



November 6, 2014

Mr. Jerry Lein  
Public Utility Analyst  
ND Public Service Commission  
600 East Boulevard Avenue, Dept. 408  
Bismarck, ND 58505-0480

Dear Mr. Lein:

Carlson McCain has completed the post-construction inspection report for the Hess Corporation Tioga Gas Plant Expansion Project - Williams County, North Dakota (Case No. PU-10-120). Upon review of the North Dakota Public Service Commission case docket and multiple site inspections Carlson McCain has found the Hess Tioga Gas Plant Expansion Project (Case No. PU-10-120) is not in full compliance with the siting laws NDCC (49-22) and rules NDAC Article (69-09) and applicable Commission orders. Please see the attached report for details.

Please contact me at 701-595-7003 if you have any questions or would like additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Ryan Krapp", written in a cursive style.

Ryan Krapp  
Natural Resource Specialist

Attachment

Cc:  
Mr. Dale Weatherby - Hess Corp Regulatory Advisor  
Ms. Vicky Sund - Hess Corp Regulatory

# POST-CONSTRUCTION INSPECTION REPORT

Hess Corporation  
Hess Tioga Gas Plant Expansion Project  
Williams County, North Dakota

*PSC Case No. PU-10-120  
Carlson McCain Project #4286*

*Prepared for:*

North Dakota Public Service Commission  
600 East Boulevard Avenue, Dept. 408  
Bismarck, ND 58505-0408

*November 6, 2014*



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## **EXECUTIVE SUMMARY**

North Dakota Public Service Commission (Commission) had approved an energy conversion facility application for of Hess Corporation (Hess) consisting of a new plant expansion with a capacity of 250 million cubic feet of gas per day and will operate with improved efficiency and reduce impacts on the environment. Most of the project will be constructed with the existing Tioga natural gas plant (TGP) footprint of approximately 95 acres but there will be various processing facilities including a flare stack that will be located on an adjacent tract comprised of 21 acres. The size of the entire facility after the expansion work will be 116 acres and located in Section 26, Township 157 North, Range 95 West in Williams County, North Dakota.

The Project is under the jurisdiction of the Commission, which issued its Finding of Fact, Conclusion of Law and Order of the Commission in Case No. PU-10-120 dated September 8, 2010, granting a Certificate of Site Compatibility for Energy Conversion Facility No. 15.

The Commission retained Carlson McCain, Inc. (Carlson McCain) to complete construction inspections applying engineering and science principles to ensure compliance with the North Dakota Century Code (NDCC) 49-22 siting laws, North Dakota Administrative Code (NDAC) Article 69-09 regulations, and applicable Commission orders (Order). Project construction inspections occurred on November 15, 2012 and October 2, 2013. The post-construction final inspection was conducted on October 6, 2014.

Based upon site visits, the Project appears to be constructed as designed with minimal impacts to the surrounding natural and human environment. However, documentation of all permits acquired for the project has not been submitted to date. Additionally, the weekly progress reports from June 15, 2013 until project completion, project completion date, and a statement assuring no modifications to the site plan had occurred without Commission approval are also missing from the case record. It is recommended that the Commission request these documents.

After review of the Commission case docket and multiple site inspections Carlson McCain overall has found the Hess Tioga Gas Plant Expansion Project (Case No. PU-10-120) is not in full compliance with the siting laws NDCC (49-22) and rules NDAC Article (69-09) and applicable Commission orders.

The Commission will decide whether these recommendations are necessary to fulfill Project obligations. Carlson McCain has been in contact with Hess personnel and expects follow-up action taken by Hess to address these particular issues and trust they can be resolved by document submission.

## **BACKGROUND**

### **1.1 Introduction**

North Dakota Public Service Commission had approved an energy conversion facility application for of Hess Corporation consisting of a new plant with a capacity of 250 million cubic feet of gas per day and will operate with improved efficiency and reduce impacts on the environment. Most of the project will be constructed with the existing Tioga natural gas plant (TGP) footprint of approximately 95 acres but there will be various processing facilities including a flare stack that will be located on an adjacent tract comprised of 21 acres. The size of the entire facility after the expansion work will be 116 acres and located in Section 26, Township 157 North, Range 95 West in Williams County, North Dakota.

The Project is under the jurisdiction of the Commission, which issued its Finding of Fact, Conclusion of Law and Order of the Commission in Case No. PU-10-120 and subsequently granted a Certificate of Site Compatibility for Energy Conversion Facility No. 15 on September 8, 2010.

### **1.2 Purpose and Scope of Inspection**

The North Dakota Energy Conversion and Transmission Facility Act (NDCC 49-22) authorizes the Commission to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and the welfare of citizens of North Dakota. Construction inspections ensure the project is constructed in compliance with the siting laws and rules and the applicable Commission Findings of Fact, Conclusions of Law, and Order.

