



February 22, 2017

To Chris Simmons

csimmons@adcogov.org

Submitted by Jennifer Gamble, President, Adams County Communities for Drilling Accountability NOW and resident of Adams County, 2280 E. 138th Avenue, Brighton, CO 80602

Comments on Ward Ivey Site Request for Use by Special Review Permit Application for 26 horizontal wells on one well pad for the production of oil and gas

Northwest of Intersection of 152nd and York Street, Brighton

Dear Chris Simmons, Adams County Staff, Adams County Commissioners, and Ward Petroleum,

The following are Adams County Communities for Drilling Accountability Now (ACCDAN)'s comments on the Ward Ivey Permit Application in accordance with the comment period which closes March 6, 2017. ACCDAN respectfully requests a response in writing to each of its individual comments listed in the three sections of this letter.

Comments to Adams County

We respectfully request that Adams County:

- 1) Require the Ward Ivey permit application to be **put to a vote of the Adams County Board of Commissioners including a public hearing.** With 26 wells and 3-mile horizontals, Ward Ivey will be the largest producing site in Adams County and with an additional pad being planned by a separate operator, the combined operations have the potential to be the largest in the entire state of Colorado. On February 14, ACCDAN submitted 1,008 petition signatures to the county stating -- As residents of Adams County in Colorado, by signing of this petition, we formally request that the Adams County Director of Planning and Development refer the Todd Creek, Ward, Ivey and any future large-scale oil and gas development applications to a vote of the Adams County Board of County Commissioners as allowable under the county's Administrative Use by Special Review provisions of Adams County Development Standards and Regulations (4-10-02-05-07). The reason for this petitioned request is that we, the undersigned, believe that all large-scale oil and gas developments within 2,000 feet of an existing or planned neighborhood should require a vote of the Adams County Commissioners and a public hearing allowing ample opportunity for public education, involvement and formal public comment.
- 2) Conduct a review of the flooding concerns raised by a resident engineer, including consideration for **application of 500-year flood design standards** and/or relocating the pad to higher ground.
- 3) Since Ward's application and transportation impacts clearly state Ward's intention to use a pipeline and use of pipeline will reduce onsite environmental/health and local traffic impacts, Adams County should place a condition of approval on the Ward Ivey application, that a pipeline be in place **prior to any drilling** on the Ward Ivey site – i.e. **make use of a pipeline for product transportation a condition of approval.**



- 4) For any activities that may occur prior to a pipeline being in place, Adams County should require the use of E-470 for all Ward Ivey traffic rather than relying on local roadways.
- 5) Due to nearby resident raised concerns regarding the effects of temperature inversions on trapping of airborne emissions from the Ivey site, Adams County should work with CDPHE, Tri-County Health, City and County of Broomfield, the University of Colorado and other similar entities to commission and conduct an environmental and health study that considers effects on resident health and air quality both before substantial drilling occurs and then following up when a majority of the more than 400 wells planned for along the E-470 corridor are drilled and in operations to enhance understanding of air quality and health impacts of large-scale urban oil and gas activities. This study should be funded in part through fees and fines collected from oil and gas activities in the northern urban corridor.
- 6) **Address the pinch point bridge on York Street north of the E-470 interchange.** This bridge is planned by Ward to be used for tanker traffic. It is too narrow. Barely wide enough for two cars and a fatality occurred at this location from a traffic accident in January 2017. This bridge needs to be repaired, widened and upgraded if it is going to be used for heavy trucks/oil tanker traffic. Please carefully evaluate and mitigate the safety of this proposed route. Preference would be to use E-470 and avoid this stretch of York Street entirely and keep traffic away from neighborhoods.
- 7) **Require traffic impact study to address school bus route considerations.**

Application Completedness Comments and Questions for WARD PETROLEUM and ADAMS COUNTY on the Permit Application Package for Ward Ivey Site

Please provide an operator written response to each question and comment.

