



Billings Refinery

July 31, 2014

Dear Council Member

The minutes from our June 10, 2013 CAC meeting are attached. The next CAC meeting will be our **MEET IN THE PARK** event on **THURSDAY, SEPTEMBER 4, 2014 at South Park.** Members are asked to come about 4:00-4:30 to help set up. The event will run from 5:00-7:00 p.m. We will have a brief CAC meeting at 7:00 p.m. after the event to debrief how things went.

Sincerely,

Ann L. Clancy, Ph.D.
Meeting Facilitator
Meeting Facilitator

**Meeting Location:
MEET IN THE PARK EVENT
SOUTH PARK GAZEBO**

**PHILLIPS 66 BILLINGS REFINERY
CITIZENS ADVISORY COUNCIL
June 10, 2014**

MEETING MINUTES

- Present:** Council members Bob Carr, Paul Dextras, Bruce MacIntyre, Shirley McDermott, Eileen Morris, John Pulasky, Jim Ronquillo, Andrew Sullivan, Emily Shaffer, Mike Yakawich, Michele Zahn, Stella Ziegler
Phillips 66 management. Colin Franks, Randall Richert, Mark Hilbert,
Facilitator Ann Clancy
- Absent:** Ken Ard, Keith Beartusk, Joshua Juarez, Lance Johnson, Ralph Hanser, Mark Pagano, Melissa Patton, Ray Rigdon, Melanie Schwarz, Dolores Terpstra,
- Guests:** Amy Galt, daughter of Dave Galt, Executive Director, MT Petroleum Association
Luke Wallawander, Director, Economic Development, Beartooth RC&D
Process Technology Program students: Austin Wyss, Roxsand Richert, Robert Ross

AGENDA

- Welcome/Introductions
- Billings Police Dept. Update
- Activity & Issues for Energy Exploration & Production in MT
- CAC Subteam Updates
- 25th CAC Anniversary in 2015
- Community, Refinery & Transportation Updates
- Next Meeting Meet in the Park on September 4, 2014

WELCOME/INTRODUCTIONS

Colin Franks apologized for Ray Rigdon's absence from the CAC meeting. He reported that Ray was in the process of moving his family to Montana from Louisiana.

Bob Carr introduced his guest, Luke Wallawander, Director of Economic Development with Beartooth RC&D (Resource Conservation and Development) located in Joliet. He described the organization as a regional vehicle to improve the economic and social conditions through conservation, utilization and development of the natural and human resources of an area. It encompasses five counties in South Central Montana—Big Horn, Carbon, Stillwater, Sweet Grass and Yellowstone. The organization is a conduit for state and federal resources and functions as a rural Big Sky Economic Development program.

BILLINGS POLICE DEPARTMENT UPDATE

T J. Vladic, Captain of Professional Standards with the Billings Police Department, provided an update on the current focus of the Billings Police Department on behalf of Police Chief Rich St John. Captain Vladic is from the Billings area and joined the police force in 1989. He was a community police officer working with the city's neighborhood task forces, then became Captain of Detectives in 2008. He is now in charge of the Office of Professional Standards overseeing internal affairs. His update focused primarily on the Safety Mill Levy to be placed on this

November's General Election ballot It is a property tax increase that would raise about \$2 million during 2015-2016 and nearly \$23 million by its 10th year. Public safety uses about 58% of the city's general fund dollars and the growth in population in Billings has stretched the limits and resources of the current police and fire departments.. Right now, the city's public safety budget is running out of money. The Police Chief favors the Community Growth option to raise money in 2015 and save more than \$20 million within 10 years. The Community Growth option would maintain the Police department's current 142 officers and provide funding to add 13 new police officers and six new firemen to keep pace with the city's expected growth. Police still process all the dispatch calls that come in On the average, there are 9 officers assigned to 9 beats with one sergeant on shift Captain Vladic described the police chain of command Police Chief Rich St. John; Assistant Chief Joel Slate; three captains of detectives, patrol and professional standards, and sergeants in charge of officers and detectives.

