

1999 SENATE FINANCE AND TAXATION

SB 2421

1999 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB 2421

Senate Finance and Taxation Committee

Conference Committee

Hearing Date 2-8- 99

Tape Number	Side A	Side B	Meter #
SB 2421 #1	X		1060- END
Committee Clerk Signature <i>Sheila Wald</i>			

Minutes:

Sen Urlacher - called the hearing to order.

Sen Cook - Testimony submitted and attached.

Sen. Tomac - Bi partisan support. Important for ND. Home of refinery, and if we didn't have this economy would be missing a lot. It keeps workers here, and the community sound, in years to come. We need to keep it working in modern technology.

Richard Glaser - Testimony submitted and attached.

Dan Porter - New Manager BPPM Amocco. The support sends a signal to spend less at the refinery. Industry is in economical turmoil. We must address all the interest in refineries world wide. There are some refineries that are receiving exemptions, and they help sides be more resourceful. We need strong support and I ask for a Do Pass on this bill.

Page 2

Senate Finance and Taxation Committee

Bill/Resolution Number Sb 2421

Hearing Date *Click here to type Hearing Date*

Dave Mound - Health Dept. The numbers we receive on environmental pollution's are correct, benefit to remove sulfur from remissions. It would help give them a handle on this and we support this bill.

Jim Kopp - Union member, very supportive of bill 2421.

Mark Johnson - Support and maintain this industry. Keep refinery in ND, and let State be a partner in this industry.

Richard Bendish - I support 2421. This is a State issue not only a Morton County one.

Russ Staiger - President Bis Man Development Association. Testimony submitted and attached.

Dave MacIver - President of Bis Man Chamber of Commerce. Testimony submitted and attached.

Dale Anderson - Pres. GNDA - Testimony submitted and attached.

Lowell Ridgeway - Petroleum Council. This is an integral part of our business. We do support.

A MOTION WAS MADE BY SEN STENEHJEM TO DO PASS AND SECONDED BY SEN.

CHRISTMANN. 7 Y 0 N 0 ABSENT. CARRIER WILL SEN. CHRISTMANN.

FISCAL NOTE

(Turn original and 14 copies)

Bill/Resolution No.: SB 2421

Amendment to: _____

Requested by Legislative Council

Date of Request: 1/27/99

1. Please estimate the fiscal impact (in dollar amounts) of the above measure for state general or special funds, counties, cities, and school districts. Please provide breakdowns, if appropriate, showing salaries and wages, operating expenses, equipment, or other details to assist in the budget process. In a word processing format, add lines or space as needed or attach a supplemental sheet to adequately address the fiscal impact of the measure.

Narrative: If enacted, SB 2421 is expected to reduce revenues as shown below:

2. **State** fiscal effect in dollar amounts:

	1997-99 Biennium		1999-2001 Biennium		2001-03 Biennium	
	General Fund	Other Funds	General Fund	Other Funds	General Fund	Other Funds
Revenues	0	0	-\$483,000	-\$42,000	-\$32,200	-\$2,800
Expenditures						

3. What, if any, is the effect of this measure on the budget for your agency or department:

- a. For rest of 1997-99 biennium: _____
(Indicate the portion of this amount included in the 1999-2001 executive budget:)
- b. For the 1999-2001 biennium: _____
(Indicate the portion of this amount included in the 1999-2001 executive budget:)
- c. For the 2001-03 biennium: _____

4. **County, city, and school district** fiscal effect in dollar amounts:

1997-99 Biennium			1999-2001 Biennium			2001-03 Biennium		
Counties	Cities	School Districts	Counties	Cities	School Districts	Counties	Cities	School Districts

If additional space is needed
attach a supplemental sheet.

Signed: *Kathryn L. Strombeck*

Typed Name: Kathryn L. Strombeck

Department: Tax

Date Prepared: February 5, 1999

Phone Number: 328-3402

Date: 2-8-99
Roll Call Vote #: 1

1999 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2421

Senate Senate Finance and Taxation Committee

Subcommittee on _____
or
 Conference Committee

Legislative Council Amendment Number _____

Action Taken No Pass

Motion Made By Sen. Stenehjem Seconded By Sen. Christmann

Senators	Yes	No	Senators	Yes	No
SENATOR URLACHER	✓				
SENATOR CHRISTMANN	✓				
SENATOR SCHOBINGER	✓				
SENATOR STENEHJEM	✓				
SENATOR WARDNER	✓				
SENATOR KINNOIN	✓				
SENATOR KROEPLIN	✓				

Total (Yes) 7 No 0

Absent _____

Floor Assignment Sen. Christmann

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE (410)
February 8, 1999 12:50 p.m.

Module No: SR-24-2167
Carrier: Christmann
Insert LC: . Title: .

REPORT OF STANDING COMMITTEE

SB 2421: Finance and Taxation Committee (Sen. Urlacher, Chairman) recommends DO PASS (7 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2421 was placed on the Eleventh order on the calendar.

1999 HOUSE FINANCE AND TAXATION

SB 2421

1999 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SB 2421

House Finance and Taxation Committee

Conference Committee

Hearing Date March 2, 1999

Tape Number	Side A	Side B	Meter #
1	x		0.4
Committee Clerk Signature <i>Janice Stein</i>			

Minutes:

REP. BELTER Opened the hearing.

SEN. STEVE TOMAC, DIST. 31, MORTON COUNTY, Sponsor of the bill, introduced the bill. Stated any tool we can use to save the refinery will be good. Referred to the fiscal note, he stated he was disappointed in our system of fiscal notes, he couldn't understand why there would be a fiscal effect if the Amoco Refinery closes. He stated, if the Amoco Refinery does not upgrade, what will the fiscal effect be.

REP. R. KELSCH, DIST. 34, Introduced the bill as a co-sponsor. Testified in support. See written testimony.

REP. JOHN MAHONEY, DIST. 33, Testified in support of the bill. This refinery is not in my district, but I do see the impact the refinery has. It is very important for our oil industry. In our

area within the coal energy, we have a lot of pipefitters, ironworkers, welders, various trades, who travel a lot for employment, our construction is down in the area, so a lot of them depend on turn-arounds. The refinery has been a good one for keeping those people located in the Beulah, Hazen, Center areas. They do contribute a substantial amount to economic benefits to this area and the state of North Dakota. This is a tool on a bipartisan effort to keep the refinery going.

REP. RICK BERG, DIST. 45, FARGO, Testified in support of the bill. Stated he got involved in the bill because it is important. Throughout the last decade, we have looked at primary sector businesses, those who are adding value to North Dakota. The key for economic development are ag products and products that come from minerals. This refinery processes seventy five percent of all the crude oil that is pumped in North Dakota. If that refinery was not operating, we would have about eight four million barrels a day pumped from the next refinery which would be Billings or Minneapolis. Obviously, this would have a major impact on our production. This is the pipeline for these products to add value into the market. This industry is probably as low as farming is in the last fifteen years, as a state, we need to protect industry and do what we can and keep those wells pumping and refine that crude oil.

RICHARD GLASER, UNTIL RECENTLY, REFINERY MANAGER OF THE BP AMOCO MANDAN REFINERY. Testified in support of the bill, see written testimony.

REP. GRANDE You talked about 13.2 million dollars to income tax, you talked about DDU being twenty five million and CNOP fifteen million dollars, what is the difference?

RICHARD GLASER Some of that would not be purchased in this state.

