March 10, 2015

TO: INTERESTED PARTIES

RE: Flint Hills Resources Combined Heat and Power (CHP) Cogeneration Project

The Minnesota Pollution Control Agency (MPCA) has approved the Findings of Fact, Conclusions of Law, and Order for a Negative Declaration on the need for an Environmental Impact Statement on the proposed Flint Hills Resources Combined Heat and Power (CHP) Cogeneration Project, Dakota County. The Findings of Fact, Conclusions of Law, and Order document concludes that this project does not have the potential for significant environmental effects. The decision for a Negative Declaration completes the state environmental review process under the revised Environmental Quality Board rules, Minn. R. ch. 4410. Final governmental decisions on the granting of permits or approvals for the project may now be made.

These documents can be reviewed at the following locations: the MPCA offices in St. Paul and the Minneapolis Public Library at 300 Nicollet Mall, Minneapolis. The document can be viewed on our MPCA website at http://www.pca.state.mn.us/news/eaw/index.html. Requests for copies of these documents may be made by contacting the St. Paul office at 651-757-2100.

We want to express our appreciation for comments submitted on the Environmental Assessment Worksheet. Comments and responses to them have been incorporated into the Findings of Fact, Conclusions of Law, and Order and have been considered by MPCA staff during the permit process for the proposed project.

Sincerely,

[Signature]

Dan R. Card, P.E.
Supervisor, Environmental Review Unit
St. Paul Office
Resource Management and Assistance Division

DRC:bt
IN THE MATTER OF THE DECISION
ON THE NEED FOR AN ENVIRONMENTAL
IMPACT STATEMENT FOR THE PROPOSED
FLINT HILLS RESOURCES COMBINED HEAT AND POWER (CHP)
COGENERATION PROJECT
DAKOTA COUNTY
ROSEMOUNT, MINNESOTA

FINDINGS OF FACT

Pursuant to Minn. ch. 4410, the Minnesota Pollution Control Agency (MPCA) staff prepared and distributed an Environmental Assessment Worksheet (EAW) for the proposed Flint Hills Resources – Combined Heat and Power (CHP) Cogeneration Project (CHP Project). Based on the MPCA staff environmental review, the EAW, comments and information received during the comment period, and other information in the record of the MPCA, the MPCA hereby makes the following Findings of Fact, Conclusions of Law, and Order.

CHP Project Description

1. Flint Hills Resources Pine Bend, LLC, (FHR), a refinery located in the city of Rosemount, Minnesota proposes to construct a natural gas-based combined heat and power cogeneration facility, generating up to a net 49.9 megawatts (MW) of electricity to reduce electricity purchases from the grid and improve the efficiency of steam production at the refinery.

2. Currently, the refinery’s electrical load is supplied from the grid and purchased from the local utility. FHR wishes to implement self-generation of electricity via a natural gas–based combined-cycle combustion turbine to produce both heat and power at the FHR refinery site as a more efficient and cost effective means of supplying electricity to meet the refinery’s needs. Therefore, FHR is proposing a CHP Cogeneration Project generating up to 49.9 MW of electricity to displace electricity purchases from the grid and generating up to 290,000 pounds per hour of steam, depending on the operating configuration, to displace a portion of the steam production at the refinery’s existing boilers.

3. The cogeneration plant will utilize a 42.9 MW capacity General Electric LM6000-PF gas turbine that will exhaust to a single-pressure heat-recovery steam generator (HRSG). The combination of electricity generation from both a combustion turbine and an integrated HRSG and steam turbine is known as combined-cycle generation.
4. The new cogeneration plant will be located within the FHR facility boundary, but south of the existing refinery process units.

5. The facility is proposing three alternatives for distributing the power to the refinery, pending final engineering and design:

   a. Alternative one would route the net power produced into the refinery’s 13.8 kV distribution system via multiple armored cable conductors in a concrete encased underground duct bank and/or an above ground cable tray that will run north from the CHP cogeneration facility and connect into the refinery’s existing 13.8 kV electric distribution system or at an internal distribution substation.

   b. Alternative two would step up the power from 13.8 kV to 115 kV using two Generator Step-Up (GSU) transformers, one each for the combustion turbine generator (CTG) and the steam turbine generator (STG). The GSU’s would be located in a transformer yard lying just to the northeast of the turbine building. The CTG transformer would be a 75 Megavolt-Amperes (MVA) class transformer and would contain approximately 7,500 gallons of dielectric fluid. The STG transformer would be a 20 MVA class transformer and will contain approximately 3,500 gallons of dielectric fluid.

   c. Alternative three also would use the same GSU configuration and design as alternative two, but instead would tie the power feed from the GSU transformer yard to Xcel Energy’s 115 kV Johnny Cake Transmission Line located directly to the east of the facility.