- 1) The will serve letter is a requirement of the permit application and has not been submitted. The application should not be processed until the will serve letter is provided.
- 2) In the cover letter, Ward seems to indicate that it has all of the easements for access and pipelines to support the project, but the easement documentation is not provided. The requested easement documentation should be provided for pipelines, since the application details are based on the presupposition that Ward will use a pipeline for the site. **ACCDAN supports the use of pipelines for the Ivey Site and encourages Adams County to make pipelines a condition for approval.**
- 3) The county regulations require a drilling schedule to be provided. By definition, a schedule includes the start and end dates for the various activities to complete the project. Ward has not provided a drilling schedule and therefore the current application is incomplete. The information provided is generic information on how long it takes to drill any well, how long it takes to complete any well and is not a schedule for the proposed Ward Ivey project that Ward is asking the county to approve. **Schedule details are provided in the traffic impact study section? Is that the planned schedule? If so, it means that you will be drilling and fracking at the Ivey site for two straight years – from August 2018 to August 2020. This is an unacceptably long period of time to impact the surrounding area.**
- 4) The sound mitigation fencing diagram on page 15 of the pdf only shows it for location 2, what about the sound wall for location 1? On pdf page 38, the drilling operations plan site layout



shows a sound wall around the entire site. Please consistently and clearly depict the plans for the sound wall.

- 5) What will the capacity of the steel berms be? 1.5 times the capacity of the largest tank?
- 6) Please include a description of the security fencing to be installed to keep children out of all equipment areas – wells, tank batteries, etc.
- 7) The Site Plan shows no separators, no ECD (combustion units) and no tanks, does this mean you do not intend to build any ancillary equipment? However, the renderings on pdf pages 22 and 23 show a couple of VCUs and a couple of tanks. It is unclear what the project will entail.
- 8) The traffic impact study assumes a pipeline is used for all product, water, etc. and yet the diagram on pdf page 49 shows 44 tanks and 12 VCUs and 26 separators. Most of this equipment is not needed since Ward will be using a pipeline. The application needs to depict what Ward's actual plan is consistently in the permit application. You can't have a traffic study that says pipeline and then not use a pipeline.
- 9) The Stormwater Management Plan information provided does not specifically tell how you will protect Big Dry Creek? The stormwater information is all generic but it needs to be site specific for this project.
- 10) There is no discussion in the traffic impact study of the damaged bridge on York Street north of the E-470 interchange where a fatality occurred last month because the bridge is too narrow and unsafe.
- 11) There is no discussion of what will be done with fracking waste water in terms of will it be piped or trucked out?
- 12) Page 12 of the traffic impact study says there will be 19,263 trucks during drilling and completion (is this with or without pipelines?).
- 13) On page 13 of the traffic impact study it references 144 one-way truck trips per ye (which we assume is per year?) during production/operations? Is this with or without pipelines? This does not seem to make sense with the statement below that indicates 21 daily trips in weekdays which would be 5,460 trips per year. Please provide a better description/explanation of the "production phase truck trips".
- 14) The traffic impact study DID NOT LOOK AT SCHOOL BUS ROUTES and times. This is a big omission as protecting our children as they travel to and from school is a key concern. Please add an analysis of this and describe what you will do to minimize impacts. For example, what if a school bus and an oil tanker both have to use the narrow bridge on York Street at the same time? Would the bridge hold the weight? Would it be safe? Furthermore, the traffic data was gathered on Wednesday afternoon which is an early release day for Adams County schools so the traffic study is not reflective of school day traffic.
- 15) The traffic plan avoids Stargate school but sends the traffic right past the Silver Creek Elementary School?

Comments for Ward Petroleum and Adams County – Please require the following Best Management Practices/Conditions for Approval.

- 1) The applicant shall transport all oil, water and gas via pipelines in order to minimize traffic impacts on local roadways and emissions impacts from the Ivey site. The applicant's transportation impacts and other aspects of its permit application are predicated on a pipeline



being in place and therefore, pipelines for water, waste water and all product transport should be a condition of permit approval. Prior to initiation of construction, the applicant shall provide the applicable title and easement commitments required to construct the oil, water and gas pipelines for the facility. The pipelines must be in place prior to drilling.