The following CAC comments/questions were recorded.

- *What about the public safety mill levy that passed a few years ago?* That was 10 years ago and it provided police and fire funding of about 80% for labor and benefits. This mill levy would allow for more police officers, vehicles and clerical staff In 1974, Billings had 101 police officers. In 2014 it has 142 – not a large increase over the past 30 years
- *The last mill levy was presented as a dollar amount. Is the newest mill levy going to be presented in mills or dollars? Will it be on the November ballot?* It will be presented in dollars and the plan is to have it on the November ballot
- *What are the crime trends (both positive and negative) in the triangle area around the refinery and the South Park area?* There are high levels of prescription drug and meth use as well as spurts of robberies The general public and businesses continue to see transients and their alcohol abuse as a major problem There appears nowhere for them to go and the police can only move them along There are bike officers that patrol the downtown area
- *What's happening with the HUB downtown?* The HUB was established as a drop-in center for the homeless and at-risk population It was designed to be a resource site while promoting a motivational environment Staff provide crisis intervention and vocational opportunities and offer services like one meal a day, laundry facilities, mail and phone services, access to outerwear, sleeping bags, blankets, backpacks and hygiene products. It serves an average of 130 men and women daily It has evolved into a situation where intoxicated individuals are loitering around the building The positive is that many of the homeless individuals hang around near the HUB but it would be helpful to close down their nearest sources of alcohol that sell individual containers Dealing with homeless and intoxicated individuals continues to be an ongoing problem
- *What are the impacts of the oil and gas boom on criminal activity in eastern Montana and Billings?* The impact occurs with drug abuse, burglary and theft but there are no statistics yet People pass through Billings headed to the Bakken area to work Most are OK but a small percentage engage in criminal activity

ACTIVITIES & ISSUES EXPLORATION AND PRODUCTION

SUMMARY FOR MONTANA

Dave Galt, Executive Director of the Montana Petroleum Association (MPA), gave a presentation summarizing the activity and issues of exploration and production in Montana for 2014 He passed out some copies of the 2012 issue of MPA's *The Treasure State Journal*, a magazine that the MPA publishes every two years focusing on the statewide impact of oil and gas exploration and production. The next issue will be published in September 2014.

Part I: Activity & Production

He showed a map of oil and gas production in Montana that includes every well plotted since 1915 – about 48,000 in total The first well drilled was in Carbon County. Most of the exploration

has been focused in the southwest, northwest and central parts of Montana. He noted that the Bell Creek area in the south was a large, high pressure field that raised production levels but was depleted quickly. Lately there have been enhanced oil recovery efforts happening in that area. In contrast, Richland County and the Bakken area are still in their initial recovery phases. Secondary and tertiary recoveries using CO2 injection may pull out another 60% of oil in these areas. The Cedar Creek area of Montana and North Dakota is a field that was first explored in the 1930s but could now be re-mined using the CO2 oil enhancement recovery process. They use pipelines to inject the CO2.

Dave referred to a slide showing the total drilling permits issued by year from 1960 to 2013. Overall the level of exploration and production activity is low in Montana. Rig counts in North Dakota and Wyoming number about 200 and 50, respectively. Montana only has 10 rig counts. He provided some Montana Petroleum Quick Facts:

- 4,400+ oil wells
- 6,600+ gas wells
- 80,000 bbl average daily production
- 160,000 mcf average daily gas production
- Montana produces enough oil to fuel almost 800,000 cars, heat over 300,000 homes, and enough natural gas to heat more than 1 million homes a day.