6. The combustion turbine will be fueled by natural gas. The HRSG will have natural gas fired duct burner(s) for supplementary heat input and will also contain an oxidation catalyst for reduction of carbon monoxide (CO) and volatile organic compounds (VOCs), and an aqueous ammonia-based selective catalytic reduction (SCR) system for nitrogen oxides (NOx) reduction.

Environmental Review of the CHP Project

7. This CHP Project will generate more than 100,000 tons per year (TPY) of greenhouse gas (GHG) emissions. Therefore, Minn. R. 4410.4300, subp. 15(B) requires the preparation of an Environmental Assessment Worksheet (EAW). Because this CHP Project will be designed for or capable of operating at a capacity of between 25 megawatts and 50 megawatts of electric power, Minn. R. 4410.4300, supb. 3 also require the preparation of an EAW.

8. The GHG emission category designates the Minnesota Pollution Control Agency (MPCA) as the responsible governmental unit (RGU) for preparing the EAW, while the electric power category designates the Environmental Quality Board (EQB) as the RGU. Based on Minn. R. 4410.0500, subp. 5(B), and with concurrence of EQB staff, the MPCA is the RGU for the EAW under both categories, as the governmental unit with the greatest responsibility for supervising or approving the CHP Project as a whole.

9. An EAW is a brief document designed to set out the basic facts necessary to determine whether an Environmental Impact Statement (EIS) is required for a proposed project or to initiate the scoping process for an EIS. (Minn. R. 4410.0200, subp. 24).
10. The MPCA provided public notice of the CHP Project as follows:

   a) Notice of the availability of the EAW for public comment was published in the EQB Monitor on December 22, 2014, as required by Minn. R. 4410.1500.
   b) The EAW was available for review on the MPCA website at http://www.pca.state.mn.us/news/eaw/index.html.
   c) The MPCA provided a news release to media, Twin Cities metro counties, and other interested parties on Dec 22, 2014.

11. During the 30-day comment period, the MPCA received comment letters from the Army Corps of Engineers, Metropolitan Council, city of Rosemount, and Dakota County. A list of the comment letters received and copies of the letters are included as Appendix A to these Findings.

12. The MPCA prepared written responses to the comment letters received during the 30-day public comment period. The responses to the comments are included as Appendix B to these findings.

**Standard for Decision on the Need for an EIS**

13. The MPCA shall base its decision on the need for an EIS on the information gathered during the EAW process and the comments received on the EAW (Minn. R. 4410.1700, subp. 3). The agency must order an EIS for projects that have the potential for significant environmental effects (Minn. R. 4410.1700, subp. 1). In deciding whether a project has the potential for significant environmental effects, the MPCA must compare the impacts that may be reasonably expected to occur from the project with the criteria set forth in Minn. R. 4410.1700, subp. 7. These criteria are:

   A. Type, extent, and reversibility of environmental effects;

   B. Cumulative potential effects. The responsible governmental unit (RGU) shall consider the following factors: whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and the efforts of the proposer to minimize the contributions from the project;

   C. The extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project; and

   D. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs.

**Type, Extent, and Reversibility of Environmental Effects**

14. The MPCA finds that the types of impacts that may reasonably be expected to occur from the CHP Project include impacts from air emissions.
15. Written comments received during the comment period raised the issue of impacts to on-site wells.

16. The MPCA makes the following findings on the extent and reversibility of impacts that are reasonably expected to occur from the CHP Project:

Findings on Air Emission Impacts

17. Air emissions will be generated from the operation of the combustion turbine (EU359) and duct burners (EU360).

18. An air quality modeling analysis was performed on the Project and reviewed by the MPCA during its review of FHR’s application for an air emissions permit amendment. The proposed Project will be governed by an air emissions permit.

19. The air emissions permit for the Project will include air emissions limits and a requirement to operate air pollution control equipment. Add-on control equipment for the combustion turbine includes Selective Catalytic Reduction (SCR) for nitrogen dioxide (NOx) control, and a catalytic oxidizer for carbon monoxide (CO) and volatile organic compound (VOC) control. Add-on control equipment for the duct burners includes SCR for NOx control, and a catalytic oxidizer for CO and VOC control.

20. The Refinery is an existing major source under Title V (Part 70) of the federal Clean Air Act Amendments because the facility-wide potential to emit (PTE) is currently above major source thresholds (i.e., 100 TPY) for several criteria pollutants. The air emissions from the proposed Project, alone, would be below Title V thresholds. The proposed Project will not change the status of the Refinery as a major source under Title V.