DAN PORTER, CURRENT MANAGER OF THE AMOCO REFINERY, MANDAN, Testified in support of the bill. The reason you should support this bill is the signal you would be sending to the new BTM corporation, about the attractiveness of spending future capital, limited capital resources in the Mandan Refinery. He stated he has worked in the petroleum industry for the last twenty one years and have seen a lot of changes. None of those changes are quite as profound as what we are going to experience over the next few years. The industry, as we speak, is in economic turmoil. Crude prices are the lowest level they have been in decades. Refining margins have taken a very steep climb earlier this year, they are low now and we expect them to remain low. Mandan refinery is not only competing for capital resources with the other six refineries in the United States, but it is also competing on a world-wide basis. Almost all of these refineries are bigger in size. A number of the refineries are already receiving economic incentives from regional, state and national government. In the short time that I have been a resident of North Dakota, I have come to appreciate the difficult fiscal issues which you now face. Mandan Refinery, likewise, is facing difficult times ahead, with industry margins reaching rock bottom levels. We now have to compete on a international level with limited available capital resources. Urged strong support.

JIM KOPP, MAINTENANCE DIVISION OF THE MANDAN REFINERY, Testified in support of the bill. Stated they were very supportive of the corporation's decision. They recognize the need for a sound tax infrastructure. There should be a provision of good jobs at a living wage. The taxpayers investment for economic development should receive a fair rate of return. It is our commitment to continue our hard work to maintain the stewardship of the resources that we share with others.

DAVE KEMNITZ, PRESIDENT OF AFL-CIO, Testified in support of the bill. The local union in that area is very supportive, they have done a lot of work over the years with that particular refinery. Because of that work, they have put together a coalition which is positive. I am an upstream neighbor of that refinery and understand that cleaner remissions and more efficient facility will be in the neighborhood.

REP. WARNER TO RICHARD GLASER You stated a good share of the money was spent in Texas for the purchase of used equipment, is your company paying sales tax in Texas for these purchases?

RICHARD GLASER The purchases that are being made in Texas, which is equipment, we are not paying taxes on.

MARK JOHNSON, NORTH DAKOTA ASSOCIATION OF COUNTIES. Testified in support. We are here as a state-wide organization supporting the efforts of Morton County to support this industry. It is a small effort to retain a company such as this.

RICHARD BENDISH, CHAIRMAN OF THE MORTON COUNTY COMMISSIONERS,
Testified in support of the bill. We have worked with the refinery over the years and are aware of the possibility of losing this in our county. We are doing what we can on a local level, but this is a state issue, and we urge your support. This refinery is not only in Morton County but in the state of North Dakota. They just recently wrote a check for 1.8 million dollars for their annual taxes. We provide very little service. This is a little less than one thousand acres of property with that type of return, they have an impact on the Mandan School District of well over one million dollars. Urged support.

RUSSELL STAIGER, PRES. BISMARCK-MANDAN DEVELOPMENT ASSN., Testified in support of the bill. See written testimony.

JERRY SPLONSKOWSKI, CHAIRMAN BISMARCK-MANDAN CHAMBER OF COMMERCE, Testified in support of the bill. See written testimony.

DALE ANDERSON, PRES. GREATER NORTH DAKOTA ASSN., Testified in support of the bill. See written testimony.

LOWELL RIDGEWAY, NORTH DAKOTA PETROLEUM COUNCIL, Testified in support of the bill. Agreed with everything that was said.

KEVIN CRAMER, DIRECTOR OF ECONOMIC DEVELOPMENT & FINANCE, Testified in support of the bill on behalf of the department and Governor Schafer. We have been very involved for a long time to encourage this expansion. It raises a number of questions as well. Why do we exclude the energy industry from the exemptions we provide manufacturing. The question has come up in my mind many times. I agree with Sen. Tomac on how we draft fiscal notes. I think it is something we need to explore. If I were to draft a fiscal note for this piece of legislation, it would not show a loss of revenue, it would show tremendous gain. I think we need to consider overall tax policy as it relates to primary sector industry. Why do we struggle every session with specific exemptions. Now is a good time to start thinking about broader tax policy as it relates to industry, business and investments.

REP. RENNER TO RICHARD BENDISH Asked what the total property tax collections were in Morton County.

RICHARD BENDISH, Stated it was about 5.3 million dollars.

REP. RENNER You indicated the refinery pays about 1.8 million?

Page 6
House Finance and Taxation Committee
Bill/Resolution Number Sb 2421
Hearing Date March 2, 1999

RICHARD BENDISH Stated yes, 1.8 million of that which is about forty percent, without that I would not be before you as a County Commissioner. If they quit, I am gone. It would be a nightmare.

With no further testimony, the hearing was closed.

COMMITTEE ACTION 3-3-99, Tape #2, Side B, Meter #7.1

REP. GROSZ Made a motion for a DO PASS.

REP. MICKELSON Second the motion. MOTION CARRIED.

14 Yes 0 No 1 Absent

REP. RENNER Was given the floor assignment.

Please type or use black pen to complete

Date 3-3-99
Roll call vote # 1

1999 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. SB 2421

House HOUSE FINANCE & TAX Committee

- Subcommittee on _____
 - Conference Committee
- } Identify or check where appropriate

Legislative Council Amendment Number _____

Action Taken Do Pass

Motion Made By Rep. Grosz Seconded By Rep. Mickelson

Representatives	Yes	No	Representatives	Yes	No
BELTER	✓		WINRICH	✓	
RENNERFELDT	✓				
CLARK	✓				
FROELICH	✓				
GRANDE	✓				
GROSZ	✓				
HERBEL	✓				
KROEBER	✓				
MICKELSON	✓				
NICHOLAS	✓				
RENNER	✓				
SCHMIDT	✓				
WARNER	✓				
WIKENHEISER	✓				

Total 14 0
(Yes) (No)

Absent 1
Floor Assignment Rep. Renner

If the vote is on an amendment, briefly indicate intent:

DO NOT USE HIGHLIGHTER ON ANY FORMS

REPORT OF STANDING COMMITTEE (410)
March 3, 1999 4:23 p.m.

Module No: HR-38-3979
Carrier: Grosz
Insert LC: . Title: .

REPORT OF STANDING COMMITTEE

SB 2421: Finance and Taxation Committee (Rep. Belter, Chairman) recommends DO PASS (14 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). SB 2421 was placed on the Fourteenth order on the calendar.

1999 HOUSE APPROPRIATIONS

SB 2421

1999 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 2421

House Appropriations Committee

Conference Committee

Hearing Date March 15, 1999

Tape Number	Side A	Side B	Meter #
1		x	4.5-16.5
Committee Clerk Signature <i>Casey Davis</i>			

Minutes:

SB 2421 - A bill for an act to amend and reenact subdivision e of subsection 5 of section 57-39.2-04.3 of the ND Century Code, relating to a sales tax exemption for certain machinery and equipment for refining of crude oil; to provide an effective date; and to provide an expiration date.

CHAIRMAN DALRYMPLE opened the hearing on SB 2421.

1B: 4.5 DAN PORTER, Business unit leader of BP-Amoco Mandan Refinery, testified in favor of the bill. (See testimony.)

1B: 11.7 REP. BOEHM asked if other states gave tax exemptions to BP-Amoco refineries. Mr. Porter replied that of those states that have BP-Amoco sites, Louisiana and North Dakota are the only two that do not provide for tax exemptions.

1B: 12.2 REP. GULLESON asked who should pick up the revenue loss. Mr. Porter said that these projects will raise additional revenue for the state so there should be no revenue loss.

1B: 13.3 REP. CARLSON asked what the estimated property tax increase would be and what they are paying now. Mr. Porter said they are currently paying \$1.8 million in property taxes, but he does not know what they would pay after the projects are done. Chairman Dalrymple said that BP-Amoco may get a capital improvements abatement at the discretion of the County Commissioners.

CHAIRMAN DALRYMPLE closed the hearing.

General Discussion

- Committee on Committees
- Rules Committee
- Confirmation Hearings
- Delayed Bills Committee
- House Appropriations
- Senate Appropriations
- Other

Date March 19, 1999			
Tape Number	Side A	B Side	Meter #
2	x		0-3.0
Committee Clerk Signature <i>Roxanne Hone</i>			

Minutes:

Chairman Dalrymple opened the discussion on Senate Bill 2421.