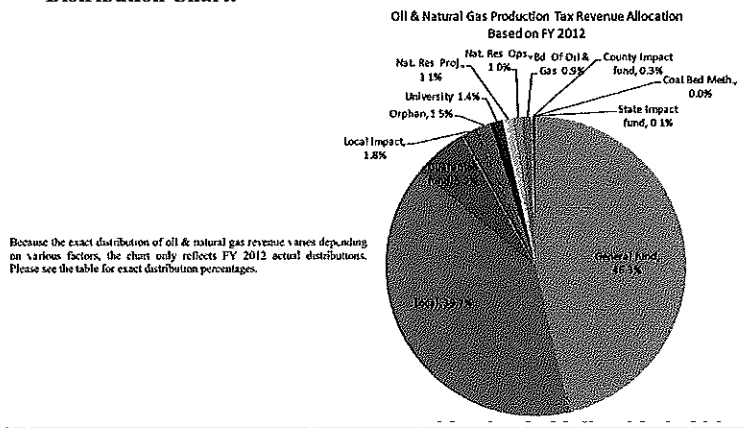
Part 2: State & Local Tax Distributions & the Production Incentive

Oil and natural gas production results in the following tax revenue collections in Montana:

- Total state share: \$1,189,631,607
- Total local share: \$1,144,695,284
- Total: \$2,334,326,891

Dave shared a distribution chart of state and local taxes (see below) and noted that there continues to be debates about school funding distribution. Overall, cities in Montana do not get a lot of tax dollars but the counties do fairly well.

Distribution Chart:



Dave compared the production of vertical vs. horizontal wells from 1986 to 2013 showing a steady decline in vertical and a growth in horizontal including horizontal re-drilling. This includes breaking shale with hydraulic horizontal fracking.

Part 3: Rules, Regulations & Concerns

Dave provided a list of rules, regulations and concerns

- Federally Proposed Rules on Hydraulic Fracturing
- BLM Resource Management Plans
- Keystone XL Pipeline
- State Sage Grouse Conservation Council
- Congressman Garner (R-CO) Sage Grouse Bill
- Wilderness, wild & scenic designations
- Production Incentive (tax)
- Antiquities Act, monument designations
- Sec 106, National Historic Preservation Act
- Clean Water Act Proposed Rule
- Discharge Permits
- Green House Gases (GHGs), EGUs, SO2
- Tax Policy

He touched on some of the most common public concerns and misperceptions.

- Air quality & airborne pollutants – What will be the impact of public exposure to gases like methane?
 - Misconception air emissions due to hydraulic fracturing are harmful to public health
 - Fact Air monitoring data from state regulatory agencies do not support this After months of air sampling in the Barnett Shale, the Texas Commission on Environmental Quality concluded "there are no immediate health concerns" resulting from oil and gas operations in the region The Pennsylvania Department of Environmental Protection conducted air monitoring in two separate regions of the Marcellus Shale and "did not identify concentrations of any compound that would likely trigger air-related health issues associated with Marcellus Shale drilling activities."
- Water supply & fracking – Where is all the water coming from? How will local aquifers be protected?
 - Misconception Hydraulic fracturing depletes water supplies
 - Fact The amount of water used for hydraulic fracturing is comparatively small A 2009 report for the U S Department of Energy, for instance, found that water required for hydraulic fracturing would represent about 0.8 percent of total demand in any given area
- Groundwater & fracking – Who will do impartial baseline testing? What is the plan for regular ongoing testing during the drilling? What is the timeline for cleanup when spills occur?
 - Misconception Hydraulic fracturing contaminates groundwater
 - Fact Hydraulic fracturing, a method of extracting oil and natural gas from shale, has been used since the 1940s, including thousands of times over the past several decades here in the United States There have been zero confirmed cases of groundwater contamination from hydraulic fracturing which the EPA, state regulators, and scientific experts from MIT and Stanford (and elsewhere) have all confirmed In April of 2012, President Obama's former EPA Administrator, Lisa Jackson, said: "In no case have we made a definitive determination that [hydraulic fracturing] has caused chemicals to enter groundwater "
 - Montana was one of the first states to adopt hydraulic fracturing disclosure rules requiring companies to disclose the contents of the fracturing fluid
 - There have been NO incidents of water contamination from hydraulic fracturing in Montana
 - Hydraulic fracturing has been in practice for over 65 years in the extraction of water, oil, and natural gas from underground reservoirs
- Frac Chemical Disclosure – What specific toxins are used in the fracking process? Why does the industry keep this list secret?
 - Misconception. Companies don't disclose the chemicals used during hydraulic fracturing
 - Fact. The list of additives used in hydraulic fracturing is available on www.FracFocus.org, which also provides specific listings on a well-by well basis You can also view a list of

