



June 22, 2011

Dear Council Member:

The minutes from the June 14, CAC meeting are attached. The next CAC meeting will be our **Neighborhood Eat & Meet** held on **Thursday, SEPTEMBER 8, 2011 at RiverStone Health**, beginning with dinner at 5:00 p.m. and followed by presentations until 6:45. A short CAC meeting will be held from 6:45 to 7:15 p.m.

Sincerely,

Ann L. Clancy, Ph.D.  
Meeting Facilitator

Next Meeting Location: RiverStone Health  
123 S. 27<sup>th</sup> Street

CONOCOPHILLIPS BILLINGS REFINERY  
CITIZENS ADVISORY COUNCIL  
June 14, 2011

MEETING MINUTES

- Present:** Council members: Ken Ard, Steve Arveschoug, Bob Carr, Shirley McDermott, Paul Miller, Linda Pettengill, John Pulasky, Jim Ronquillo, Emily Schaffer, Gladys Stahl, Dolores Terpstra  
ConocoPhillips management: Steve Steach, Reed Marton  
Facilitator: Ann Clancy
- Absent:** Keith BearTusk, Brittany Blood, Paul Dextras, Hillary Hansen, Mark Hilbert, Mike Kautzman, Elizabeth Stears, Richard Wilson, Ernie Woods, Stella Ziegler
- Guests:** *Linda Pettengill:* Sheryl Hoffarth, Marion Dozier, Peggie Gaghen  
*Gladys Stahl:* Robin Hamel  
*Shirley McDermott:* Duane McDermott  
*Dolores Terpstra:* Joy Stevens, Evelyn Pyburn  
*Paul Miller:* Svein Neuman  
Andy Holman, Process Engineer, Billings Refinery

AGENDA

- Welcome/Introductions/Announcements
- Virtual Refinery Tour Presentation & Refinery Bus Tour
- Refinery & Transportation Updates
- Next Meeting: Neighborhood Eat & Meet, September 8, RiverStone Health

WELCOME/INTRODUCTIONS/ANNOUNCEMENTS

Guests were introduced and Jim Ronquillo announced the 3<sup>rd</sup> annual Firecracker BBQ to be held on June 28 at 1505 Avenue D to benefit the Council on Aging. It is sponsored by the Yellowstone County Commissioners, Billings City Council, and other elected officials. The event will offer food and entertainment from 4:00-7:00 p.m.

Reed Marton handed out a ConocoPhillips's memento for each attendee and a copy of the company's Spirit magazine. The following guests were invited to attend the refinery bus tour:

Linda Pettengill invited:

- Sheryl Hoffarth, member of South Side NTF & former CAC member
- Marion Dozier, Chair, South Side NTF
- Peggie Gaghen, City Council member representing Ward 1

Gladys Stahl invited:

- Robin Hamel, wife of Billings Mayor Tom Hamel

Shirley McDermott invited:

- Duane McDermott, husband

- Heidi Jensen, Laurel City Planner (did not make the tour)
- Dolores Terpstra invited:
- Evelyn Pyburn, publisher of Big Sky Business Journal
  - Joy Stevens, former City Council member, lawyer, & petroleum engineer
- Paul Miller invited:
- Svein Neuman, member of Northern Plains Resource Council
- Emily Shaffer invited:
- Ryan Cunningham, Chair, North Park NTF (did not make the tour)

## REFINERY PRESENTATION & BUS TOUR

Refinery Manager Steve Steach did a “virtual” presentation tour of the refinery starting off with some basic facts about the company as a whole and including details about the Billings refinery.

### **ConocoPhillips Company**

- #3 integrated oil & gas company in US: 30,000 employees, \$156 billion in assets, 2010 revenue of \$189 billion, 2010 earnings of \$11.4 billion
- Explores oil & gas in more than 30 countries
- Proven resources of 8.3 billion barrels of oil (7<sup>th</sup> worldwide)
- Production of 1.7 million bpd
- Global refining capacity of more than 2.4 million bpd (2<sup>nd</sup> in US)
- Sells petroleum at 7,150 marketer-operated retail outlets in US & at 1,450 gas stations in Europe
- Refineries in: Billings, MT; Ferndale, WA; LA & San Francisco, CA; Ponca City, OK; Sweeny, TX; Lake Charles & Alliance, LA; Bayway, NJ; Trainer, PA
- Joint venture refineries in: Borger, TX; Wood River, IL

### **Refineries in Rockies Region**

- 16 refineries with total capacity of 671 mbd located in 5 states
- CoP Billings is 4<sup>th</sup> largest refinery & represents almost 10% of regional capacity
- Demand is highly seasonal & summer demand exceeds production capability
- Very limited avenues to bring in additional supply from other regions
- Simultaneous & summer turnarounds/shutdowns severely strain supply capability

### **ConocoPhillips in Montana**

- 439 employees, 198 retirees
- Payroll of \$44 million
- 2.6 million bbl oil production
- Billings Refinery: 58 mbpd
- 7 Product terminals: Billings (2), Bozeman, Great Falls, Helena, Missoula, Thompson Falls
- 1,427 miles of pipeline
- 187 marketing sites with 24.5% gasoline market share
- \$2.4 billion in assets and \$1.3 billion in sales
- Total taxes & royalties: \$34.5 million (payroll \$2.3 million, severance/production \$17.1 million, royalties \$1.2 million, property \$9.5 million, state income tax \$3.6 million, miscellaneous taxes \$0.8 million)