21. The Refinery is an existing major source under the federal Prevention of Significant Deterioration (PSD) Program (40 CFR 52.21) because the facility-wide PTE is greater the PSD threshold for several criteria pollutants. The air emissions from the proposed Project are above the Significant Emission Rate (SER) threshold for major PSD sources for PM10, PM2.5 and greenhouse gas (GHG). Therefore the Project requires a major modification of its permit and Best Available Control Technology (BACT) analysis.

22. The Refinery is an existing major source of hazardous air pollutants (HAPs) under the National Emission Standards for Hazardous Air Pollutants (NESHAP) Program (40 CFR Part 63) because the facility-wide PTE is greater than the NESHAP thresholds (i.e., 10 TPY of any single HAP and 25 TPY of all HAPs combined). The air emissions from the proposed Project, alone, would be below NESHAP thresholds. The proposed Project will not change the status of the Refinery as a major source under 40 CFR Part 63.

23. Air dispersion modeling was conducted following an MPCA-approved protocol. The U. S. Environmental Protection Agency (EPA) preferred model, the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee’s Dispersion Model (AERMOD) was used to conduct the analysis. Worst-case hourly emissions from both the CHP Project and the Tier 3 Project were included. Also worst-case stack temperatures were input to the model, along with actual local geography.
24. Modeling results were compared to Significant Impact Levels (SILs), provided by the EPA. As long as representative ambient background concentrations are more than a SIL below the NAAQS, the SIL thresholds can be used to determine whether a source could cause or contribute to a violation of the NAAQS, i.e. a significant deterioration of air quality. The SIL analysis was valid in this case as representative background concentrations were more than a SIL below the NAAQS for all pollutants. The results of the air quality modeling demonstrate that the total ambient pollutant concentrations of the CHP Project and Tier 3 Project combined are below the EPA Significant Impact Levels (SILs) for each criteria pollutant.

25. Detailed screening conducted by MPCA also showed the CHP project would not cause or contribute to an exceedance of PM2.5 increment levels. These results show the combined projects are not expected to produce a significant deterioration of air quality. If any of the analysis conducted as part of this project modeled a pollutant concentration greater than the SILs, the MPCA would have requested additional refined analysis.

26. With respect to the reversibility of air quality impacts that are reasonably expected to occur from the Project, air emissions from the CHP Project will continue while the CHP Project remains in operation, and would cease only if the CHP Project were to be temporarily or permanently closed. While in operation, the CHP Project is expected to meet applicable air quality standards and criteria. If excessive air emissions or violations of the ambient air standards were to occur, air quality impacts are likely to be temporary in nature and corrective measures could be implemented. Such measures could include the initiation of a complaint investigation by the MPCA and requiring the Project Proposer to make operation and maintenance changes.

27. The MPCA finds that information presented in the EAW and other information in the environmental review record are adequate to address the concerns related to air emissions. The impacts on air emissions that are reasonably expected to occur from the proposed CHP Project have been considered during the review process and appropriate mitigation measures are available and will be required to prevent significant adverse impacts.

28. The MPCA finds that the CHP Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of impacts related to air emissions that are reasonably expected to occur from the CHP Project.

Findings on Public Comments on Impacts to on-site wells.

29. There may be a public water supply well near the CHP Project site. A third party contractor will investigate the potential well, working with Dakota County. If the well is found, it will be properly sealed by a licensed well contractor, brought back into use, or obtain coverage under an annual Unused Well Permit.

30. The MPCA finds that information presented in the EAW and other information in the environmental review record is adequate to address the concerns related to impacts to on-site wells. The impacts to on-site wells that are reasonably expected to occur from the proposed CHP Project have been considered during the review process and methods to prevent significant adverse impacts have been developed.
31. The MPCA finds that the CHP Project, as it is proposed, does not have the potential for significant environmental effects based on the type, extent, and reversibility of impacts related to on-site wells that are reasonably expected to occur from the CHP Project.

Cumulative Potential Effects

32. The second criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is the “cumulative potential effects.” In making this determination, the MPCA must consider “whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effects; and the efforts of the proposer to minimize the contributions from the project.” Minn. R. 4410.1700 subp.7.b. The MPCA findings with respect to this criterion are set forth below.

33. The MPCA considered the cumulative potential effects for the proposed CHP Project on air quality. This analysis included consideration of background concentrations for the area and the impacts from both the proposed CHP Project and another proposed project by FHR known as the Clean Fuels Project, described in Paragraph 34. The EAW makes the following findings on the cumulative potential effects for the proposed CHP Project on air quality.