- 2) Prior to initiation of construction, applicant shall submit a fencing plan addressing BOTH fencing during construction and permanent fencing during operations. The permanent fencing shall be a security fencing a minimum of 6 feet tall and shall fully surround all oil and gas wells, tanks, ECDs and other ancillary oil and gas equipment. The access gate shall be locked. Fencing is not optional and not left up to the surface owner to decide. It is a public safety issue when you are within walking distance of neighborhoods and schools.
- 3) Prior to initiative of construction, applicant shall submit a landscaping plan which includes a combination of berm(s), mature trees (8-plus feet in height), bushes and groundcover to adequately serve as a visual barrier between the site and surrounding neighborhoods and roadways. The landscaping plan shall be compatible with the surrounding area and is subject to county approval prior to construction initiation. The landscaping plan shall include a means and schedule for watering during establishment of vegetation and then thereafter for maintenance. Vegetation must be watered/irrigated to ensure its survival.
- 4) The sound mitigation plan shall include a sound wall during drilling and completion operations regardless of the results of the sound study. In addition, any additional controls recommended by the required sound study will be implemented.
- 5) The applicant agrees to conduct a baseline drinking water test for any drinking water well owner within 1 mile both prior to drilling and following six months, one year and five years of operation upon the request of the owner.
- 6) Prior to initiating construction, the applicant shall request of COGCC and CDPHE that a CDPHE evaluation of the site be conducted and shall subsequently then agree to comply with the resulting CDPHE recommendations. If CDPHE will not conduct said evaluation, the applicant shall secure the services of an independent company to conduct a similar evaluation and shall agree to comply with its recommendations.
- 7) The applicant shall agree to perform Bradenhead Annulus Pressure Monitoring (Rule 341), regardless of whether directed by COGCC or not. Operator shall monitor and record bradenhead annulus pressure during hydraulic fracturing operations, and to promptly report to Adams County and COGCC increases in pressure greater than 200 psig. These requirements help to ensure that groundwater is protected and that prompt action is taken if conditions arise that could lead to the subsurface release of hydraulic fracturing fluids.
- 8) The applicant agrees to use electric drill rigs or best available clean and quiet drilling technology to achieve sound levels of less than 45 dBA measured 200 feet from the drill rig.
- 9) The applicant agrees to use of closed loop system and to not use any open pits.
- 10) The applicant agrees to pipe in water for fracking operations and not to use truck transport for water and the applicant agrees to no use of local wells unless the well is owned by the operator and is permitted by the state for industrial use (versus residential use).
- 11) Applicant agrees to use only low-profile tanks (12-foot tall maximum during for operations) for operations. Larger temporary tanks may be used during drilling and completion. Applicant further agrees to comply with a maximum equipment height for any equipment to remain on



- the site for operations (such as VCUs, shafts, etc.) of 25 feet or less (Note this is in addition to the height restriction of 12 feet for all product storage tanks to be used at the site).
- 12) Applicant agrees to install steel-rimmed berms and synthetic liners everywhere and in all cases. Applicant further agrees to install berm capacity capable of containing 1.5 times the amount of liquids in the single largest tank to be present on the site at any given time.
 - 13) Applicant agrees to increased liability insurance for operators at a minimum of \$5 million per incident to cover the increased risk of drilling in or near neighborhoods.
 - 14) Requirement for no flaring except in the case of an emergency/repair after completion. Applicant agrees to requirements of Green Completion.
 - 15) Strengthened requirements for dust control during operations, requiring that "no visible dust" is created which impacts neighboring properties or dust on roads impacting children.
 - 16) Restrictions on well drilling traffic for safety considerations and to avoid school schedule times, rush hour and evening sleeping hours.
 - 17) Requirement that once drilling starts on the first well that all planned wells for that phase must be completed within 9 months or they lose the right to drill and must repeat the permit process for remaining wells. Applicant agrees to complete all permitted wells in two phases or less to minimize disturbance on surrounding area.
 - 18) Applicant shall verify prior to commencement of drilling operations that the designated emergency responders have appropriate fire suppressant foam on hand and that they are trained and capable of responding to oil and gas fires. Applicant shall secure a signed letter of preparedness from the designated emergency response agency attesting to these facts.
 - 19) Applicant agrees to provide Adams County with the use of FLIR camera three days per month for the county's independent inspection use for monthly inspections of facilities proximate to neighborhoods.
 - 20) Requirement for all lighting used to be directed downwards and shielded upwards to minimize light pollution during nighttime operations.
 - 21) If well operations are stopped for a period of 12 months, the operator must initiate removal of all well structures within 6 months of the 12th month that operations are ceased and complete full removal within 24 months of the last operations day and re-vegetate the site.
 - 22) Applicant agrees to provide Adams County access for inspections with notification, but without advance notification.
 - 23) Requirement for an emergency response plan to be developed including a minimum of one public meeting and then an educational pamphlet to be distributed to the ½ mile radius on the emergency response plan and safety mitigation measures.