The Commission retained Carson McCain to complete a construction inspection of the Project. The inspection process included a review of the Siting Plan, Order, and other applicable documents to determine Project-specific siting and construction requirements; a site visit and inspection of facilities; documentation of compliance; and a report summarizing findings. This report includes, but is not limited to, documentation of site visit observations, documentation of compliance deficiencies, and a summary of issues that should be addressed for the Project to be considered complete and in full compliance.

## **PROJECT REVIEW**

### **2.1 Methods**

Carlson McCain reviewed North Dakota siting laws and rules, the Applications for the Certificate of Corridor Compatibility and Route Permit (Application), and the Order for the Project to identify what Project-specific documentation was required for compliance. Carlson McCain then reviewed Project documents in the Commission Online Case Search to identify those siting laws and rules and Application and Order assertions that had written verification, those that still required documentation, and those that required physical site verification.

Carlson McCain Inspector Ryan Krapp inspected the project site on multiple occasions. First inspection occurred on November 15, 2012 with Hess TGP Expansion Construction Manager, Mr. Scott Wright and Environmental Compliance Manager, Mr. Greg Lea. The second inspection on October 2, 2013, was also with Mr. Wright, Mr. Lea, and also with Mr. Brandon Bell, Kiewit Infrastructure Group (Kiewit) Project Environmental Coordinator. Project construction had been completed spring of 2014 (date unknown) and regulatory compliance had been turned over to Hess personnel Mr. Victor Loose, Senior Regulatory Specialist and Ms. Victoria Siemieniewski, Regulatory Analyst. The final post-construction inspection occurred on October 6, 2014.

### **2.2 Orders**

The following section includes discussion of the list of components of the Project that were asserted in the Application and Order which could be documented during the post-construction inspection to verify compliance with siting laws, rules and the Order for the Project, by either written documentation or physical site verification.

On August 27, 2010, the Commission ordered:

1. Hess Corporation's application for a waiver of procedures and time schedules is grated.
2. Certificate of Site Compatibility for Energy Conversion Facility No. 18 is issues to Hess Corporation for the construction, operation and maintenance of an expanded Tioga Gas Plant.
3. The August 27, 2010, Certification Relating to Order Provisions - Facility Siting is incorporated by reference and attached to this Order.

### **2.3 Certification Relating to Order Provisions –Facility Siting**

The Commission issued the Certificate of Site Compatibility for Energy Conversion Facility, Certificate Number 33 on August 27, 2010. Mr. Rory Nelson, a representative of Hess Corporation (Hess) with authority to bind Company to requirements to be set forth by the Commission in its Order Provisions (1-27) and certified the following Orders:

- 1. Company understands and agrees that the Certificate of Site Compatibility will be issued by the Commission 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.**

*Docket #33 and #34 - Findings of Fact, Conclusions of Law and Order and Commission Motion of Adoption. Hess personnel, Rory D. Nelson signed the Certification on August 27, 2010.*

*Order #1 is considered satisfied.*

- 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.**

*Docket #41 – Preconstruction conference minutes, site survey map, and site plan were submitted on September 15, 2010. These provided substantiation that the requirements had been fulfilled.*

*Order #2 is considered satisfied.*

- 3. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed energy conversion facility including all city, township, and county zoning regulations.**

*Dockets #24 through 28 - Permit Filing and Status Reports, and Exhibits. Within these Dockets, Hess noted that a few permits were pending at this time. Docket #32, a late-filed supplement to Exhibit 3 is a permit checklist table of permits required, obtained and/or pending. Docket #40 presents an updated permit checklist table. Within it notes that Federal Aviation Administration (FAA) permits, North Dakota Department of Health - Air Quality Division and Stormwater Program Permits, and Williams Co. Highway Dept. Road Permits were still pending on September 15, 2010. During the on-site inspection(s) these pending permits were presented; however, they have not been documented as received by the Commission.*

*Order #3 will be considered satisfied upon document submission(s) to the Commission.*

- 4. Company 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 energy conversion facility that requires said license or permit.**

*During the on-site inspection(s) the permits listed as pending in Docket #40 list were presented; however, they had not been documented as received and/or posted to the case website.*

*The Commission will need to determine if Order #4 can be considered satisfied upon submittal of the permit documents.*

- 5. Company understands and agrees that the Certificate of Site Compatibility 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.**

*No concerns of non-compliance with the Certificate of Site Compatibility were found during the construction or post-construction inspections.*

*Order #5 is considered satisfied.*

- 6. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission's order and the Certificate of Site Compatibility, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.**

*Hess has maintained records on-site that demonstrated compliance with the requirements of the Commission's order and the Certificate of Site Compatibility; however has not submitted all due permit documents and weekly construction reports since June 8, 2013.*