2A: .8 Rep. Carlisle moved for a DO PASS. Rep. Boehm 2nd the motion. Rep. Carlisle commented on positive impacts of refinery. Rep. Boehm further commented this is more of a Thank You but also important to future impacts. Rep. Kerzman also commented on support of bill.

2A: 2.7 On a Roll Call Vote the motion carried. 16 voting Yes, 0 voting No, 4 Absent.
Carrier: Rep. Boehm

Date: 3-19-99

Roll Call Vote #:

1999 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2421

House Appropriations Committee

Subcommittee on _____
or

Conference Committee

Legislative Council Amendment Number _____

Action Taken DO PASS

Motion Made By CARLISLE Seconded By BOEHM

Representatives	Yes	No	Representatives	Yes	No
Chairman Dalrymple	✓		Nichols	✓	
Vice-Chairman Byerly	✓		Poolman		
Aarsvold	✓		Svedjan		
Bernstein			Timm	✓	
Boehm	✓		Tollefson	✓	
Carlson	✓		Wentz	✓	
Carlisle	✓				
Delzer	✓				
Gulleson					
Hoffner	✓				
Huether	✓				
Kerzman	✓				
Lloyd	✓				
Monson	✓				

Total (Yes) 15 16 No 0

Absent 4

Floor Assignment Rep. Boehm

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE (410)
March 19, 1999 11:22 a.m.

Module No: HR-50-5171
Carrier: Boehm
Insert LC: . Title: .

REPORT OF STANDING COMMITTEE

SB 2421: Appropriations Committee (Rep. Dalrymple, Chairman) recommends DO PASS
(16 YEAS, 0 NAYS, 4 ABSENT AND NOT VOTING). SB 2421 was placed on the
Fourteenth order on the calendar.

1999 TESTIMONY

SB 2421

TESTIMONY FOR SB 2421

Prepared by Senator Dwight C. Cook

Monday, February 8, 1999

Mr. Chairman and Members of the Senate Finance and Taxation Committee: My name is Dwight Cook, State Senator from District 34. It is an honor to be here today to introduce Senate Bill 2421 and to ask for your support. This is a very important piece of legislation not only for the people of Mandan and Bismarck but also for the entire state of North Dakota.

Senate Bill 2421 provides for a temporary sales tax exemption for certain machinery and equipment for the refining of crude oil. Yes, fellow senators, this would be for the Mandan refinery. This tax exemption would be in effect for taxable sales occurring after January 31, 1999, and before August 1, 2002, the time it takes to make expensive environmental upgrades to this plant. The fiscal impact is estimated at \$500,000.

I believe we all know what a tremendous impact this refinery has on our state. This refinery alone contributes \$6.4 million in state tax revenue. Increased spending for wages and salaries for the upcoming construction project is estimated to be \$15 million, which would result in an estimated \$420,000 in increased state income tax.

I also believe we all know the economic turmoil the oil industry presently is in. Conditions that today challenge this refinery's mere survival. Testimony that will follow will further address these conditions. You are also going to hear testimony about the astonishing manner in which a deal was put together between the refinery and British Petroleum AMOCO, despite these adverse conditions. A deal to reinvest millions of dollars into this plant.

Mr. Chairman and members of the Committee: As you listen to all who are about to testify, I would ask that you keep in the back of your minds an understanding of the relationship that has been built over the past 48 years:

- a relationship between employees and their employer;

- employees committed to being the best they can be and an employer committed to providing a safe working environment with high paying jobs and opportunities for continued personal growth;

- a relationship between a company and the communities that company calls home; a relationship built on employees volunteering their time in service clubs and special projects such as getting together on weekends to fix or remodel needy families' homes;

- a relationship built on large financial contributions from a company committed to being one of our communities' most generous contributors; a relationship between a company and our state;

- a company that forms the core of one of our state's leading industries - oil production;

- a company that measures its success, not on profit alone, but also on safety, environment, people, and its community.

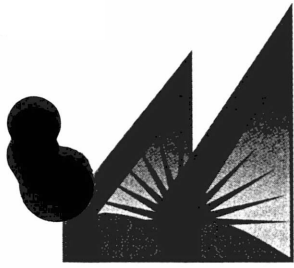
Mr. Chairman and Members of the Committee: Senate Bill 2421 is more than just allowing this relationship to continue. It's about expanding this relationship to British Petroleum AMOCO. It's about making a new friend; a friend positioned to compete in a global market; a friend that offers our oil industry continued growth and success in the years to come.

Leaders of the AMOCO refinery and of our state have, to some extent, made a deal. A deal that will allow one of our state's finest corporate partners the chance to raise its level of performance. These leaders have extended their hand, in good old North Dakota fashion, to this new friend. They have put a deal on the table that will benefit both BP AMOCO and this great state we call home.

Fellow senators, Senate Bill 2421 secures the deal. It opens doors of continued growth and opportunity. It puts the grip in a North Dakota handshake. I ask again, that you give Senate Bill 2421 a "Do Pass".

Respectfully submitted by:

Senator Dwight C. Cook



BISMARCK-MANDAN DEVELOPMENT ASSOCIATION

701-222-5530 • fax 701-222-3843 • 1-888-222-5497 info@bmda.org • www.bmda.org

February 8, 1999

To: Senate Finance and Taxation Committee

From: Russell Staiger, President
 Bismarck-Mandan Development Association (BMDA)

Re: BMDA support for SB 2421

This is to confirm that the Board of Directors of the Bismarck-Mandan Development Association unanimously supports SB 2421.

One of the top economic development priorities of the BMDA is retention and expansion of existing business and industry. We believe that economic growth from within existing business and industry should be at the heart of the economic development process in any community in the State of North Dakota. It is projected that nationally, 80% to 85% of new growth comes from existing business and industry. It is for this reason we feel the need for retention of viable, long standing businesses is critical to the economic well being of Bismarck-Mandan and the State of North Dakota.

It is with these thoughts in mind that the BMDA encourages a "Do Pass" recommendation on SB 2421 by the Senate Finance and Taxation Committee.

The BP Amoco Refinery has been a part of Bismarck-Mandan and the State of North Dakota's economic landscape for nearly a half of a century. It is a major reason why North Dakota's oil and gas industry has developed as strongly as it has over those same years. Now the oil and gas industry is struggling through some exceptionally difficult times and the Board of Directors of BP Amoco and the management team of the Mandan BP Amoco Refinery are stepping to the line and renewing their commitment to the State of North Dakota. That commitment comes in the form of a major investment in upgrades which will insure this refinery will continue to operate long into the new century.

By making this investment, BP Amoco also insures that the current annual economic impact of billions of dollars will be available to North Dakota for years to come. The amendment proposed in SB 2421 represents a small investment to insure that this

tremendous economic impact continues for the future of our cities and our state. BP Amoco made the decision to make this investment without any prior commitment other than the belief that a good faith effort will be made to assist them in whatever reasonable way we can. This request is certainly reasonable in light the economic return North Dakota has received in the past and will continue to receive in the future as a result of this investment by BP Amoco.

The Bismarck-Mandan Development Association strongly urges a unanimous recommendation of "Do Pass" on SB 2421.

Thank you for your support.



Fifty-Sixth Legislative Assembly
Of North Dakota

February 8, 1999
Senate Fin/Tax Cmte.

Testimony of Dave MacIver, President
Bismarck-Mandan Chamber of Commerce
On SB 2421

Chairman Urlacher, members of the committee, my name is Dave MacIver, President of the Bismarck-Mandan Chamber of Commerce, an organization representing roughly one thousand businesses in Bismarck and Mandan.

The Chamber fully supports Senate Bill 2421. We believe the management of BP/Amoco have shown their commitment to Mandan and North Dakota first, by deciding to keep their smallest plant in full operation, and second, by deciding to spend 40-million dollars to upgrade the refinery. In return for that commitment, the Chamber believes it is only right to grant BP/Amoco a sales tax exemption to help them make those necessary repairs.

