



Planning Division  
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December 4, 2019

Kathy Denzer  
ConocoPhillips Company  
34501 E Quincy Ave, Building 1  
Watkins, CO 80137

**Re: Initial Submission Review - Grande South - Oil and Gas Well Permit**  
Application Number: **DA-2010-05**  
Case Number(s): **2019-6024-03**

Dear Ms. Denzer:

Thank you for your initial submission, which we started to process on Friday, November 15, 2019. We reviewed it and attached our comments along with this cover letter. The first section of our review highlights our major comments. The following sections contain more specific comments, including those received from other city departments and community members.

Since several important issues still remain, you will need to make another submission. Please revise your previous work and send us a new submission on or before Wednesday, December 18, 2019.

Note that all our comments are numbered. When you resubmit, include a cover letter specifically responding to each item marked with an asterisk. The Planning Department reserves the right to reject any resubmissions that fail to address these items. If you have made any other changes to your documents other than those requested, be sure to also specifically list them in your letter.

As always, if you have any comments or concerns, please give me a call. I may be reached at 739-7186.

Sincerely,

Stephen Rodriguez, Planning Supervisor  
City of Aurora Planning Department

cc: Melinda Lundquist, CVL Consultants Of Colorado Inc, 10333 E Dry Creek Rd Ste 240, Englewood CO 80112  
Scott Campbell, Neighborhood Liaison  
Mark Geyer, ODA  
Filed: K:\SDA\2010-05rev1.rtf



## **GRANDE SOUTH (PHASE 2) OIL AND GAS PERMIT REVIEW**

### *Initial Submittal Review*

#### **SUMMARY OF KEY COMMENTS FROM ALL DEPARTMENTS**

- See the comment redlines from Planning on the Site Plan regarding noise mitigation (sound walls), buildings on-site, Lighting Plan and Haul Route. (See Item 1,6,7,10,31 and 33)
- See the comment redlines for the Site Plan from Real Property. (See Items 19 and 20)
- See the comment redlines from Engineering/Public Works. (See Items 1, 29 and 30)
- See the comment redlines from Life Safety. (See Items 16 and 17)
- Contact Traffic Engineering directly for comments. (See Items 1 and 18)
- See the comment redlines from Aurora Water. (See Items 1, 22,23,24,25 and 27)
- See the comment redlines from PROS. (See Items 27 and 28)
- See the attached letter from Tri-County Health Department (TCHD)
- See the comments from Urban Drainage and Flood Control District (UDFCD)
- As a reminder, the City has developed CAD Data Submittal Standards for internal and external use to streamline the process of importing AutoCAD information into the city's Enterprise GIS. Please note that a digital submission meeting the CAD Data Submittal Standards is required before your final Site Plan mylars can be routed for signatures or recorded. Please review the CAD Data Submittal Standards, including templates and required layer file labeling, at <http://tinyurl.com/AuroraCAD>. Email your Case Manager the appropriate Site Plan file before submitting your final Site Plan mylars. Once received, the City's AutoCAD Operator will run an audit report and your Case Manager will let you know whether the file meets or does not meet the City's CAD Data Submittal Standards. Please email [CADGIS@auroragov.org](mailto:CADGIS@auroragov.org) for questions or more detailed instructions.
- Respond to additional comments if applicable.
- Respond in your resubmittal to all summary comments and redlines in a separate comment response letter.

