because no pressure is currently added at a pipeline storage site to move the crude oil.
4. Hess now proposes to add pumps at the RTF and convert the gathering pipeline to a transmission pipeline. The only new construction which will be required is the addition of main line valves at both ends of the pipeline. The main line valves will be located entirely on property owned by Hess and used in connection with the RTF and the TRT.
5. With the addition of the pumps, the transmission line will be capable of carrying up to 120,000 barrels of oil per day, but Hess anticipates a normal throughput of approximately 54,000 barrels of oil per day.

Need for Facility

6. Alternatives to conversion of the pipelines consists primarily of trucking the crude from the RTF to the TRT. At maximum capacity, it would require approximately 667 trucks per day to be loaded at the RTF, driven to the TRT, and unloaded at TRT. This would result in an unacceptable amount of heavy vehicle traffic for area residents and excessive wear and tear on roads. Such transportation would also be subject to disruptions, which would result in a shutdown of the Plant and the flaring of natural gas. The other primary alternative would be a Greenfield pipeline development, which would require new easements from landowners and substantially increased environmental impacts associated with construction activities.

Study of Preferred Location

7. North Dakota Administrative Code Chapter 69-06-08 sets forth certain criteria to guide the Commission in evaluating the suitability of granting an application for a certificate of corridor compatibility and route permit. The criteria as set forth in North Dakota Administrative Code Section 69-06-08-02 are classified as Exclusion Areas, Avoidance Areas, Selection Criteria and Policy Criteria. A transmission facility route must not be sited within an Exclusion Area. A transmission facility route must not be sited within an Avoidance Area unless the applicant demonstrates that under the circumstances there are no reasonable alternatives. In determining whether an Avoidance Area shall be designated for a facility, the Commission may consider, among other things, the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative routes. In accordance with the Commission's Selection Criteria, a transmission route shall be approved if it is demonstrated that no significant adverse impacts will result from the location, construction, and maintenance of the transmission facility. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the transmission facility.
8. Hess evaluated a one-mile wide corridor centered on the existing pipeline alignment for the exclusion, avoidance, selection and policy criteria of the Commission.
9. The only exclusion areas included within the corridor are several previously recorded and newly recorded cultural resources. Because no new construction will occur, these resources will not be impacted. In any event, Hess' consultants recommended a determination of "No Historic Properties Affected" and "No Significant Sites Affected" and the State Historic Preservation Officer ("SHPO") concurred with this recommendation.
10. The only avoidance areas included within the corridor are several wildlife areas, but as no new construction will occur, these will not be impacted.
11. As there will be no ground disturbing activities, there will be no impact to wetlands, woodlands, or wooded areas. No trees, saplings or shrubs were identified within the pipeline route in a survey that was completed.

Mitigation to Minimize Impact

12. No mitigation of construction activities is required since there will be no ground-disturbing activities outside of the confines of the RTF and TRT.
13. In 2011, the existing 14" pipeline which was converted from a gas pipeline to a crude oil gathering line was electronically inspected and the tie-in welds. The remaining segments were newly constructed in 2011. The pipeline meets all U.S. Department of Transportation regulations as set forth in 49 CFR Part 195.

14. Hess will have personnel available in Tioga to respond to any conditions 24 hours a day, seven days a week. The mainline valves will allow the pipeline to be quickly shut down in the event of any system failure. A SCADA system will report pipeline operations and facilitate early response to any breach or failure of the pipeline.
15. Hess has agreed to a number of steps to mitigate the impact of the Project as indicated by the Certification Relating to Order Provisions – Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications.
16. Hess will use environmental monitors and inspectors to comply with all applicable permits.

From the foregoing Findings of Fact, the Hearing Officer makes the following:

Conclusions of Law

1. The Commission has jurisdiction over the applicant, Hess, and over the subject matter of this application under North Dakota Century Code Chapter 49-22.
2. Hess is a utility as defined in North Dakota Century Code Section 49-22-03(13).
3. The pipeline, as proposed to be converted by Hess, is a transmission facility as defined in North Dakota Century Code Section 49-22-03(12).
4. The location, construction, and operation of the pipeline as a transmission line will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
5. The pipeline corridor and route are compatible with the environmental preservation and the efficient use of resources.
6. The pipeline corridor and route will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.
7. The Project is of such design and location that it will produce minimal adverse effects, as defined under North Dakota Century Code Section 49-22-07.2.