34. FHR is also proposing, in addition to the CHP Project, to make Refinery changes to meet the requirements of the U.S. Environmental Protection Agency (EPA) Tier 3 gasoline sulfur standard, install a process to convert recovered gas containing sulfur and nitrogen into a salable aqueous liquid fertilizer (ammonium thiosulfate), improve the Refinery’s sour water skimming and storage, and lastly switching to a more efficient amine solution. All of these projects are collectively called the Clean Fuels Projects, which will be occurring on a similar time frame as the CHP Project; therefore their air emissions impacts are considered cumulatively.

35. The cumulative potential effects on air quality from this project were evaluated by considering background concentrations for the area and the impacts from both the proposed CHP Project and the Tier 3 Clean Fuels Projects. The combined modeled impacts of both projects were equal or less than the applicable SIL and when added to background values were below the National Ambient Air Quality Standard (NAAQS). This Project will not contribute significantly to adverse cumulative potential effects on air quality.

36. Based on information on the proposed CHP Project obtained from air modeling, permit application processes, a site visit by MPCA staff, information presented in the EAW, and in consideration of potential effects due to related or anticipated future projects, the MPCA finds no potential for significant cumulative effects from the CHP Project.

The Extent to Which the Environmental Effects Are Subject to Mitigation by Ongoing Public Regulatory Authority

37. The third criterion that the MPCA must consider when determining if a project has the potential for significant environmental effects is “the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures...
that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project.” Minn. R. 4410.1700, subp. 7.C. The MPCA findings with respect to this criterion are set forth below.

38. The following permits or approvals will be required for the CHP Project:

<table>
<thead>
<tr>
<th>Unit of Government</th>
<th>Permit or Approval Required</th>
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<tbody>
<tr>
<td>MPCA</td>
<td>Air Emission Permit</td>
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<tr>
<td>MPCA</td>
<td>National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Industrial Stormwater Multi-Sector General Permit</td>
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<tr>
<td>MPCA</td>
<td>Construction Stormwater NPDES/SDS Permit</td>
</tr>
<tr>
<td>Rosemount Fire Marshal</td>
<td>Plan Review and Approval</td>
</tr>
<tr>
<td>City of Rosemount</td>
<td>Building Permit; Excavation and Grading Permit; Zoning Ordinance Text Amendment; Site Plan Review.</td>
</tr>
<tr>
<td>Minnesota Public Utilities Commission (MPUC)*</td>
<td>Route Permit</td>
</tr>
<tr>
<td>Midcontinent Independent System Operator (MISO)*</td>
<td>Transmission Study</td>
</tr>
</tbody>
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*Only required if transmission alternatives 2 or 3 are selected.

39. **MPCA Air Emissions Permit Amendment.** An Air Emissions Permit Amendment to FHR– Pine Bend’s existing Federal Part 70 permit must be issued before construction can begin. The Air Emission Permit will contain operational and emission limits, including requirements for use of control equipment, that will help prevent or minimize the potential for significant environmental effects.

40. **MPCA NPDES/SDS Industrial Stormwater General Permit.** Flint Hills has a NPDES/SDS Industrial Stormwater General Permit. The NPDES/SDS Industrial Stormwater Permit requires that specific conditions be adhered to for the operation of the Project, and for overall compliance with water quality requirements. Flint Hills will need to update its Stormwater Pollution Prevention Plan (SWPPP) to include the new CHP Project.

41. **MPCA NPDES/SDS Construction Stormwater General Permit.** An NPDES/SDS Construction Stormwater General Permit is required. A General NPDES Construction Stormwater Permit is required when a project disturbs one or more acres. It provides for the use of best management practices (BMPs) such as silt fences, bale checks, and prompt revegetation to prevent eroded sediment from leaving the construction site. Flint Hills must have a SWPPP detailing the BMPs to be implemented and that will also address: phased construction; vehicle tracking of sediment; inspection of erosion control measures implemented; and timeframes in which erosion control measures will be implemented. The general permit also requires adequate stormwater treatment capacity be provided to assure that water quality will not be impacted by runoff once the Project is constructed.

42. **Rosemount Fire Marshal.** The Rosemount Fire Marshal will need to review and approve the Project plan.
43. **City of Rosemount.** A Building Permit, Excavation and Grading Permit, Zoning Ordinance Text Amendment, and Site Plan Review will be required. These permits or approvals will ensure compliance with local ordinances, zoning, environmental, regulatory, and other requirements that are needed to avoid adverse effects on adjacent land uses.

44. **Minnesota Public Utilities Commission (MPUC).** A Route Permit will be required if FHR decides to build transmission alternatives 2 or 3.

45. **Midcontinent Independent System Operator (MISO).** A Transmission Study will be required if FHR decides to build transmission alternatives 2 or 3.

46. The above-listed permits include general and specific requirements for mitigation of environmental effects of the CHP Project. The MPCA finds that the environmental effects of the CHP Project are subject to mitigation by ongoing public regulatory authority.