#### **REVIEWERS**

- Planning – Steve Rodriguez and Juliana Berry / 303-739-7186 and 303-739-7209 / [srodrigu@auroragov.org](mailto:srodrigu@auroragov.org) and [jberry@auroragov.org](mailto:jberry@auroragov.org) / Comments in dark teal
- Planning/Landscape – Kelly Bish / 303-739-7189 / [kbish@auroragov.org](mailto:kbish@auroragov.org) / Comments in bright teal
- Public Works – Kristin Tanabe / 303-739-7306 / [ktanabe@auroragov.org](mailto:ktanabe@auroragov.org) / Comments in green
- Building/Life Safety – Will Polk / 303-739-7371 / [wpolk@auroragov.org](mailto:wpolk@auroragov.org) / Comments in blue
- Traffic – Brianna Medema / 303-739-7336 / [bmedema@auroragov.org](mailto:bmedema@auroragov.org) / Comments in orange
- Real Property – Grace Gray / 303-739-7277 / [ggray@auroragov.org](mailto:ggray@auroragov.org) / Comments in magenta
- Water – Steve Dekoskie and Joshua Godwin / 303-739-7490 and 720-859-4307 / [sdekoski@auroragov.org](mailto:sdekoski@auroragov.org) and [jgodwin@auroragov.org](mailto:jgodwin@auroragov.org) / Comments in red
- Parks, Recreation, and Open Space (PROS) – Chris Ricciardiello and Curtis Bish / 303-739-7154 and 303-739-7131 / [cricciar@auroragov.org](mailto:cricciar@auroragov.org) and [cbish@auroragov.org](mailto:cbish@auroragov.org) / Comments in purple
- Tri-County Health Department – Kathy Boyer

*Reviewers: Please list your comments, including summarization of PDF red-lines, under each pertinent document category below. This will be the only comment document provided and must be utilized to encapsulate all substantive review remarks from each individual department.*



## **SITE PLAN COMMENTS**

### **1. Site Plan Set (Multiple departments)**

- 1A. **Sheet 1**: Add a note stating that no work shall commence until the roadway maintenance agreement is amended to include additional roadways (Public Works).
- 1B. Reviewers are getting confused and commenting on Phase 1 sheets, particularly Grace Gray in Real Property. To clarify further, please change the title block on the Phase 1 sheets to read, "Phase 1." The disclaimer note should be on all the Phase 1 sheets (Planning).
- 1C. Reference the Operator Agreement BMP in note 11 for Tree Mitigation.
- 1D. Upload note 5 under the site plan notes regarding the Amended Road Maintenance Agreement.
- 1E. Change the zoning to R-2 in the Data Block.
- 1F. Show the proposed air quality monitoring locations on the applicable site plan sheets.
- 1G. Show the mitigation measure referenced in Scenario 1 of the Modeled Mitigation Scenarios Table 4-3 of the Noise Management Plan.
- 1H. Add the Road Maintenance Agreement note to the Haul Route Map sheet.
- 1I. Add a note stating that no work shall commence until the RMA is amended to include additional roadways (Public Works).
- 1J. Outlet structures will be required on all detention basins; please show on the plan set. An I&M plan is also required (Aurora Water).
- 1K. Review Autoturn exhibits for Access Road & Powhaton Rd and ensure that traveled path is within access road or widen access road in this area (Traffic Engineering, sheet 12).

### **2. Vicinity / Context Map (Planning)**

- 2A. Please continue to incorporate into the overall Plan Set.

### **3. Interim Reclamation Plan (Planning)**

- 3A. Please continue to incorporate into the overall Plan Set.

### **4. Visual Mitigation Plan**

- 4A. N/A

### **5. Landscape Plan**

- 5A. Please continue to incorporate into the overall Plan Set.
- 5B. **Sheet 3** - This sheet may be left in the plan set, but the following two sheets 4 and 5 must be removed and submitted separately as a mylar change. See comment on the next page. Please reference in the note to the left the following Case Number: CN 2017-6024-00.
- 5C. **Sheet 4** - Sheets 4 and 5 must be removed and submitted separately as a mylar change. Because we have an approved plan set for Phase 1 or Grande #4-65 20-19 Oil and Gas Permit CN # 2017-6024-00, the landscaping for that would be considered an amendment to that plan set and not part of the Phase 2 Submission. Work with your Case Manager to submit a Mylar application (one page form) and a separate fee for this review.
- 5D. **Sheet 4** - Provide the required landscaping around the entire oil and gas production site as has been the case with previous ConocoPhillips Oil and Gas applications that are being phased.
- 5E. **Sheet 4** - Whether Phase 1 landscaping is ever constructed, it needs to meet code requirements.
- 5F. **Sheet 5** - Remove this sheet from the plan set and submit as part of the mylar application with Sheet 4
- 5G. **Sheet 9** - Include landscaping for the entire well pad site as has been the case with previous ConocoPhillips Oil and Gas applications that are being phased not just the frontage along the street.
- 5H. **Sheet 9** - Darken the well heads.
- 5I. **Sheet 9** - Please include Powhaton Road.