these additives at www.EnergyInDepth.org Furthermore, companies disclose this information on Material Safety Data Sheets, which are available at each hydraulic fracturing site. Water and sand constitute more than 99 percent of fluids used during hydraulic fracturing. The industry supports a regulatory package with comprehensive disclosure, including additives, geologic formations to be stimulated, flowback volume, and much more.

- Flaring – How much flaring can we expect? What is the plan to reduce the amount of flaring required?
 - The state allows companies to flare gas for 60 DAYS after production starts. Flaring can continue if the producer can show that hooking up to a pipeline is economically unfeasible or the gas cannot be sold at a profit. Production may be reduced or fines imposed (36 22 1220 Associated Gas Flaring Limitation, Application to exceed, board review & action)
 - An article in the Billings Gazette, June 2012, reports on a Montana company created to capture and sell excess Bakken gas. GTUIT installs what is basically a mini-natural gas plant in a trailer that can be hauled out to an oil well to capture, liquefy and store gas emissions.
- State Sage Grouse Conservation Council
 - Core habitat areas restrict drilling surface areas

Billings SO2 Nonattainment Area

- The EPA did not take the advice of Governor Bullock instead creating a small area on Coburn Road as SO2 nonattainment. The MPA will wait to see if new data shows improvement in the area. Dave predicts the EPA will be challenged.

Actual Property Tax Comparison

Dave provided a comparison of property tax from 2011 through 2013 showing how taxes have elevated over that time period.

State	Pipe Miles	Compressor Stations	Total Investment	2013 Property Tax
Montana	181.0	3	349,039,688	10,454,391
North Dakota	280.4	5	609,375,695	1,760,342
South Dakota	182.5	3	385,576,649	2,154,242
State	Pipe Miles	Compressor Stations	Total Investment	2012 Property Tax
Montana	181.0	3	342,731,392	10,135,124
North Dakota	280.4	5	604,946,365	2,479,154
South Dakota	182.5	3	377,925,134	2,044,813
State	Pipe Miles	Compressor Stations	Total Investment	2011 Property Tax
Montana	181.0	3	343,317,745	10,081,182
North Dakota	280.4	5	602,577,961	2,729,853
South Dakota	182.5	3	373,856,657	1,953,133

Part 4: Beyond the Numbers

To conclude, Dave presented a headline from the Billings Gazette from June 2013, "Bakken an Industry, Not a boom" to summarize the impact of oil and gas exploration and production across the state. As a further example, he noted that Nelcon, a heavy highway contractor in the Kalispell area, supplied more than 10 million tons of aggregate reserves such as sand and gravel for construction jobs in the area, and \$5 million in payroll to primarily Kalispell-based employees in 2013.