## Origins of Billings Refinery

- Continental Oil Company (Conoco) incorporated in Denver in 1875
- Company expanded to establish refineries close to where oil was produced
- By late 1930s, produced enough heavy “sour” crude oil in the Rockies to justify construction of refinery in Billings. Construction delayed during WWII.
- Need for aviation fuel led to refining process improvements during the war that were incorporated into final design of refinery
- Construction began October 1947 and opened October 8, 1949 at a cost of \$9.5 million
- Refining history: started up in 1949; expanded in 1956, 1963, and 1967; added coker project 1992; installed gas oil hydrodesulfurizer unit in 1994, ultra light sulfur diesel unit in 2006 and light sulfur gas unit in 2009
- Capacity increased from 7.5 mbd in 1949 to 58 mbd in 2011

## Billings Refinery Operations

- Refinery feedstock is crude (majority by Canadian pipeline, less than 1% by truck); natural gas (hydrogen production); and field butane (alky unit feed)
- Rockies crude pipe lines include: CoP Glacier, MidContinent Express, Front Range Cenex
- Refined products include: gasoline, diesel, propane, clarified oil, jet fuel, aviation gas, coke, sulfur & fertilizer
- Product distribution is through pipeline (90% of products through Yellowstone & Seminoe Pipelines), trucking (8% of products), rail (2% of products)
- Gasoline market share: 25% remains in Montana; Wyoming, 8%; Nebraska, 12%; North Dakota, 4%; South Dakota, 7%; Washington, 8%; Idaho, 7%; Utah, 6%; Colorado, 16%

## Billings Refinery People & Community

- 300 employees & 130 resident contractors
- Outreach via Citizens Advisory Council
- Awards: EPA Clear Air Award, EPA Energy Star Awards (twice); Montana Governor’s Cup for Outstanding Workplace Health & Safety; NPRA Distinguished Safety Award; ConocoPhillips SPIRIT Awards (3 times)
- Philanthropic program that supports over 90 organizations in the area

## Refining 101 Presentation

- Refining consists of:
  - *Boiling*: distillation, separating HC molecules by boiling ranges
  - *Breaking*: cracking, separating large HC molecules into smaller ones; thermal cracking (coker), catalytic cracking (fluid catalytic cracker)
  - *Treating*: hydrotreating, using hydrogen to remove contaminants (sulfur, nitrogen), produces hydrogen sulfide & ammonia, amine/caustic treating (recovers H<sub>2</sub>S & mercaptan)
  - *Bending*: reforming, alkylation
  - *Blending*: multiple gasoline blend stocks
- Refinery overview:
  - Central Control Building
  - Process block:
    - Combination area: crude/vacuum unites & fluid catalytic cracking (original refinery)

- Condensate area: gasoline treating, reforming & alkylation (gas treating, refining area)
- Coker area: heavy resid cracking
- Hydrogen De-Sulfurization (HDS) area: hydrogen production, gas oil/diesel treating (two plants and treaters)
- Tank farm & utilities: pump house & boiler house
- Jupiter Plant Joint Venture: fertilizer & sulfur production

The presentation was followed by a bus tour of the refinery led by Andy Holman, Process Engineer with the refinery.

## NEIGHBORHOOD EAT & MEET UPDATE

Ann Clancy reminded members of the Neighborhood Eat & Meet event scheduled this year for September 8, 2011 to be held at RiverStone Health. Ann stated she will set up meetings for the Eat & Meet team in June and July.

## REFINERY UPDATE

**Safety and Environmental:** After 490 days with no employee injuries, there was an incident a week ago in which an employee suffered an injury that required stitches. Management is reviewing the incident to enact improved safety measures.

**Operations:** Steve Steach reported that his boss, Larry Ziemba, President Global Refining, will be visiting to do a stewardship review of the Billings refinery. They will discuss the coke drums, wastewater compliance issues, and the Tier 3 change in gasoline specifications requiring a 30% increase in mpg by 2016. This involves increasing the percentage of ethanol used in gasoline blends and is part of the overall federal tier system to gradually enact stricter emissions standards. It has been a good year so far in terms of operations for the refinery. There was a small unplanned shutdown when a leak in a heater tower was discovered.

**Coke Drum Project:** Steve Steach reported that the two remaining coke drums are temporarily parked about 45 miles east of Helena until weather improves. The rain and flooding has made it difficult to move them as the turnouts and shoulder areas of the roads are soft and muddy. They have 265 miles to complete. He calculates that they will not arrive until the first week of July.

## TRANSPORTATION UPDATE

**Safety and environmental:** Steve Steach reported that there have been alerts of potential leaks on sections of the Seminole Pipeline due to the rainy weather. An area where the bank supports the pipeline has been washed out. About a mile long area of pipeline is being dug up.

Next Meeting Agenda: Neighborhood Eat & Meet  
September 8, 2011  
Location: RiverStone Health