### **6. Lighting Plan (Planning)**

- 6A. Please continue to incorporate into the overall Plan Set.

**7. Building and Structure Elevations (Planning)**

7A. Please continue to incorporate into the overall Plan Set.

**LETTER OF INTRODUCTION COMMENTS**

The Plat Package section is not as robust as previous applications (Eastern Hills North and Rush North, as examples); please include more sheet details in the next submission.

**8. Project Summary (Planning)**

8A. Update the zone district to R2 in the Project Location paragraph.

8B. Reference the proposed cattle guards in the paragraph including the wildlife fence under Purpose, Pad and Access Road as described in previous applications.

8C. Please add in language regarding the pre- and post- pipeline haul routes, as submitted in past applications.

**9. Applicable BMPs Addressed (Narrative List) (Planning)**

9A. Add in details from the final submission of Rush North for the following BMPs:

- Air Quality
- Emergency Response Plan
- Notifications to the City
- Reclamation
- Road Repairs
- Transportation and Circulation
- Water Supply

9B. **Electric Equipment**- The Project Development Schedule indicates 2021, so the electric infrastructure should be in place and available by then. Please update the language for this BMP accordingly.

9C. **Reclamation**- Correct “cropland” to the non-cropland “rangeland” to match the Form 2A.

9D. **Water Quality Monitoring Plan/Groundwater Pollution Mitigation**- The sentence “As the well is constructed...” appears twice in the first paragraph, and the second paragraph is an entire repeat. Please correct.

**10. Neighborhood Meeting Schedule / Results/Comments (Planning)**

10A. See the attached comment letter from Tri-County Health Department

10B. See the following comments from Urban Drainage and Flood Control District: It appears the E/W portion of their access road crosses an unnamed major drainage tributary to Coal Creek and installs a culvert. The SMWP plans show this culvert best, but the crossing should be designed per criteria. There is an onsite sediment/WQ basin that seems to outfall towards the tributary, but doesn't have a direct connection, this is an erosion concern and should be addressed.

10C. No comments were received from neighbors.

**11. Response to Initial Review Comment Letter (Planning)**

11A. Please provide this with your resubmittal.

**OPERATIONS PLAN COMMENTS****12. Operations Plan (Planning)**

12A. The field-wide Operations Plan has been previously accepted by the City.

**13. Project Development Schedule (Planning)**

13A. Please show dates for the overall Completions Phase.

13B. Define “Toe prep” and “PDO/Tbg.”

13C. Clarify whether the reclamation Phase Start and End are the Final or Initial Reclamation (no dates provided, please clarify).



**14. Security Plan (Planning)**

14A. The field-wide Operations Plan has been previously accepted by the City.

**15. Decommissioning / Final Reclamation Plan**

15A. The field-wide Operations Plan has been previously accepted by the City

**EMERGENCY RESPONSE PLAN COMMENTS**

**16. Emergency Response Plan (Building/Life Safety)**

16A. This information is required to verify that the listed local notifications are correct and up to date. Please provide the local notifications and LEPCs information.

**17. PHA-HAZOP Analysis (Building/Life Safety)**

Field-Wide

17A. The field-wide PHA-HAZOP Analysis has been previously approved by the City.