You've heard the numbers in terms of the economic impact of the refinery on Mandan and North Dakota. The amount of sales tax not collected as a result of this exemption pales in comparison to those numbers. Bottom line, they've made a commitment to us, and the Chamber believes the state should, in turn, show our commitment to BP/Amoco by granting the tax exemption through the passage of Senate Bill 2421.

Mr. Chairman that concludes my prepared testimony and I'll be happy to answer any questions.



Greater North Dakota Association

STATEMENT BY DALE O. ANDERSON, PRESIDENT, GREATER NORTH DAKOTA ASSOCIATION, IN SUPPORT OF SB 2421 NORTH DAKOTA SENATE FINANCE AND TAXATION COMMITTEE, FEBRUARY 8, 1999.

Chairman Urlacher and members of the North Dakota Senate Finance and Taxation Committee. I am Dale O. Anderson, President, Greater North Dakota Association. Thank you for this opportunity to provide testimony in support of SB 2421. SB 2421 would provide a sales tax exemption for machinery or equipment used in a physical or economic expansion of an existing manufacturing plant.

The Greater North Dakota Association, and its divisions of Manufacturing and Processing and Wholesaling, is the voice for business and principal advocate for positive change for North Dakota. GNDA was organized in 1925 as a statewide, general business organization. The organization's membership of 950 is an economic and geographic cross section of North Dakota's private sector, including statewide associations and local chambers of commerce, development organizations and convention and visitors organizations. GNDA is governed by a 25 member Board of Directors elected by GNDA's membership. The Board of Directors establishes the organization's policy.

A HISTORICAL PERSPECTIVE

GNDA historically has been and continues to be a leader in job creation in North Dakota. Recently, GNDA was one of the participants in the Vision 2000 process. Nearly 7,000 people participated in town hall meetings to provide input into the development of a common vision for economic development in North Dakota.

The Vision 2000 Committee articulated a new vision for North Dakota which is to unite together to build a new North Dakota so we may realize our highest potential in creating a solid, diversified and successful rural economy, tailored to our needs and accomplished at a pace we can afford.

One consensus which emerged through the Vision 2000 process is that North Dakota should pursue a “four-part” economy which builds on our existing strengths. When these interrelated economies grow, they tend to help strengthen and diversify each other in order to meet the needs of the global marketplace. This four-part economy would consist of:

- 1) Advanced agriculture and food processing;**
- 2) Energy and energy by-product development;**
- 3) Export services and tourism; and**
- 4) Advanced manufacturing.**

Every dollar of new wealth created in North Dakota is generated by the four-part economy identified above. Sustained economic activity in each of these four basic sectors provide the base for North Dakota’s private sectors success such as wholesale and retail trade, health care, services, etc.

During the last 8 years, the North Dakota Legislature has enacted a large number of measures to help North Dakota be more competitive in a new, global marketplace. These measures, which were directed at North Dakota’s four primary sectors, include the Growing North Dakota program, financing programs, tax incentive measures and workforce training programs.

Dr. David Birch told the North Dakota Business Conference in November 1997, in assessing the progress North Dakota has made since 1986, that “You’ve done a remarkable job of changing your future,” ... “creating over 40,000 jobs.” The public policy changes enacted by you and your colleagues in the North Dakota

Legislature have had a positive impact on turning our economy around.

The Mandan Amoco oil refinery is a vital segment of North Dakota's growing manufacturing sector. You have heard considerable discussion today regarding the turmoil in the petroleum industry. In order to assure long term viability of the Mandan refinery, management has secured its future crude supply, optimized its assets and formulated plans to meet environmental requirements.

GNDAs believes that passage of SB 2421 is sound public policy because:

- 1) help ensure 225 Mandan Refinery families of long term job security;**
- 2) the environment will benefit from Amoco's investment of more than \$40 million over the next five years to meet regulatory standards;**
- 3) sends a strong, positive message to BP Amoco management of North Dakota's pro-business philosophy; and**
- 4) it provides an incentive to a primary sector business.**

Chairman Urlacher and members of the Senate Finance and Taxation Committee, GNDAs urges a do pass for SB 2421. Thank you Mr. Chairman and members of the Committee. I welcome your questions.

SENATE BILL NO. 2421

Mr. Chairman, Members of the Committee:

My name is Richard Glaser, and until recently, the Refinery Manager of the BP Amoco Mandan Refinery. I appreciate this time in front of you, to solicit your support of Senate Bill 2421.

The packets that are being passed around include an Amoco brief paper, the recent University of North Dakota Study of the Oil Industry in North Dakota and texts of this mornings presentations. 1885

As I am sure most of you know, the Mandan Refinery has recently received support from the BP Amoco Corporation for major upgrades in the refinery and support of its future viability. This support was not easily won and goes against the recent trend of divesting small inland refineries, which are refineries that run less than 150M barrels of crude a day and do not have access to international crude supplies. For example, of the 180 plus refineries that have been shutdown in the United States since 1970 over 90% were small inland refineries. 1943

With your indulgence, I would like to share with you the sequence of the effort that was done to secure this Corporate support and explain why I am here today asking for sales tax exemption for projects already publicly announced as being approved.

Several years ago it became apparent that the Mandan Refinery was going to come to a cross road in the future. That of remaking itself so that it could compete in the world we were entering or one of gradual decline. Although it was unclear when we would come to this cross road, the Management Team of the refinery decided to conduct studies of the entire crude to customer value chain to prepare for the decision regarding the future viability of the Mandan Refinery.

We first looked at crude oil supply. The Corporation believed that Mandan's supply of North Dakota crude was finite and would gradually diminish. Over the last three years we developed and implemented a strategy that would change this belief. We made investments, changed how we contracted for the majority of the North Dakota crude production, and added new alternatives for its transportation. We took an issue that 2058

could have made us victims of change, and were able to inform the Corporation that even if there was not another drop of crude found in North Dakota, we had secured sufficient crude to sustain our customers to beyond the year 2010. 2088

A second area we looked at was the Market side of our business. Mandan, has historically been underutilized, meaning that our production was lower than the capacity of the facility. To address this a major study was initiated to evaluate the market we serve, North Dakota, South Dakota, and Minnesota primarily, to see:

1. If there was sufficient demand of products to support the Refinery in the future
2. What products would the customer demand; and
3. If Amoco could compete sufficiently to increase the utilization of the refinery

The study revealed that the Mandan Refinery could compete in the future IF we were able to supply the Environmental Highway Diesel Fuels that we are currently unable to make, as well as continuing to supply our Premier Diesel Fuels for Agriculture. It also estimated that the \$50MM book value Refinery would have to spend approximately \$100MM over the next 10 years to meet environmental and sustaining demands. 2192

The third area of self help was the implementation of major organizational changes within the Refinery and reskilling of the employees to optimize the Refinery units, improve their reliability, and to reduce costs. The results so far have demonstrated that the Refinery can operate competitively and produce higher quality products on a consistent basis.