**The Extent to Which Environmental Effects can be Anticipated and Controlled as a Result of Other Available Environmental Studies Undertaken by Public Agencies or the Project Proposer, Including Other EISs**

47. The fourth criterion that the MPCA must consider is "the extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs," Minn. R. 4410.1700, subp. 7. D. The MPCA findings with respect to this criterion are set forth below.

48. The following documents were reviewed by MPCA staff as part of the environmental impact analysis for the proposed CHP Project:
   - data presented in the EAW
   - FHR’s air permit application
   - air dispersion modeling report

49. This list is not intended to be exhaustive. The MPCA also relies on information provided by the project proposer, persons commenting on the EAW, staff experience, and other available information obtained by staff.

50. The environmental effects of the CHP Project have been addressed by the design and permit development processes, and by ensuring conformance with regional and local plans. There are no elements of the CHP Project that pose the potential for significant environmental effects.

51. Based on the environmental review, previous environmental studies by public agencies or the project proposer, and staff expertise and experience on similar projects, the MPCA finds that the environmental effects of the CHP Project that are reasonably expected to occur can be anticipated and controlled.

52. The MPCA adopts the rationale stated in the attached Response to Comments (Appendix B) as the basis for response to any issues not specifically addressed in these Findings.
CONCLUSIONS OF LAW

53. The MPCA has jurisdiction and is the RGU for determining the need for an EIS for the CHP Project.

54. The EAW, the permit development process, and the evidence in the record are adequate to support a reasoned decision regarding the potential significant environmental effects that are reasonably expected to occur from the CHP Project.

55. Areas where the potential for significant environmental effects may have existed have been identified and appropriate mitigation measures have been incorporated into the CHP Project design and permits. The CHP Project is expected to comply with all MPCA standards.

56. Based on a comparison of the impacts that are reasonably expected to occur from the CHP Project with the criteria established in Minn. R. 4410.1700 subp. 7, the CHP Project does not have the potential for significant environmental effects.

57. An EIS is not required.

58. Any findings that might properly be termed conclusions and any conclusions that might properly be termed findings are hereby adopted as such.

ORDER

59. The MPCA issues a Negative Declaration on the need for an Environmental Impact Statement for the Flint Hills Resources Combined Heat and Power (CHP) Cogeneration Project, based on the information gathered during the Environmental Assessment Worksheet process and the comments received on the Environmental Assessment Worksheet indicating that there are no potential significant environmental effects reasonably expected to occur.

IT IS SO ORDERED

[Signature]
John Linc Stine, Commissioner
Minnesota Pollution Control Agency

3/11/15
Date
LIST OF COMMENT LETTERS RECEIVED

1. Ryan Malterud, Army Corps of Engineers. Letter received 1/05/2015.

2. LisaBeth Barajas, Metropolitan Council. Letter received 1/20/15.

3. William H. Droste, City of Rosemount. Electronic communication received 1/21/2015.

4. Steve Mielke, Dakota County. Electronic communication received on 1/21/2015.
Operations
Regulatory (2013-00419-RMM)

Ms. Kim Grosenheider
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155

Dear Ms. Grosenheider:

We have received the document entitled "Flint Hills Resources – Combined Heat and Power (CHP) Cogeneration Project" dated December 22, 2014. The purpose of this letter is to inform you that based on available information a Department of the Army (DA) permit will not be required for the proposed activity. This letter also provides general information regarding the U.S. Army Corps of Engineers (Corps) regulatory program.

If the proposal involves activity in navigable waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit.

If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404. Information about the Corps permitting process can be obtained online at http://www.mvp.usace.army.mil/regulatory.

The Corps evaluation of a Section 10 and/or a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying
for a Section 404 permit cannot be factored into the Corps decision whether there is a less damaging practicable alternative to the proposal.

If an application for a Corps permit has not yet been submitted, the project proposer may request a pre-application consultation meeting with the Corps to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process. A pre-application consultation meeting is strongly recommended if the proposal has substantial impacts to waters of the United States, or if it is a large or controversial project.

Please note that our determination that a permit will not be required is based on the information provided in the Environmental Assessment Worksheet. The information we are relying on is provided in Section 3, iv, Surface Waters. It is noted there is a wetland on site; however, the project will not involve draining, filling, or dredging of that area.

For further information or to request a pre-application consultation meeting, please contact me at (651) 290-5286, or Ryan.M.Malterud@usace.army.mil.