17B. This requirement is acceptable as submitted.

**COMMENTS ON OTHER REQUIRED ITEMS**

**18. Traffic Letter / Plan (Traffic Engineering)**

18A. Previously approved. Thank you for including in your submission. No need to resubmit for this Well Pad site.

**19. License Agreements (Real Property)**

19A. A License Agreement may be required for the culvert or utility sleeve should it encroach City roads or easements.

19B. A license Agreement will be required for Outlet Structures if a Drainage Easement is required.

19C. Any license agreements related to lay-flat lines will be required.

**20. Recorded Surface Use Agreement (Real Property)**

20A. This requirement is acceptable as submitted.

**21. Property Owner Authorizations (Planning)**

21A. This requirement is acceptable as submitted.

**22. Water Delivery Method/Water Supply Plan (Aurora Water)**

22A. The field-wide Water Delivery Agreement has been previously accepted by the City.

**Water Supply Plan**

22B. This requirement is acceptable as submitted.

**23. Groundwater Quality Monitoring Plan (Aurora Water)**

23A. A variance requested included in this submittal was denied.

23B. Until initial sampling, City staff and COPC environmental staff will have a standing call every other week to provide an update on the sampling and/or (if applicable) status update of the “requested well” installation schedule.

23C. If applicable and as noted in the field-wide submittal, COPC will notify, in writing, the City at least 40 weeks prior to drilling if the “requested well” is not possible and that parties (City and COPC) will have to pursue the “easement well” protocol in order to comply with the monitoring well requirement.

23D. If applicable and as noted in this submittal, COPC will notify the City immediately of any delays outside of COPC’s control.

**24. Fugitive Dust Suppression Plan (Aurora Water)**

24A. This is acceptable as submitted.



**25. Fluid Disposal Plan (Aurora Water)**

25A. The field-wide Fugitive Dust Suppression Plan has been previously accepted by the City.

**26. Water Use Plan CDPHE Reg. 84**

26A. N/A

**27. Weed Control Plan (Aurora Water and PROS)**

27A. The field-wide Weed Control Plan has been previously accepted by the City.

**28. Wildlife Impact Mitigation Plan (PROS)**

28A. This is acceptable as submitted.

**29. Stormwater Management Plan (Public Works)**

29A. This document will be reviewed and commented on by the standard SWMP Review team via upload through the separate Public Works portal; please coordinate with Public Works to utilize that portal if you haven't already.

29B. *FYI*: Profiles for gathering lateral pipelines crossing any Aurora Water utilities, ROWs, and floodplains will be required as part of the SWMP plan. (Water)

29C. *FYI*: Outlet structures will be required on detention basins- detail required (Water)

**30. Preliminary Drainage Report / Letter (Public Works)**

30A. This document will be reviewed and commented on by the standard SWMP Review team via upload through the separate Public Works portal; please coordinate with Public Works to utilize that portal if you haven't already.

**31. Road Maintenance / Construction (Planning)**

31A. Please provide the revised, approved, and fully executed Road Maintenance Agreement as part of the second submission.

**32. Air Quality Plan (Planning)**

Field-Wide Plan

32A. The field-wide Air Quality Plan has been previously accepted by the City.

Site-Specific Plan

32B. Submit a complete Plan, including confirmed monitoring locations, pre-construction baseline air monitoring results, established alert level thresholds, all pre-activity information, all location-specific considerations, any anticipated location modifications and timeline, and location data plan.

32C. Spell out what "NAAQS" and "ATSDR" stand for.

32D. The Plan should reference how the reports will include trend identification related to increases / decreases / spikes in concentration or emissions as related to the health-based criteria.

32E. List the Monitoring Strategy dates in order.

32F. Pre-construction baseline air monitoring (under Monitoring Strategy) is missing language about prior notification to the City.

**33. Noise Management Plan (Planning)**

33A. The document is acceptable as submitted.