Would all of the above work guarantee that the Corporation would support the needs of the Refinery and make the investments required to keep it competitive? I did not believe so. There was only going to be one chance and we wanted to make sure that we went in with the best possible package to secure corporate support. Accordingly, we sponsored a study by the University of North Dakota to detail the impact of the Oil Industry and Amoco in North Dakota. The study found that of the \$1.9 billion of business volume the industry contributes yearly to the State, Amoco's presence was responsible for almost \$1.1 billion and of the 16,400 jobs created in the State, Amoco's presence creates over 7,400 of them. Quite a bit different impact versus just looking at the 225 jobs at the Refinery. 2315

Recent events dictated that the formal viability review by the Corporation had to be accelerated. The project work for the facilities that would be needed to produce environmental diesel fuels identified that the only cost feasible way to do so was to purchase a unit already built in Texas. The owners of the unit wanted immediate commitment for its purchase. If we had a shot at gaining support from the Corporation we only had a few weeks to pull everything together. 2380

To prepare for the viability presentation to the Corporation, we sponsored the University of North Dakota study, which they completed and released in record time. We also openly communicated the current status of the Refinery with the public and many State and local officials. I felt that the people that could be affected needed to know that this issue was going on. I also spent time with many of the leaders of the State trying to determine if there were programs available that I could use to further improve the odds that the Corporation would support the initial investments needed immediately in the Refinery. 2445

A furious amount of work was done between Amoco and the State Economic Development Group to research what Amoco could be eligible for and what other support programs that there was a potential for. Because of the need to get the support of the Corporation we took our best assumptions and presented them, along with the self help actions we had taken. In discussions with the Governor, it was not an issue of a Stadium by which I meant that either we get it or we fold up, but a matter of improving the odds of support from what I considered a 50/50 chance to a 51/49 probability of support. As you now know, the Corporation approved our viability and the initial investment of over \$40 million based upon our work and the support that I portrayed was probable from the County and the State. They approved it based upon our relationship with North Dakota and my assurance that there would be some support from the State. To me, their approval to proceed indicated the trust and goodwill they have for North Dakota and the desire to continue this long relationship.

So today I am here to urge your consideration and support for exempting the purchase of equipment needed for the two approved projects, the Distillate Desulphurization Unit and the complete changeout of our computer controls, from sales tax. Compared to incentive packages that have been proposed and accepted for new companies entering the State, this is a very modest request. It was however, enough to improve the odds, and that was the intent of our effort.

If you decide not to support this bill, does it mean the corporation will not move ahead with the projects? There are no guarantees but most probably not. It would however make the hill we have to climb for future investments needed much steeper and more importantly, it would hurt the refinery's credibility with the Corporation in the future.

2655 We have tried to be very open in our efforts to address the refinery's viability issue. We covet our relationships with the people of this great State and want to help fuel the future of it. By your support it helps assure that:

- * The environment will benefit by removing 14,000,000 pounds of sulphur dioxide from our fuels and over 300 tons/year of nitrogen oxide out of the refinery stacks.

- * Over 100 high paying construction jobs will be created for the next 1 1/2 years. Paying an estimated \$420M in income taxes, not to mention the secondary jobs and revenue it creates.
- * There is continued demand for North Dakota crude at market values
- * And future growth opportunities in the State are still possible.

Is there payback? I believe many times over.

Mr. Chairman, Members of the Committee, the families of the Mandan Refinery urge your support of Senate Bill 2421

2760

Thank you for your time, I would be glad to entertain any questions you may have.

Mr. Chairman, Members of the Committee, it is my pleasure to introduce Mr. Dan Porter the new Business unit Leader of the Mandan Refinery who would like to share with you his views of the current status of the Refinery. Thank you.

Briefing Paper on a Temporary Sales Tax Exemption
For the BP Amoco Mandan, ND Refinery (SB2421)

Introduction

The petroleum industry is in economic turmoil. Crude prices are the lowest they have been in decades. These conditions are driving major changes in the industry as evidenced by the recent British Petroleum-Amoco merger. The Mandan Refinery is a small refinery (60,000 bbls/day) as compared to the average size refinery in the industry (150,000 bbls/day). Consequently it does not enjoy the economy of scale that allows it to distribute costs over more barrels of capacity. To ensure the long-term viability of the Mandan Refinery, work has been done to secure its future crude supply, optimize its assets, and meet environmental requirements. However, there is an immediate need to install a Distillate Desulfurizer Unit to produce a low sulfur diesel fuel product for sale in the Refinery's tri-state marketing area (North Dakota, Minnesota, and South Dakota). In addition, the Refinery's existing process control instrumentation needs to be upgraded to advanced computer control, and consolidated into one control room. This project will allow the Refinery to increase optimization and improve efficiency of its process units. These projects are critical to the economic and long-term success of the Mandan Refinery.

The Mandan Refinery is a key link in the North Dakota petroleum industry. Crude oil exploration, production, and refining contributed more than \$800 million to direct sales of crude oil and refined petroleum products in 1996. In turn, expanded economic activity due to the multiplier effect totaled more than \$1.0 billion (\$651 million – Mandan Refinery), inducing total economic activity of \$1.87 billion (\$1.1 billion – Mandan Refinery). The total business activity created by the presence of the petroleum industry contributes more than 16,000 total jobs (over 7,000 – Mandan Refinery) to the North Dakota economy. In addition, the petroleum industry accounts for nearly 8 percent of state tax revenue and millions of dollars of local property tax revenue. The Mandan Refinery alone contributes about \$6.4 million in state tax revenue.

Background

Distillate Desulfurization Project

Installation of a Distillate Desulfurizer Unit (DDU) will allow the Mandan Refinery to begin manufacturing a low sulfur diesel fuel product required for on-road diesel powered vehicles. The project involves the purchase of a used DDU from a West Texas Refinery, transportation to, and installation at Mandan. This project will eliminate a crude run constraint currently being experienced due to limited high sulfur demand. The cost of the DDU project is \$25 million.

Control and Optimization Project

The Control and Optimization Project (C&OP) involves the modernization of existing process control instrumentation to advanced computer controls consolidated into a single control room. The project will allow for increased optimization and improved efficiency of the Refinery through enhanced technology. The cost of this project is estimated at \$15 million.

Environmental Impact

The completion of the Distillate Desulfurization and Control and Optimization projects will have a favorable effect on the environment. The installation of the Distillate Desulfurization Unit will result in a reduction of vehicle tailpipe emissions of sulfur dioxide (SO₂) of more than 14 million pounds per year. In addition, nitrogen oxides (NO_x) emissions from the Refinery will be reduced by approximately 300 tons per year. Modernizing existing process control instrumentation will improve process optimization and increase efficiency of refining process units resulting in increased product yields and reduced waste generation.

Tax Incentives

Corporate management uses the comparison of net income and cash flow to make value judgments on assets. As in any business, there is competition for future investments. The Mandan Refinery essentially competes against 19 other BP Amoco refineries for investment funds. The track record of each refinery and merits of specific projects are considered. During difficult economic times, investment funds are reduced, portfolios rationalized and additional incentives often sought.

Several BP Amoco refineries have been provided economic incentives by the states where they are located. Examples include enterprise zone status, manufacturers' tax and Advalorem tax exemptions. These help them be more competitive both internally and externally.

Manufacturing Exemption

Section 57-39.2-04.3 of the North Dakota Century Code currently provides a sales tax exemption for machinery or equipment used in a physical or economic expansion of an existing manufacturing plant. Subdivision e of subsection 5 of 57-39.2-04.3 of the NDCC defines "Manufacturing" and specifically excludes "refining" from this exemption.

Effect of Senate Bill 2421

Senate Bill 2421 amends and reenacts subdivision e of subsection 5 of section 57-39.2-04.3 of the North Dakota Century Code to provide a sales tax exemption for certain machinery and equipment for the refining of crude oil. This tax exemption would be in effect for taxable events occurring after January 31, 1999, and before August 1, 2002, and is thereafter ineffective. Subdivision e currently excludes refining from the sales tax exemption for manufacturing machinery and equipment.

Sales Tax Impact and Offsets

Providing a temporary sales tax exemption for certain machinery and equipment for the refining of crude oil will have a fiscal impact of an estimated \$500,000. This fiscal impact would be offset by increased tax revenues resulting from additional construction phase employment and local spending during the two to three year construction phase of the projects. Increased spending for wages and salaries alone is estimated to be \$15 million which would result in an estimated \$420,000 in increased state income tax. Other tax revenue and economic benefits would result from the creation of spin-off jobs and local spending increases. Of course, this is all in addition to ensuring the continued employment of the 225 current Refinery employees. A more comprehensive study of the economic benefits to the state and local communities has been requested from the North Dakota State University.