*Order #6 may be considered satisfied following document submission(s) to the Commission.*



- 7. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the energy conversion 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 of construction activities on a weekly basis.**

*Docket #44 and Docket's #45-69 and #75-91 – Construction Notification and Project Progress Reports. Carlson McCain reported activities discussed during on-site inspection; however as noted in the previous inspection reports, project progress reports have not be submitted to the third-party contractor or Commission since June 15, 2013.*

*Order #7 may be considered satisfied upon submittal of weekly construction progress reports from June 15, 2013 through the date of construction completion (unknown).*

- 8. Company agrees to construct and operate the energy conversion facility/expansion in the manner described in the Company's application, in any late filed exhibits and supplemental materials, and in accordance with all applicable safety requirements.**

*Docket #33 and #34 - Findings of Fact, Conclusions of Law and Order and Commission Motion of Adoption. No concerns of non- compliance or deviation from the Application were found during the construction or post-construction inspections. Through Docket's #45-69 and #75-91 (weekly progress reports) Hess documented safety procedures and reported injuries or incidences and the corrective actions taken.*

*Order #8 may be considered satisfied upon submittal of weekly construction progress reports from June 15, 2013 through the date of construction completion (unknown).*

- 9. Company agrees to report promptly to the Commission the presence in the permit area of any critical habitat of threatened species, endangered species, bald eagles, or golden eagles that Company becomes aware of and which were not previously reported to the Commission.**

*Discussions with Hess personnel during the construction and post-construction on-site visits indicated that no threatened species, endangered species, bald eagles, or golden eagles were discovered in or near the project before or during construction; therefore, no documentation was necessary.*

*Order #9 is considered satisfied.*

- 10. Company understands that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office (SHPO) and approved prior to the start of any fieldwork and construction activity in the affected area.**

*Docket #4 and Docket #55 – SWCA Consultants conducted cultural resource investigations on behalf of Hess and submitted reports to SHPO. SHPO verified that no cultural resources would be affected.*

*Order #10 is considered satisfied.*

- 11. 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 by the State Historical Society, a report of such examination is filed with the Commission, and clearance to proceed is given by the Commission.**

*It was discussed with the Construction Project Manager, and no unanticipated cultural resources were discovered.*

*Order #11 is considered satisfied.*

- 12. Company understands and agrees that underground piping or electric line crossing of graded roads shall be bored unless the responsible governing agency specifically permits Company to open cut the road.**

*No buried facilities were constructed under government roads during Project construction.*

*Order #12 is considered satisfied.*

- 13. 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 energy conversion 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.**

*County Road 10 (68<sup>th</sup> St NW) is situated between project offices and the project. The road was used to traverse between the sites. Weekly project progress reports submitted noted that maintenance to roadways was completed when necessary.*

*Order #13 is considered satisfied.*

- 14. 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.**

*In the weekly progress reports Hess documented occasional adverse weather conditions and responded as appropriate to the conditions.*

*Order #14 is considered satisfied.*

- 15. During construction, at least 12 inches of topsoil, where available (or topsoil to the depth of cultivation, whichever is greater), over and along areas where facilities will be placed must be stripped and segregated from subsoil. Any area on which excavated subsoil will be placed must first be stripped of topsoil. After backfilling with subsoil is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must not be placed within the footprint of the facilities, and must be placed over areas containing topsoil.**

*Docket #28 – Exhibit #4 explained that very little topsoil occurs onsite. The entire project area would be converted to permanent development. All available topsoil was stripped and respread on adjacent areas.*

*Order #15 is considered satisfied.*

- 16. 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.**

*Post-construction on-site inspection documented that the entire project area was contoured, sloped, and graveled for stabilization. No bare ground was visible and no reseeding efforts were necessary. Additionally, Docket #28 – Exhibit #4 explained that very little reclamation would be necessary.*

*Order #16 is considered satisfied with the Hess commitment to monitor and maintain in accordance with Stormwater Pollution Prevention Plan (SWPPP).*

- 17. Company understands and agrees that its obligation for reclamation and maintenance of the energy conversion facility site, associated facilities and roadways will continue throughout the life of the energy conversion facility.**

*Docket #33 and #34 - Findings of Fact, Conclusions of Law and Order and Commission Motion of Adoption. Hess personnel, Rory D. Nelson signed the Certification on August*

27, 2010. Additionally, Docket #28, later filed as Exhibit #4, explained that little reclamation would be necessary

Order #17 is considered satisfied with the Company commitment to monitor and maintain the project area as necessary.