**34. Application Form (Planning)**

Checklist

34A. License Agreements will be required; revise the "N/A" accordingly.

34B. There has been no field-wide Wildlife Impact mitigation Plan submitted or accepted by the City previously; please revise accordingly.

34C. Remove the check from Visual Mitigation Plan under Plan Set and Response to Pre-Application Notes/Review(s) under letter of Introduction as they are not applicable.



**35. 1-Mile Radius Abutters List (Planning)**

35A. Add the abutter list to the radius map.

**36. COGCC Forms / 2A (Planning)**

36A. Please provide the final version at the next submission and ensure that the timeline matches the Project Development Schedule (or vice versa).



November 27, 2019

Stephen Rodriguez  
City of Aurora Planning and Development Services  
15151 E. Alameda Parkway  
Aurora, CO 80012

RE: Grande South Phase 2, DA-2010-05  
TCHD Case No. 5981

Dear Mr. Rodriguez,

Thank you for the opportunity to review and comment on the oil and gas permit application for a multi-well oil and gas pad site on 10 acres located southeast of Powhaton Road and Mississippi Avenue Alignment. Tri-County Health Department (TCHD) staff has reviewed the application for compliance with applicable environmental and public health regulations and principles of healthy community design. After reviewing the application, TCHD has the following comments.

### **Domestic Wastewater Management**

Proper wastewater management promotes effective and responsible water use, protects potable water from contaminants, and provides appropriate collection, treatment, and disposal of waste that protects public health and the environment. TCHD, as the local public health agency, plays a role in reviewing whether a new proposed land use has addressed the domestic water and wastewater needs and is the regulating agency for On-Site Wastewater Treatment Systems (OWTS). Because of the nature of oil and gas operations and the typical location of this land use, not in close proximity to existing wastewater facilities, many of the oil and gas sites utilize portable above-ground wastewater storage systems.

To ensure public health is protected, the system utilized for collecting and storing domestic wastewater shall be operated and maintained in a sanitary manner, to include pumping and hauling of the wastewater by a Systems Cleaner licensed by TCHD. TCHD maintains a list of licensed System Cleaners which can be found here <http://www.tchd.org/745/Finding-Certified-Septic-Professionals>. If you have any questions regarding installation or operation of a portable above-ground wastewater storage system, or the process to obtain a Systems Cleaner license, please contact Mike Weakley at 720-200-1593 or [mweakley@tchd.org](mailto:mweakley@tchd.org).

### **Baseline Water Quality Testing**

Water quality is unregulated in domestic and irrigation wells in Colorado and monitored in a limited manner for commercial wells. This means water quality testing is typically not required, and the water quality is often unknown. In general, TCHD supports

baseline water quality testing to establish the existing water quality relative to the water well's permitted use and to identify water quality issues that should be known and addressed by the well's owner. Baseline water quality testing can also provide an understanding of pre-existing conditions should the water quality change in the future. Baseline and subsequent water quality testing data can support a determination of whether water treatment may be needed to protect the health of well water users and the health of the environment.

*Specific Recommendations for Water Wells within ½ mile:*

TCHD believes that any owner of a well within one-half mile of the proposed oil and gas operation should have the opportunity to obtain a baseline water quality test prior to the change in land use. One-half mile is the area of influence established by the Colorado Oil and Gas Conservation Commission's Final Rule 609 Statewide Groundwater Baseline Sampling and Monitoring.

TCHD recommends the following for well permits and water rights holders located within one-half mile of the proposed oil and gas well as they are likely used or will be used for drinking water for humans or animals.

- That the City or applicant notify owners of the wells or groundwater rights owners of the proposed application;
- That the City refer well owners who want to test their wells to TCHD for guidance on recommended testing parameters, procedures for selection of qualified sampling professionals and laboratories, and sharing of data; and
- That the City refers well owners desiring guidance for wellhead protection to TCHD.