*Economic Activity Created by the
Mandan Amoco Refinery and the ND
Petroleum Industry
(1996 Data)*

	Mandan <u>Refinery</u>	ND Petroleum <u>Industry</u>
Direct Sales	\$413 million	\$829 million
Expanded Sales	\$651 million	\$1.035 billion
Total Gross Business Volume	\$1.064 billion	\$1.865 billion
State Tax Revenue	\$6.4 million	\$58.3 million
Direct Employment Created	384 jobs	2,725 jobs
Expanded Employment Created	7,052 jobs	13,701 jobs
Total Employment Created	7,436 jobs	16,426 jobs



North Dakota Petroleum Industry Future

- The petroleum industry's economic health is questionable.
- Uncertain future for the Mandan Refinery.
 - Mandan's 60,000 barrel/day capacity is small compared to the average refinery capacity of 150,000 barrel/day and the industry giants refining 650,000 barrels/day.
 - Many of the small inland refineries have been closed because economics of size work against small refineries.
 - Tight economic margins being experienced by oil refineries, small refineries in particular, are being compounded by increasing costs of environmental regulations.
 - Over the next five years the refinery must make environmental capital expenditures of \$40 million, nearly one-half of these costs will occur in 1999.
 - Small refineries have less output over which to spread the incremental fixed capital costs.
 - Amoco must view the refinery from a business perspective by determining if it should close or sell the refinery and allocate the \$40 million in capital expenditures to other investments.
 - The economic future of the middle link in North Dakota's petroleum industry is uncertain. To a degree, therefore, the future of the entire petroleum industry in the state is also uncertain.



Economic Impact of the Petroleum Industry

- Agriculture and energy are the two key employment and income creating sectors in North Dakota.
- The direct economic impact of North Dakota's oil exploration - production - refining activities is multiplied forward to create indirect economic activity.
- The combined business operations of oil exploration - production - refining created total direct sales of \$829 million and indirect activity (expanded sales) of \$1.0 billion in 1996.
- The combined direct and indirect economic activity of \$1.8 billion from the petroleum industry represents 5.5% of North Dakota's gross business volume.
- Oil exploration - production - refining created direct employment of 2,725 and indirect employment of 13,701 people in 1996.
- The combined economic activity of exploration - production - refining were responsible for 8% of the state's total tax revenue collections.
- The petroleum industry is responsible for between 4% and 5% of North Dakota's total economic activity.



Long Term Trends in the Petroleum Industry

- Petroleum remains the energy choice throughout the world.
- Long term petroleum industry trends.
 - Lower crude price
 - Lower rotary rig count
 - Lower US crude oil production
 - Lowest gasoline prices in 30 years
 - Increased crude oil imports (1/2 of total consumption)
 - Increased oil reserves world-wide
 - Improved technology
 - Increased environmental regulations and costs
 - Increased production costs
 - Increased competition
 - Corporate mergers
 - Lower profit margins
- The above trends are raising doubt about the economic feasibility of the Amoco Mandan Refinery.



North Dakota Petroleum Industry Trends

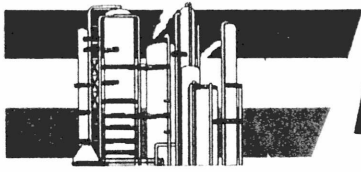
- Exploration and Production in North Dakota
 - Ranked 9th among crude producing states
 - Produced 36 million barrels in 1997.
 - Good long term production potential (Williston Basin)
 - Horizontal drilling (2/3 of rig activity from 1994-97)
 - Increased exploration success rate.
 - Increased average daily production rate
 - Increased rig activity (opposite of national trend)
 - Higher average drilling costs (\$715,000 vs \$490,000)
 - Highest production taxation among oil producing states

- Refining in North Dakota / Amoco Mandan Refinery
 - Built in 1954
 - 60,000 barrel/day capacity
 - Receives crude via pipeline (Mostly ND crude)
 - Twelve products delivered via pipeline, truck, and rail car
 - Forty percent of product used in North Dakota
 - Export product to five states.
 - \$20.8 million direct payroll
 - \$1.7 million in yearly dividends to 800 ND shareholders
 - Expend \$5.5 million/year in environmental related operating expenses
 - Averaged \$1 million/year in environmental capital expenditures.

- The oil fields, petroleum pipelines, and the Mandan Refinery constitute an important integrated economic unit in North Dakota.



Fueling the Future



Mandan Refinery

October 2, 1954 to Present

- Built on 960 acres
- Originally designed to process 33,000 barrels of crude per day. Currently can process up to 60,000 barrels per day.
- North Dakota produces 80,000+ barrels of crude oil per day. Approximately 50,000 barrels of this is processed at the Mandan Refinery per day. The refinery's additional crude needs are supplied from Canada.
- Number of Employees: 1954 - 320
 1998 - 220
- Amoco Oil Mandan Refinery:
 - Has an annual payroll of approximately \$12 million without benefits, approximately \$16 million with benefits.
 - Has its own fire department.
 - Generates approximately 90% of its own electricity.
 - Uses 1.5 - 2 million gallons of Missouri River water per day. Returns approximately 0.5 million gallons of water to the river per day.
 - Provides product to people in North Dakota, South Dakota, Minnesota, Illinois, Iowa, and Wisconsin.
 - Paid approximately \$2 million in taxes to Morton County in 1997.
 - Manufactures 12 different products with approximately 55% of it being gasoline.

4 Grades Gasoline

Ultimate
Silver
Unleaded Regular
Subgrade (Ethanol blending)

4 Grades Diesel Fuel

Heater Oil
Furnace Oil
Railroad 40
Premier Diesel

1 Grade Jet Fuel

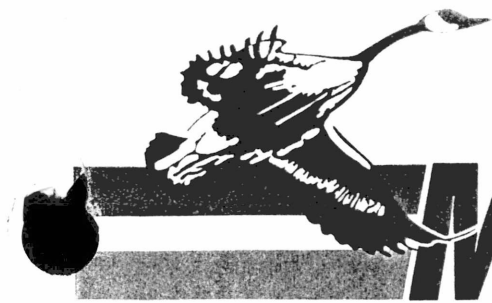
Type A Jet

Other Products

Residual Fuel
Propane
Butane

1 barrel = 42 gallons; 96,000 barrel tank = 4,032,000 gallons

9/23/98



Industry in Harmony with Nature



Mandan Refinery

North 40 At A Glance

The Mandan refinery takes 1,500,000 to 2,000,000 gallons of water per day from the Missouri River. The water is used in refinery operations to make steam, cool equipment and a variety of other refining processes. Water that is not consumed in the processes or converted to steam is eventually returned to the river. The refinery's Cascade Pond System was initially put into operation in 1974 to help us meet increasingly restrictive waste water quality discharge standards.

Shortly after we began to send water through the pond system an increase in the amount of wildlife around the system was noted. Features to improve and expand wildlife habitat were included in the planning and construction as more ponds were added to the system. Islands and platforms were constructed to provide safe nesting habitat for water fowl and more than 60,000 trees and shrubs (30,000 which bear fruit) have been planted to provide food and shelter for the many species of wildlife inhabiting the area. Additionally, fields of corn, alfalfa, millet and other forage crops are planted to provide wildlife with food and cover.

Over the years since 1974 the area around the ponds has evolved into the wildlife habitat we call the North 40. It has become a unique eco-system in which we treat our waste water. The N40 has become an excellent example of how industry and the environment can co-exist and even benefit one another.

The N40 at a glance:

- there are 11 ponds in the system, 5 ponds are normally used as part of our waste water treatment with the remaining 6 ponds used for emergency storage capacity and/or wildlife habitat.
- an average of 400,000 gallons of water is pumped from the lagoon into the pond system.
- more than 1800 goslings have been hatched in the N40, with approximately 800 of these transplanted to start flocks in 20 different locations in North Dakota.
- 199 different species and 10 races of birds have been observed on the area with 61 species confirmed as nesting in the N40.
- there is an abundance of deer, wild turkey, rabbit and pheasants living in the area.
- other wildlife such as partridge, grouse, coyote, fox, skunk, mink, badger, ducks, heron and pelican can often be seen in the area.