CAC Comments/Questions

- *Where is the oil going out of the Bakken?* Rail transportation has changed things dramatically with about half of the oil now being delivered by train all over the country. None comes to Phillips 66 by rail, some by truck. Rail delivery has become very significant. If the Keystone Pipeline goes through, that could expedite another 100,000 barrels down to the Gulf region. There are no pipelines to Richland County.
- *Why are we not shipping oil overseas?* Companies are not doing a lot now to export. It would be helpful to export crude oil that is wanted in the U.S., such as exporting crude oil to allies to hold for us.
- *In terms of hydraulic fracturing, does Colorado have different requirements?* Every state has its own state regulations.
- *When you drive towards Cody around the border with Wyoming there is an area that smells, do you know what that is?* I don't know. Perhaps a sulfur smell?
- *You mentioned that another 60% of oil can be extracted through enhanced oil recovery processes. Why isn't the other 40% accessible?* We don't yet have the technology to make the last 40% recoverable.
- *What change do you foresee with fracturing in Montana? Is Colorado doing better than us?* That is a difficult question to answer because some investors are leaving Colorado due to the more stringent requirements for pre-fracturing. The biggest concern in Colorado now are the locally developed bans on hydraulic fracturing resulting in no production.
- *What about recycling of fractured water?* Yes, that could be more viable if it becomes an economic issue. Wells are not economical in Montana right now.
- *Why aren't more historic wells being redeveloped?* Excluding Richland and Roosevelt Counties, we are at our lowest levels of production in the state. There was a peak in 2000 but now there is not an overall boom. Based on revenue, the last report was \$12 million lower than the previous quarter.
- *What is the reason for that, geology?* Yes, it is geology and not due to a tax structure issue. World class companies have been exploring but not finding it economically profitable.
- *What about environmentalists?* There are more here in Montana than North Dakota. We are one-third owned by the federal government so we end up with parcels of land.
- *What about permitting for wells?* Wells are registered according to established criteria and have control requirements placed on them.

SUBTEAM UPDATES

Meet in the Park Subteam

Ann reported that the Meet in the Park subteam met in April and will meet again on June 24 to further the logistics for the event. A draft agenda has been created, caterer selected, park permits acquired, and a list of organizations/partners drafted who have indicated they want to have a booth or display at the event. The event is scheduled for September 4, 2014 at South Park Gazebo.

RMC Connection & Focus on Youth Subteam

Ann reported that the subteam focused on youth education and building a connection with Rocky Mountain College (RMC) met on April 30. Luke Ward and Kayhan Ostovar, professors at RMC, were present at the meeting. The subteam talked about selecting a Phillips 66 refinery representative to serve on the Yellowstone River Research Center Steering Committee; involving CAC members and Phillips 66 employees in the Yellowstone River Clean-Up scheduled for September 13, 2014; identifying a research project of interest to the Phillips 66 refinery that a RMC student could focus on, and determining RMC student interest in attending a CAC meeting this year. Colin Franks indicated that they had a refinery employee who might

be interested in serving on the Steering Committee. Ann will poll CAC members by email to see who would like to participate in the Yellowstone River Clean-Up in September. A suggested research project was looking at waste water that affects the Yegen Drain habitat in conjunction with the refinery. Kayhan and Luke said that students would probably be interested in attending a CAC meeting in the fall as in May they will be done with classes.

In terms of the Focus on Youth CAC theme for 2014, Ann reported that subteam members were interested in having representation from the Career Center at CAC meetings as well as high school level representation or involvement in refinery tours (e.g., involving home schoolers), in having the refinery HR efforts target Native American youth, and in exploring a CAC Facebook page that a high school or college journalism class might be interested in taking on as a project.

Link Between Agriculture & Energy Industries Subteam

Ann reported that this subteam also met in April and talked about setting up a panel discussion on "future economic & environmental impacts of the link between agriculture and the energy industries." The panel would take place at the October 14 CAC meeting. Ideas for panel members included representatives from Jupiter Sulphur, MTDEQ, environmental group, RMC environmental science professors and an agricultural economist at MSU-B. Topics might include: role of government mandates, oil-based agricultural products, pipelines under farm land, Phillips 66 commercial interest in oil-based products, biodiesel, RIN credits, ethanol production, and reduced emissions.

Planning for 25th CAC Anniversary in 2015

Ann informed members that the 25th anniversary of the CAC was coming up next year and asked what interest members and Phillips 66 had in hosting some celebratory events. It was agreed that something should be done to acknowledge the CAC's longevity next year and that a planning discussion should take place in the fall at a CAC meeting.