**18. Company agrees to comply with the Tree and Shrub Mitigation Specifications.**

*Docket #4 – The Application documented that no trees or shrubs were present within the Project area. Docket #28 reiterated the acknowledgement and that no trees or shrubs were present.*

*Order #18 is considered satisfied.*

**19. Company agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.**

*Hess established and maintained temporary storage and workspace on the west side of the project area. All staging areas and equipment stayed within Hess property boundaries.*

*Order #19 is considered satisfied.*

**20. Company 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.**

*Hess personnel and Kiewit Infrastructure Group Project Environmental Coordinator demonstrated and indicated that strict SPCC plan was followed and waste was properly disposed of on a regular basis. Trash bins and concrete wash-out pits were found on-site during the construction inspections.*

*Order #20 is considered satisfied.*

**21. Company agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the energy conversion facility/expansion.**

*Hess erected chain-link fence around the temporary construction site and TGP. Access to the site was/is controlled by Hess Security. Fencing was found to be appropriate during the construction inspections.*

*Order #21 is considered satisfied.*

- 22. Company agrees that it shall advise the Commission of any extraordinary events which take place at the site of the energy conversion facility/expansions, including but not limited to injured workers or private individuals, the death of any threatened or endangered species, or the discovery of large number of dead birds or bats on the site within five business days of such event.**

*See Order #9 above. Additionally, any personal injuries were reported and remedies outlined within the weekly progress reports submitted.*

*Order #22 is considered satisfied.*

- 23. Company agrees that it shall implement a procedure for how complaints concerning the proposed energy conversion facility will be handled by Company.**

*Hess indicated that no problems have arisen from the expansion operations. No complaints were reported.*

*Order #23 considered satisfied.*

- 24. Company agrees to provide the Commission with engineering design drawings showing surveyed structure(s) prior to construction, and understands and agrees that it must obtain approval from the Commission or from Commission Staff prior to any changes in the energy conversion facility/expansion.**

*Docket #4 - Construction plans and engineering drawings were supplied in the Application. Dockets #41 and #43 – An updated version of the Site Plan was presented with the Pre-construction Conference Call meeting minutes.*

*Order #24 considered satisfied.*

- 25. Company agrees to provide the Commission with a copy (hardcopy and electronic version) of the design specifications for the construction of the energy conversation facility showing the location of the energy conversion facility as built facility design specification 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.**

*Hess submitted the facility design specifications and site map via email and will mail a compact disc of the electronic As-Built files that can be imported into ESRI GIS Mapping software for the Tioga Gas Plant Expansion Project on November 4, 2014.*

*Order #25 is considered satisfied.*

- 26. Company understands and agrees that the authorizations granted by the Certificate of Site Compatibility for the energy conversion facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.**

*During review of the case dockets the Commission did not appear to order any modifications to the Project to protect further the public or the environment.*

*Order #26 is considered satisfied.*

- 27. Company agrees to inform form the Commission in writing of any modifications to the energy conversion facility, or of any plans to modify the site plan for the energy conversation facility. Any additions or modifications to the site plan for energy conversion facility must be approved in writing by the Commission or Commission staff. Approval may be granted after notice and opportunity for hearing.**

*Carlson McCain is unsure if Hess made any modifications to the site plan for the energy conversion facility, none were submitted according to the Commission record (website).*

*The Commission may request a written statement for Order #27 to be considered satisfied.*

## **CONCLUSION**

Based upon site visits, the Project appears to be constructed as designed with minimal impacts to the surrounding natural and human environment. However, documentation of all permits acquired for the project has not been submitted to date. Additionally, the weekly progress reports from June 15, 2013 until project completion, project completion date, and a statement assuring no modifications to the site plan had occurred without Commission approval are also missing from the case record. It is recommended that the Commission request these documents.

After review of the Commission case docket and multiple site inspections Carlson McCain overall has found the Hess Tioga Gas Plant Expansion Project (Case No. PU-10-120) is not in full compliance with the siting laws NDCC (49-22) and rules NDAC Article (69-09) and applicable Commission orders.

The Commission will decide whether these recommendations are necessary to fulfill Project obligations. Carlson McCain has been in contact with Hess personnel and expects follow-up action taken by Hess to address these particular issues and trust they can be resolved by document submission.

*Post-Construction Inspection Report  
Tioga Gas Plant Expansion Project – Williams County  
Case No. PU-10-120*

## **APPENDIX A. FIGURES**



*Post-Construction Inspection Report  
Tioga Gas Plant Expansion Project – Williams County  
Case No. PU-10-120*



**Figure 1. Former temporary workspace east of the TGP Expansion. The perimeter is fenced, equipment removed and level areas have been gravelled.**



**Figure 2. Former temporary workspace east of the TGP Expansion. Weed control around the site is being maintained.**

*Post-Construction Inspection Report  
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**Figure 3. All drainages established within the project site have been stabilized by gravel and rock.**



**Figure 4. Sediment and standing water was observed in the stormwater pond during final inspection. The SWPPP bi-weekly reports and Hess personnel assure pond water was tested twice this year and has never overtopped.**