**THE PETROLEUM INDUSTRY IN NORTH DAKOTA:
ECONOMIC TRENDS AND ECONOMIC IMPACT**

**PREPARED FOR:
AMOCO OIL COMPANY
MANDAN, NORTH DAKOTA**

**PREPARED BY:
DAVID E. RAMSETT, PHD
PROFESSOR OF ECONOMICS
DIRECTOR, DIVISION OF ECONOMICS AND PUBLIC AFFAIRS
UNIVERSITY OF NORTH DAKOTA**

OCTOBER, 1998

EXECUTIVE SUMMARY

The petroleum industry is one of the most important industries in the state of North Dakota, being comprised of exploration-production, pipeline-truck transportation, crude oil refining and final product distribution. This industry is important because it produces products vital to our standard of living and our lifestyles. It is also important because it contributes substantial income, employment and tax revenue to the state's economy.

Due to increased worldwide competition and changing technologies in the exploration, production and refining of crude oil products, both crude oil and gasoline prices gradually have declined for more than a decade. Presently, the price of gasoline at the pump is as low as it has been in 30 years. **Despite the long-term decline in crude oil prices, in recent years the exploration and production of crude oil in North Dakota has increased, largely due to changing technology in exploration and drilling.** The success rate in discovering new oil reserves has increased markedly as has the average production per well. As a result, crude oil production has increased each year for the past three years.

Much of the crude oil produced in North Dakota is processed into higher-level petroleum products at the Mandan Oil Refinery. In processing 55,000 barrels per day, the refinery produces twelve products that are distributed in North Dakota and several other mid-western states.

Crude oil exploration, production and refining combine to bring forth a very important economic impact on North Dakota's economy, contributing more than \$800 million to direct sales of crude oil and refined petroleum products in 1996. In turn, expanded economic activity due to the multiplier effect totaled more than \$1.0 billion, inducing total economic activity of \$1.8 billion. **The total business activity created by the presence of the petroleum industry contributes more than 16,000 total jobs to the North Dakota economy. In addition, the petroleum industry accounts for nearly 8 percent of state tax revenue and millions of dollars of local property tax revenue.**

There are several interrelated economic issues facing the petroleum industry in North Dakota, but at present one stands out. It concerns the future of the Mandan Oil Refinery. Over a period of several years, increased competition in all phases of the petroleum cycle and additional government regulations aimed at reducing the environmental impact of refining and using petroleum products have combined to gradually squeeze profit margins, particularly for small oil refineries. Since the Mandan Refinery is only about one-third the size of the average oil refinery and only a small fraction of the size of a large oil refinery, it is not able to take advantage of economies of scale that are becoming more and more important in today's product market. In addition, required capital spending and operating expenditures dedicated to meeting regulatory standards are becoming more burdensome for oil refining. **During the next five years, anticipated expenditures at the Mandan Oil Refinery to comply with environmental regulatory standards will total more than \$40 million. This compares with an average of \$1 million per year during the past several years.**

In an increasingly competitive marketplace, business firms must make investment decisions based on fundamental economic criteria. **In the face of its small size and impending capital spending requirements related to the environment, there is urgent concern as to whether continuation of the Mandan Oil Refinery is economically feasible.**

The closure of the Mandan Refinery would affect the entire petroleum industry in North Dakota. The state's economy would lose millions of dollars of income and thousands of jobs tied directly and indirectly to petroleum refining.

THE PETROLEUM INDUSTRY IN NORTH DAKOTA: ECONOMIC TRENDS AND ECONOMIC IMPACT

INTRODUCTION

Our society is fortunate to have a well-developed petroleum industry that provides many products vital to our lifestyle at low market prices. In addition, many states such as North Dakota are fortunate to have within their boundaries an extensive petroleum industry because it is the foundation for a broad-based economic impact. The great productive power of the industry to discover, refine and transport oil products creates substantial economic activity in the state, including important tax revenues.

Like any business, the petroleum industry must be profitable; that is, it must explore for and extract crude oil profitably, and convert this oil to final products for sale to final consumers profitably. The petroleum industry is massive in size and is truly a worldwide industry. As such, it is highly competitive, being governed by economic forces that are far beyond the reach of the state of North Dakota. A long term general erosion in the price of crude oil and its retail products in the U.S. have weakened profits for many different types of firms in the petroleum industry. Absent any pricing power, profitability is dependent on the industry's ability to control costs, over which it still has at least some influence. For example, remarkable productivity enhancing (cost saving) improvements have been made in oil drilling with the development of new drilling technology.

However, other costs have been increasing such as the costs of fulfilling air and water pollution abatement requirements set by the Environmental Protection Agency. These

costs are externally imposed and thus are not subject to industry control. Such regulations have been particularly burdensome for oil refineries. As a result, many U.S. oil refineries have closed over a period of several years. In addition, in an effort to reduce costs and keep historic profit rates, mergers are becoming more and more prevalent in the petroleum industry.

This report discusses the petroleum industry in North Dakota. It includes: (1) an overview of the key long-term trends that have characterized the petroleum industry -- internationally, nationally and regionally; (2) the impact of these trends on the petroleum industry in North Dakota; (3) the economic impact of the petroleum industry on the state's economy; and (4) an overview of the future of the petroleum industry in North Dakota. Special attention is devoted to the role and future of the oil refinery located in Mandan, North Dakota.

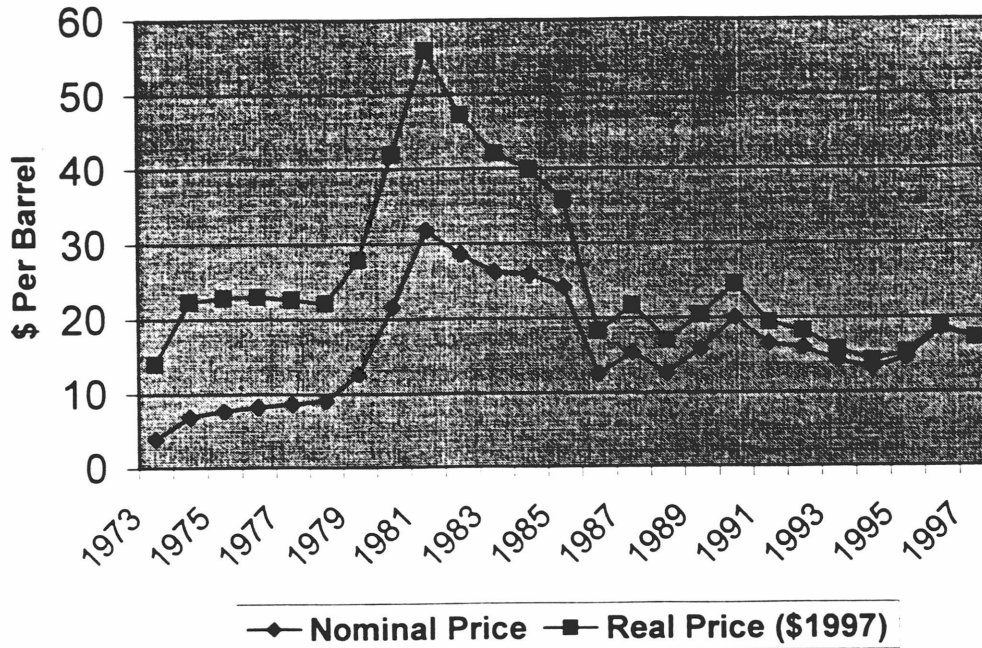
KEY LONG-TERM TRENDS IN THE PETROLEUM INDUSTRY

Petroleum remains to be the energy form of choice throughout the world. It follows that the petroleum industry is one of the world's most important industries, and yet its presence is assumed and largely taken for granted. This was not always the case. During the petroleum crisis of the 1970s when high prices and shortages of gasoline were commonplace, a familiar theme among consumers of gasoline was that they were being gouged by the economic power of big oil. The resultant political pressure led to price controls on various products within the petroleum industry. If there was concentration of economic power back then, it was centered in several key oil producing countries that owned most of the world's proved reserves of oil (i.e. OPEC – The Organization of Petroleum Exporting Countries). However, soon after price controls were removed and market forces took over, the economic power of OPEC gradually began to diminish. Since then, crude oil prices have steadily declined.