Sincerely,

Ryan Malterud
Project Manager

cc:
Greg Myers (Greg.Myers@fhr.com)
Dennis Rodacker (Dennis.Rodacker@state.mn.us)
Jennie Skancke (Jennie.Skancke@state.mn.us)
Brian Watson (Brian.Watson@co.dakota.mn.us)
January 15, 2015

Kim Grothenhider
Resource Management and Assistance Division
Minnesota Pollution Control Agency
520 Lafayette Road North
Saint Paul, MN 55155-4194

RE: Flint Hills Resources – Combined Heat and Power Cogeneration Project EAW
Flint Hills Resources Pine Bend Refinery
City of Rosemount, Dakota County, Minnesota
Metropolitan Council District 16, Wendy Wulf
Review File No. 21318-1

Dear Ms. Grothenhider:

Metropolitan Council staff has reviewed the EAW for the proposed refinery project to construct a natural gas-based combined heat and power cogeneration facility to reduce electricity purchases from the grid and improve the efficiency of steam production at the refinery. Our review focused on its adequacy and accuracy in addressing regional concerns, its potential for significant environmental impact, and its consistency with regional plans and policies. The Council staff review finds that the EAW is complete and accurate with respect to regional concerns and raises no major issues of consistency with Council policies. An EIS is not necessary for regional purposes.

The Council will take no formal action on the EAW. If you have questions about these comments or need further information, please contact Jim Larsen PE, principal reviewer, at 651-602-1159.

Sincerely,

Lisa Beth Barajas, Manager
Local Planning Assistance

cc: Wendy Wulf, Council District 16
Patrick Boylan, Planning Sector Representative
Kyle Colvin, MCES Engineering Services Assistance Manager
Judy Sventek, MCES Water Resources Assessment Manager
Raya Esmaili, Reviews Coordinator

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January 20, 2015

Kim Grosenheider
Resource Management and Assistance Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155

RE: Flint Hills Resources Combined Heat and Power Cogeneration Project Environmental Assessment Worksheet

Dear Ms. Grosenheider:

The purpose of this letter is to submit comments, questions, and responses to the Minnesota Pollution Control Agency (PCA) from the City of Rosemount on the Flint Hills Resources (FHR) Combined Heat and Power (CHP) Cogeneration Project Environmental Assessment Worksheet (EAW). We have reviewed the EAW and appreciate the opportunity to provide feedback. The City of Rosemount’s comments are as follows:

Page 3 and 4, Item 6. b. Proposed project: The EAW states that the CHP cogeneration project will generate up to 49.9 MW, while the two turbines within the CHP could generate up to 54.9 MW. It is our understanding that FHR is proposing the 49.9 MW maximum to avoid approval and regulation from the Minnesota Public Utility Commission (PUC). If FHR would ever consider generating electricity at the design capacity of the generators or any at any level above 49.9 MW, that should be stated within the EAW and be reviewed and approved by the PUC.

Page 9, Item 8. Permits and approvals needed: The EAW does not identify all the City of Rosemount permits and approvals needed. The CHP project is not an allowed use in the HI: Heavy Industrial zoning district and therefore an ordinance amendment and site plan review would be required. Please add the following to items to the list of City of Rosemount permits or approval required:
1. Zoning Ordinance Text Amendment
2. Site Plan Review

Page 10, Item 9 b. Land Use Compatibility: The EAW states that the proposed project is consistent with the City of Rosemount’s rules and regulations. This statement is not correct because the CHP use is not allowed in HI: Heavy Industrial zoning district. As stated above, a Zoning Ordinance Text Amendment would be required to add CHP as an allowable use in the HI: Heavy Industrial zoning district.

Page 14, Item 11. b. i. Wastewater: The EAW states that the sanitary wastewater will be sent to the City of Rosemount’s publicly owned treatment works (POTW). This is incorrect. The sanitary wastewater will be sent to the Empire Wastewater Treatment Plant operated by the Metropolitan Council.
Page 23, Item 15. Visual: The CHP building will be 85 feet tall. It is estimated that the upper 75 feet will be visible from US Highway 52, based on the topographical information provided on page 12 of the EAW. The CHP building will not be screened from view from the public right-of-way by any other structure and no mitigation measures are discussed. Building materials of the CHP building are not described, but the HI: Heavy Industrial zoning district requires that 100% of the façade facing a public right-of-way be constructed of masonry and that all other facades be at least 40% masonry. Additional mitigation measures will be evaluated during the City Site Plan Review process.

Page 44, Item 19. c. Cumulative Potential Air Quality Effects: The EAW states that the table on page 44 is the cumulative air quality effects of both the Tier 3 and the CHP projects, but this cumulative air quality table has different CO, NO2, SO2 and H2S concentrations than the cumulative air quality table on page 43 of the Tier 3 EAW. How can these differences be explained?