COMMUNITY UPDATES

Emily Shaffer announced that the North Park Neighborhood Task Force had its first meeting in a number of years. Jim Ronquillo and Michele Zahn announced the March Against Drugs and Violence event to take place Saturday, June 14 at the Courthouse Lawn from 11:30-1:00 p.m. All CAC members are invited.

Mike Yakawich shared some information that he has gleaned so far in his experience as a City Council member. He encouraged CAC members to read the City League public newspaper that is produced periodically by the city and can be obtained at City Hall or as an insert in the Billings Gazette. He reported that city department heads presented a budget for the Council to approve which includes a 10 year mill levy for public safety as those expenses are eating up the city's reserve budget, most of it for salaries for police and firemen. He said he was impressed by the work of City Manager Tina Volek in focusing on putting funds away for the future. He thanked the previous efforts of Jim Ronquillo and Shirley McDermott in getting a water spray park in South Park. He reported there would be a summit on homelessness in the fall as the city is now experiencing transients coming through Billings on their way to and from the Bakken. He praised the partnership between the refinery and the city in treating the refinery wastewater as a great model of win-win collaboration for all involved.

Eileen Morris reported that the activity of Yellowstone Valley Citizens Council at this time of year is primarily focused on promoting local foods and the farmer's market. In addition to downtown, there is a market in South Park Thursdays and Saturdays.

TRANSPORTATION UPDATE

Mark Hilbert reported on the transportation update:

Operations: In May, there were 322 calls in Yellowstone County about excavating in right of ways. The Seminoe and Pioneer pipelines are running well. The Yellowstone Pipeline running east is full of product.

Safety: There were two recordable but minor injuries in May, both contractors. The record of no employee injuries since 2008 still holds.

Environmental: Operations are going well with no reported incidents. There is a new project in Salt Lake City to do a pipeline assessment by inoculating the pipeline systems with gas to sniff for any gas leaks.

People: The terminal supervisor for Billings and Sheridan is moving back to the east coast so a new superintendent is being recruited.

REFINERY UPDATE

Colin Franks reported on the refinery update:

Operations: The plant is running well and reliably. The refinery had a corporate visit from senior executives in May which went well. Different projects were discussed. One project is developing a better truck recovery rack which is 85% complete. It should be online the end of summer and will enable the refinery to receive more local crude oil.

Safety: There has been one injury to date this year, back in January. Last week, two OSHA inspectors were at the refinery as part of the Voluntary Protection Program (VPP) which promotes cooperative relationships at workplaces that have implemented comprehensive safety and health management systems. VPP is an official recognition of outstanding efforts made by companies and employees to achieve exemplary occupational safety and health. Within the VPP program is the Special Government Employee (SGE) program which allows industry employees to work alongside OSHA during VPP onsite evaluations. The inspectors that came to the Billings refinery were accompanied by some SGEs from other refineries. The group recommended that the refinery stay within the VPP STAR program which is awarded to companies that have achieved injury and illness rates at or below the national average of their respective industries. Star participants are reevaluated every 3 to 5 years but their incident rates are reviewed annually. The refinery was awarded the Star certification but needed to draft a 90 day plan to better communicate safety and health issues to refinery employees.

Environmental: There were no updates in this area.

People: The refinery has hired 12-14 new operators who are currently in classes. Another 8 operators may be coming on board in anticipation of more retirements this year. Colin announced that the refinery received a community services award from Riverside Middle School.

NEXT MEETING: MEET IN THE PARK EVENT

SOUTH PARK GAZEBO

- Meet in the Park Event (5:00-7:00 p.m.)
- Brief CAC Debrief Meeting (7:00-7:30 p.m.)
- Next Meeting, October 14: Panel Discussion of Link between Agriculture & Energy Industries