From the foregoing Findings of Fact and Conclusions of Law, the Commission now makes its:

Order

The Commission orders:

1. Hess's application for waiver of procedures and time schedules is granted.
2. Hess is issued Certificate of Corridor Compatibility for a Transmission Facility Corridor No. ____ and Route Permit for Construction of a Transmission Facility No. ____ to construct the facilities necessary to convert the pipeline to a transmission line. The route that is approved for this purpose is the route identified on Late Filed Exhibits 3.
3. Hess shall obtain approval from the Commission or Commission staff prior to any changes or deviations to the pipeline route.
4. The Certificate of Compatibility for a Transmission Facility Corridor No. ____ and Route Permit for Construction of a Transmission Facility No. ____ are effective for the life of the Pipeline, but are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.
5. Hess shall comply with all the rules and regulations of all other agencies having jurisdiction over any phase of the proposed project. Prior to commencing construction of any phase of the proposed project, Hess shall obtain all other necessary licenses and permits for construction of such phase, and provide copies to the Commission prior to construction of each phase.
6. Hess shall conduct a preconstruction conference to be held prior to the commencement of any construction. The conference must include a Hess representative, Hess's construction supervisor, and Commission staff, to ensure that Hess fully understands the conditions set forth in this order.
7. Hess shall comply with the Certification Relating to Order Provisions – Pipeline Siting filed in this proceeding and attached hereto.
8. Hess shall notify the Commission as soon as reasonably possible if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate issued in this proceeding. In the event of any damage to underground facilities, Hess shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined and clearance to proceed has been given by the Commission.
9. The route permit is subject to suspension or revocation and may, after hearing, be suspended or revoked for failure to comply with the Commission's order, requirements of the One-Call Excavation Notice System under North Dakota Century Code Chapter 49-23, the conditions and criteria of the permit or

subsequent modification, or failure to comply with applicable statutes or rules, regulations, standards, and permits of other state or federal agencies.

Dated this ___ day of _____, 2013.

PUBLIC SERVICE COMMISSION

Brian P. Kalk
Commissioner

Randy Christmann
Commissioner

Julie Fedorchak
Commissioner

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Hess Corporation
14" Crude Oil Pipeline- Williams County
Siting Application

Case No. PU-12-683

CERTIFICATION RELATING TO ORDER PROVISIONS
TRANSMISSION FACILITY SITING

I am Warren W. Walkan, a representative of Hess Corporation ("Company") with authority to bind Company to requirements to be set forth by the Commission in its Order and I certify the following:

1. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.
2. Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.
3. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations.
4. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.
5. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a weekly basis.
6. Company understands and agrees that the pipeline will be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in range land, 48

inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines.

7. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.
8. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission's order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.
9. Company agrees to construct and operate the transmission facility in the manner described in Company's application, in any late filed exhibits, and supplemental materials (Application). To the extent there are any conflicts or inconsistencies between Company's Application and the provisions in this Certification Relating to Order Provisions, the Certification provisions control.
10. Company agrees to report promptly to the Commission the presence in the permit area of any critical habitat or threatened species, endangered species, bald eagles, or golden eagles of which Company becomes aware and which were not previously reported to the Commission.
11. Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.
12. Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society and clearance to proceed is given by the Commission.
13. Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.
14. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission

facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.

15. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures approved by the Commission are taken.
16. Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be stripped and segregated from the subsoil. Except along segments of the line using the double ditching method, any area on which excavated subsoil will be placed must also be stripped of topsoil. After backfilling is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced.
17. Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.
18. Company understands and agrees that its obligation for reclamation and maintenance of the right-of-way will continue throughout the life of the transmission facility.
19. Company understands and agrees that its obligation for reclamation and maintenance of the transmission facility, associated facilities, and roadways will continue throughout the life of the transmission facility.
20. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.
21. Company understands and agrees that it shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.
22. Company understands and agrees that it shall repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.

23. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.
24. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.
25. Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.
26. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.
27. Company understands and agrees that it shall advise the Commission of any extraordinary events which take place at the site of the transmission facility, including injuries to any person, or the death of any threatened or endangered species on the site within five business days of such event.
28. Company understands and agrees that it shall implement a procedure for how complaints concerning the transmission facility will be handled by Company
29. Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.
30. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility. Company understands and agrees to obtain written approval from the Commission prior to any modifications to the site plan or the transmission facility. Approval may be granted after notice and opportunity for hearing.
31. Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North

and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.

32. Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.
33. Company understands and agrees that in the event Company desires to construct, within any corridor granted by a Certificate of Corridor Compatibility in this proceeding, a transmission facility or energy conversion facility that was not included in Company's application in this proceeding, Company shall apply to the Commission for a Route Permit or Site Certificate for the facility.
34. Company shall notify the Commission, as soon as reasonably possible, if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined and clearance to proceed has been given by the Commission.
35. Company understands and agrees that the corridor certificate and route permit are subject to suspension or revocation and may, after hearing, be suspended or revoked for failure to comply with the Commission's order, requirements of the One-Call Excavation Notice System under North Dakota Century Code Chapter 49-23, the conditions and criteria of the certificate or permit or subsequent modification, or failure to comply with applicable statutes, or rules, regulations, standards, and permits of other state or federal agencies.
36. Company agrees to utilize the following procedures if Company seeks a route adjustment before or during construction of its pipeline, pursuant to House Bill No. 1147:
 - a. Company will specifically identify the subsection of House Bill No. 1147 under which it is requesting the adjustment.
 - b. Before conducting any construction activities for any adjustment to the designated route within the designated corridor, Company will file with the Commission maps meeting the requirement of N.D. Admin. Code § 69-06-04-01(n) and identifying:

1. the designated route and the route adjustment;
 2. the designated corridor;
 3. all exclusion and avoidance areas within the designated corridor;
 4. all landowners and their associated property within the designated corridor; and
 5. all government entities with an interest in the designated corridor.
- c. If Company is filing a route adjustment with construction activities outside the designated corridor, the maps will include the following additional information:
1. the length of the route outside the designated corridor;
 2. the corridor adjustment;
 3. the width of the revised corridor;
 4. identification of all exclusion and avoidance areas within the revised corridor;
 5. identification of all landowners and their associated property within the revised corridor; and
 6. identification of all government entities with an interest in the revised corridor.
- d. Company will provide the name and contact information for each landowner and for each governmental entity with an interest in the designated corridor and any revised corridor; and will provide a description of the nature of each entity's interest sufficient for the Commission and Commission staff to evaluate potential impacts.
- e. Company will provide sufficient supporting documentation indicating that no landowner or interested government entity opposes the adjustment. If a landowner or interested government entity is opposed to the route adjustment, Company will provide documentation from the landowner or government entity stating its objection. If no documentation exists, Company will provide a description of its understanding of the nature of any landowner or government entity objection.
- f. If the construction activity associated with the adjustment will not affect any known exclusion or avoidance area, Company will certify in its filing that construction activities will not affect any known exclusion or avoidance areas and will provide all field studies performed to conclude that exclusion or avoidance areas will not be impacted within the revised corridor.

- g. If the construction activity associated with the adjustment will impact an avoidance area, Company will provide, before any construction activities are undertaken:
1. Specific information describing avoidance areas expected to be impacted;
 2. All field studies performed to conclude that exclusion or avoidance areas will be impacted;
 3. Specific information describing why Company asserts there is no reasonable alternative to impacting the avoidance area;
 4. Specific information describing why Company asserts there is good cause to impact the avoidance area; and
 5. Specific information about any mitigation measures Company will take.
- h. If Company is seeking an adjustment under subsection (2) or (4) of House Bill No. 1147, the Company agrees the initiation of the 10 working days from receipt of Company's filing, certification and supporting documentation will not start until all of the information required by law and this Certification has been received by the Commission. Company further acknowledges that the Commission may delegate to staff the authority to determine if Company has established good cause to impact an avoidance area. However, if it is Commission staff's determination that full Commission involvement is necessary to evaluate whether authorization to impact the avoidance area should be authorized, staff's written notice to Company that the staff is bringing the question to the full Commission constitutes action by the Commission within 10 working days and authorization is not granted until the Commission acts.
- i. If a route adjustment is granted within the original designated corridor or in an adjusted corridor, Company agrees to incorporate and follow all provisions of the Commission's Order designating the original route and corridor unless Company specifically requests relief from a specific provision, and the requested relief is specifically granted.
- j. Company certifies that it will comply with the Commission's Order and all applicable laws, rules, and regulations designating the corridor and route with respect to any adjustment.

Dated this 22 day of July, 2013.

HESS CORPORATION

By W. W. Walhang

Its Director of Infrastructure -

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Hess Corporation
14" Crude Oil Pipeline – Williams County
Siting Application

Case No. PU-12-683

Tree and Shrub Mitigation Specifications

Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (e.g., *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.

6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

Clearing for Construction

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

Replacement

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

Invasive or noxious species must be replaced by similar non-invasive or non-noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Tree and shrub replacement must not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).