We thank you for the opportunity to comment on the EAW. We look forward to working with the PCA and FHR on the City Code amendments and permits needed to install, construct and operate the CHP project.

Sincerely,

[Signature]
William H. Droste
Mayor
January 21, 2015

Minnesota Pollution Control Agency
Kim Grosenheider
Resource Management and Assistance
520 Lafayette Road North
St. Paul, MN 55155

RE: Flint Hills Resources – Combined Heat and Power (CHP) Cogeneration Project

Thank you for the opportunity to comment on the Flint Hills Resources – Combined Heat and Power (CHP) Cogeneration Project. Dakota County Environmental Resources staff has reviewed the document and offer the following comments for consideration:

Flint Hills Resources – Tier 3 Clean Fuels Projects

Page 15 - The table of wells in the EAW area is inadequate, as is related Figure 11. Current information on wells can be obtained from Flint Hills, or may be requested from Dakota County Environmental Resources. Wells close to the project area are discussed below.

In Figure 11, the site labeled SOUR WATER TANK LOCATION is very close to monitoring well W05883 (W-3); the site labeled ATS DAYTANK is very close to well 767299 (P11). On the east side of the project, there are two new monitoring wells on the northern border of the site not shown: 799893 and 799894.
In Figure 11, the line crossing the Highway 52 labeled U/G PIPELINE GAS will pass close to where we believe there is an unused unsealed monitoring well, Unique Well number 243756 on the east side of the highway. The rail line carrying the product will also pass close to another such well, unique number 243758. These wells have been lost for a number of years, and they should be found and dealt with at this time. The owner of an unused unsealed well is required by State Rule to have the well properly sealed by a licensed well contractor, to bring the well back into use, or to obtain an annual Unused Well Permit. Dakota County Environmental Resources has assisted in searching for this well, and will do so again if requested. If the site is developed, then unsealed wells may not be built over or buried, may not be modified except by a licensed well contractor, and all set-backs and isolation distances from wells, as specified in Minnesota Rules 4725, must be maintained. Dakota County Environmental Resources staff strongly recommends that an effort should be made now to find and seal the wells.
Figure 11 correctly identify wells 752110 and 161421 as two wells that the steam line and electric lines will pass near. The electric lines in Figure 11 will pass close to 433266 (W-13) and 627213 (W-38).

The works may be close to well W05895, however more time is needed to research this well to find out if it exists at the location shown on the figure below, and whether it may have been sealed. It was a public water supply well, and our most recent records, dated 10/7/1998, state that it is no longer used. If the well exists and is not sealed, then all set-backs and isolation distances from wells, as specified in Minnesota Rules 4725, must be maintained. If it is not in use, then the owner is required by State Rule to have the well properly sealed by a licensed well contractor, to bring the well back into use, or to obtain an annual Unused Well Permit. If the well is not known, and our research indicates that the well is not sealed, then Dakota County Environmental Resources can assist in locating it.

If you have any questions relating to these comments, please contact me at 952-891-7007 or steven.mielke@co.dakota.mn.us

Sincerely,

Steve Mielke, Director
Physical Development

cc: Commissioner Nancy Schouweller, District 4
Brandt Richardson, County Manager
Minnesota Pollution Control Agency

Flint Hills Resources – Combined Heat and Power (CHP) Cogeneration Project
Environmental Assessment Worksheet (EAW)

RESPONSES TO COMMENTS ON THE EAW

1. Comments by Ryan Malterud, Army Corps of Engineers. Letter received on 1/05/2015.

Comment 1-1: The Army Corps of Engineers commented that based on available information, a Department of Army (DA) permit will not be required.

Response: The comment is noted.

2. Comments by LisaBeth Barajas, Metropolitan Council. Letter received on 1/20/15.

Comment 2-1: Commenter stated that the EAW was adequate.

Response: The comment is noted.

3. Comments by William H. Droste, City of Rosemount. Electronic communication received on 1/21/2015.

Comment 3-1: The city of Rosemount commented that the EAW states that the project will generate up to 49.9 MW of electricity, however if the total capacity of all equipment are calculated and no controls were put in place, the capacity would be 54.9 MW. The commenter stated that if FHR wants to generate greater than 49.9 MW, then FHR should seek review and approval from the Public Utilities Commission (PUC).

Response: The comment is noted.

Comment 3-2: The city of Rosemount commented that the EAW left out two City permits or approvals required.

Response: Flint Hills has been made aware of these requirements. The CHP EAW for the permanent record, available on the Minnesota Pollution Control Agency’s (MPCA) website and in the MPCA Environmental Review file, has been modified with the additional City permits or approvals.