**Water Supply for Use by Workers**

Providing clean and safe water for use by workers for ware washing, food preparation, hand washing, and showering is important. The majority of foodborne illnesses can be traced to improper food handling procedures in home, retail, or office kitchens. Improper transport, storage, cross-connections, and backflow also pose dangers to potable water quality.

If the proposed drinking water source for workers is to be hauled, the hauler must be a certified Public Water System (PWS) Hauler in accordance with Colorado Department of Public Health and Environment's (CDPHE) Colorado Primary Drink Water Regulation, 5 CCR 1002-11.41 (the Water Hauler Rule), The applicant should determine if the proposed water hauler is certified here:

<http://portal.coloradocwp.com/External/Pages/Admin/OperatorCertificateSearch.aspx>.

**Potential Temporary Water Storage**

Non-potable water is often used onsite at oil and gas sites. The storage tank should be marked with a sign indicating the water is non-potable. In addition, these very large

water storage tanks have the potential to collapse if not properly constructed with appropriate quality controls. A collapse can result in significant damage to the environment, property, and individuals that may be nearby. TCHD recommends the applicant employ proper quality control techniques when constructing the water storage tank.

### **Above Ground Storage Tanks**

Fuel is often stored onsite at oil and gas sites. All storage tanks must have a secondary containment area, a routine monitoring system to check for leaks, and best management practices implemented in order to prevent the release of contaminants into the soil and water supplies.

### **Emergency Response Plan/Spill Reporting**

One of the most common environmental releases associated with oil and gas drilling operations is the inadvertent surface spill of chemicals, produced water, or flowback water. The Emergency Response Plan should include response and notification procedures for responding to and effective strategies for minimizing the risk of hydrocarbon spills, hazardous chemical spills, and produced water spills. If a spill or incident were to occur, the emergency response to spills should be indicated in the Spill Prevention, Control, and Countermeasures Plan that is kept onsite.

Specific information related directly to a potential leak or spill from the domestic wastewater system should also be addressed. In the event there is a domestic wastewater spill or leak, TCHD should be contacted immediately.

### **Air Quality Permitting**

Air pollutant emissions including flares are regulated by the Colorado Department of Public Health and Environment. Vapor recovery equipment should be used to control the release of vapors into the environment. The use of green completion technology is strongly encouraged at every site. If the site is to use multiple flares and combustors, the oil and gas industry permits should include a regulatory analysis determining the applicability of state and federal air quality permitting requirements and air pollution control regulations for the proposed emissions source(s). More information as well as all forms can be found online at <https://www.colorado.gov/pacific/cdphe/all-permits>.

### **Dust Control and Mitigation**

TCHD encourages the applicant to follow best management practices for erosion control on the site, specifically to minimize excessive dust from land disturbance. This will help minimize the environmental impact resulting from any construction and land disturbance on the site. TCHD encourages any reclamation, including site pad minimization, and reseeding activities to occur as early as possible. This prevents erosion, helps control excessive weeds, and can provide some benefit to air quality.

Grande South Phase 2  
November 27, 2019  
Page 4 of 4

### **Traffic Safety**

Oil and gas production and monitoring wells involve significant truck traffic to and from a site during the construction and drilling process. TCHD recommends the applicant include traffic control in their best management practices and TCHD encourages the City to designate a primary traffic route for all construction traffic and deliveries. If the trucks servicing the site will be traveling on a local school bus route, we encourage the City to work with the applicant to minimize traffic during hours when school buses are in operation.

Please feel free to contact me at 720-200-1575 or [kboyer@tchd.org](mailto:kboyer@tchd.org) if you have any questions on TCHD's comments.

Sincerely,

A handwritten signature in cursive script, appearing to read 'K Boyer', followed by a horizontal line.

Kathy Boyer, REHS  
Land Use and Built Environment Specialist III

cc: Sheila Lynch, Dylan Garrison, TCHD