Comment 3-3: The city of Rosemount commented that currently a combined heat and power project is not allowed under the HI: Heavy Industrial zoning district. An ordinance amendment and site plan review will be required before the project can move forward.

Response: Flint Hills has been made aware of this requirement.
Comment 3-4: The city of Rosemount pointed out that EAW incorrectly identified that sanitary wastewater will be sent to the city of Rosemount’s publicly owned treatment works (POTW). The correct treatment plant is the Empire Wastewater Treatment Plant operated by the Metropolitan Council.

Response: The comment is noted. The CHP EAW for the permanent record, available on the MPCA website and in the MPCA Environmental Review file, lists the correct wastewater treatment plant.

Comment 3-5: The city of Rosemount commented that buildings within the HI: Heavy Industrial zoning district facing a public right-of-way must be constructed with 100% of the façade of masonry and that all other facades must be at least 40% masonry.

Response: Flint Hills has been made aware of these requirements.

Comment 3-6: The city of Rosemount pointed out that the cumulative air quality effects of the combined CHP and the Tier 3 projects listed in the CHP EAW (page 44) did not match the Tier 3 EAW (page 43).

Response: The discrepancies between the EAWs are a mistake. The correct combined CHP and Tier 3 modeling results are given in the Tier 3 EAW and also shown in the table below.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Period</th>
<th>Maximum Modeled Concentration (μg/m³)</th>
<th>SIL (μg/m³)</th>
<th>Less than SIL? (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>1-hour</td>
<td>6.97</td>
<td>2000</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>8-hour</td>
<td>4.33</td>
<td>500</td>
<td>Y</td>
</tr>
<tr>
<td>PM10</td>
<td>24-hour</td>
<td>0.54</td>
<td>5</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.07</td>
<td>1.0</td>
<td>Y</td>
</tr>
<tr>
<td>PM2.5</td>
<td>24-hour</td>
<td>0.44</td>
<td>1.2</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.07</td>
<td>0.3</td>
<td>Y</td>
</tr>
<tr>
<td>NO2</td>
<td>1-hour</td>
<td>6.43</td>
<td>7.52</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.18</td>
<td>1.0</td>
<td>Y</td>
</tr>
<tr>
<td>SO2</td>
<td>1-hour</td>
<td>4.63</td>
<td>7.83</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>3-hour</td>
<td>4.22</td>
<td>25</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>1.24</td>
<td>5</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
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<td>1</td>
<td>Y</td>
</tr>
<tr>
<td>H₂S</td>
<td>1-hour</td>
<td>2.08</td>
<td>2.1</td>
<td>Y</td>
</tr>
</tbody>
</table>

In addition, the CHP maximum modeled concentrations given in the CHP EAW (page 33) were also incorrect. See the table below for the corrected results.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Period</th>
<th>Maximum Modeled Concentration (μg/m³)</th>
<th>SIL (μg/m³)</th>
<th>Less than SIL? (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>1-hour</td>
<td>6.95</td>
<td>2000</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>8-hour</td>
<td>4.33</td>
<td>500</td>
<td>Y</td>
</tr>
<tr>
<td>PM10</td>
<td>24-hour</td>
<td>0.54</td>
<td>5</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.041</td>
<td>1.0</td>
<td>Y</td>
</tr>
<tr>
<td>PM2.5</td>
<td>24-hour</td>
<td>0.376</td>
<td>1.2</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.041</td>
<td>0.3</td>
<td>Y</td>
</tr>
</tbody>
</table>
Modeling results given in the CHP EAW were preliminary. During the EAW process, modeling was updated using the latest versions of the modeling software and meteorological processing software as recommended by MPCA’s dispersion modeling guidance. These adjustments resulted in slight changes to the predicted modeled concentrations. The CHP EAW tables were not updated to show these slight changes. The conclusions of the cumulative effects remain the same.

The CHP EAW for the permanent record, available on the MPCA website and in the MPCA Environmental Review file, has been modified with the corrected tables.

4. **Comments by Steve Mielke, Dakota County.**  **Electronic communication received on 1/21/2015.**

**Comment 4-1:** Dakota County commented that the table of wells listed and Figure 11 in the EAW are inadequate.

**Response:** Leaving out the mentioned wells was a mistake. The CHP EAW for the permanent record, available on the MPCA website and in the MPCA Environmental Review file, has been modified to correctly list all of the well sites and an updated Figure 11.

**Comment 4-2:** Dakota County commented that near the CHP site location there may be a public water supply well. Research into this well must be conducted to ensure it is not in use, then it must either be properly sealed by a licensed well contractor, brought back into use or obtain coverage under an annual Unused Well Permit.

**Response:** Flint Hills has agreed to hire a third party contractor to identify and manage the potential well. Flint Hills will work with the County as a part of this process.