Domestic Exploration-Production:

Figure 1 reports long-term trends in the price of crude oil. The lower line shows nominal prices -- that is, the average price that occurred in each respective year. The upper line shows real prices -- that is, nominal prices adjusted for inflation, based on 1997 purchasing power dollars (price index = 1980-82).

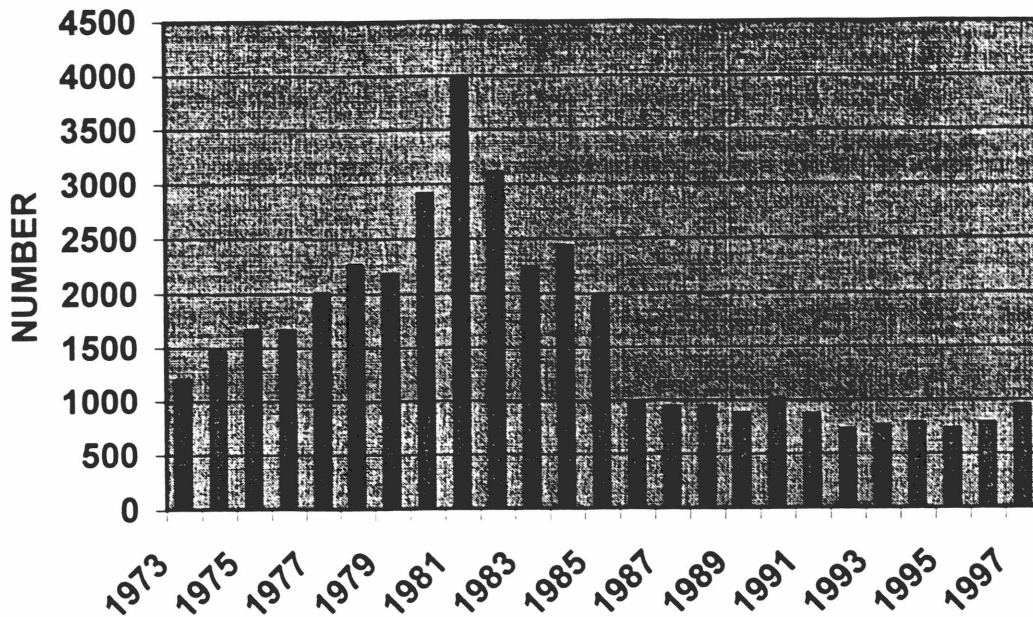
Figure 1 -- Nominal vs. Real Crude Oil Prices



Source: Adapted from data from U.S. Department of Energy, *Monthly Energy Review*, July 1997

More than any other single variable, the market price of crude oil governs the search for and production of crude oil. Figure 2 reports U. S. statistics on rotary rigs in operation exploring for oil over the same time period.

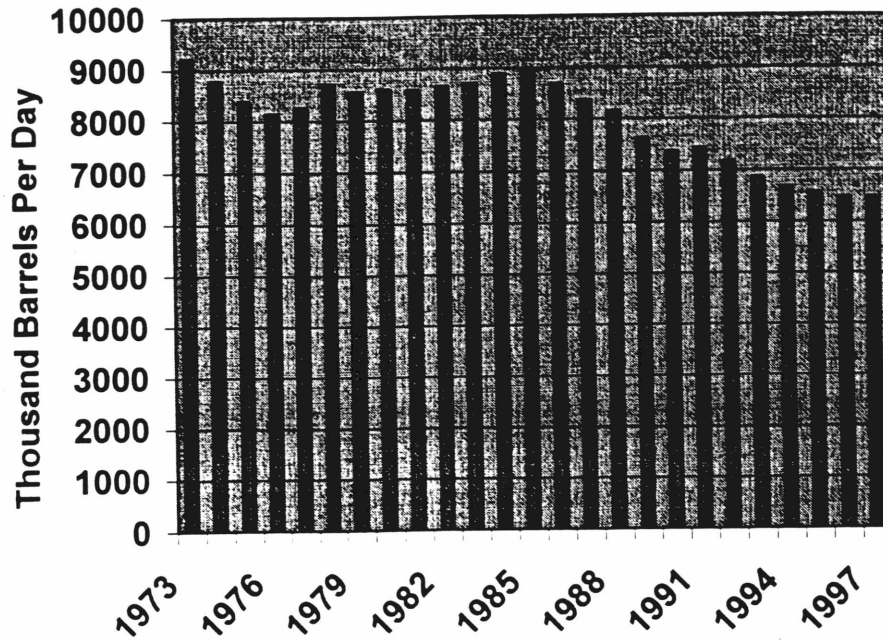
FIGURE 2 -- ROTARY RIGS IN OPERATION IN U.S.



Source: U.S. Department of Energy, *Monthly Energy Review*, July 1997

Figures 1 and 2 indicate that the high oil prices that characterized the late 1970s and early 1980s occurred in concert with increased rig activity in the United States. This was due to greater profit potential from undiscovered oil. In turn, precipitous declines in crude oil prices in the mid-1980s were accompanied by reduced rotary rig activity. Crude oil prices recovered briefly, but then began a downward trend. Because low crude oil prices translate into low profit expectations for oil exploration, low rig activity over a period of several years has resulted. Due to smaller additions to proved reserves, domestic production of crude oil also has trended slowly downward (See Figure 3).

FIGURE 3 -- U.S. CRUDE OIL PRODUCTION



Source: U.S. Department of Energy, *Monthly Energy Review*, July 1997

At the same time, our economy's appetite for crude oil and all its various final goods has increased. This is due in part to growth in our economy and in part to the relative cheapness of oil products as a share of total family income. The U.S. crude oil market has solved the dilemma of declining supply and expanding demand by increasing imports of crude oil from many countries around the world where crude oil reserves are much more abundant and cheaper to discover and extract. Gradually, imports have increased to the point where they now comprise about one-half of our economy's total crude oil consumption.

World Exploration-Production of Crude Oil:

During the recent decade, crude oil reserves have become much more abundant and hold lower valuations worldwide. The question is, why? This gradual trend can be explained largely by two key long-term influences. First, the very high prices for crude oil in the 1970s and 1980s attracted several additional countries into the oil exploration and production business. Gradually world competition has increased and, although only a small number of countries own most of the world's proved reserves of crude oil, there are many countries today that have sufficient reserves to be significant producers when taken as a whole. For example, in 1996, there were ten countries that exported more than 1000 barrels per day (not including Iraq); in 1970 there were only seven. In 1970, 45 percent of world crude oil production was from non-OPEC countries; by 1996, the non-OPEC share had increased to nearly 60 percent. Moreover, many oil exporting countries are hungry for foreign exchange from key currencies, particularly U.S. dollars. This has served to increase crude oil price competition worldwide.

High crude oil prices initially attracted many countries into the oil exploration business, but what has kept them there is changing technology. Some of the technological improvements that are changing the face of crude oil exploration and extraction are as follows:

- **The developments of seismic techniques to better estimate the likelihood of oil in various geologic formations.**

- **The development of the horizontal drilling technology which increases the probability of discovering oil and removing it more efficiently.**
- **Improvements in drilling at great water depths combined with ingenious production platforms.**
- **Greater well and field productivity due to the trends listed above as well as the deployment of secondary and tertiary recovery techniques.**

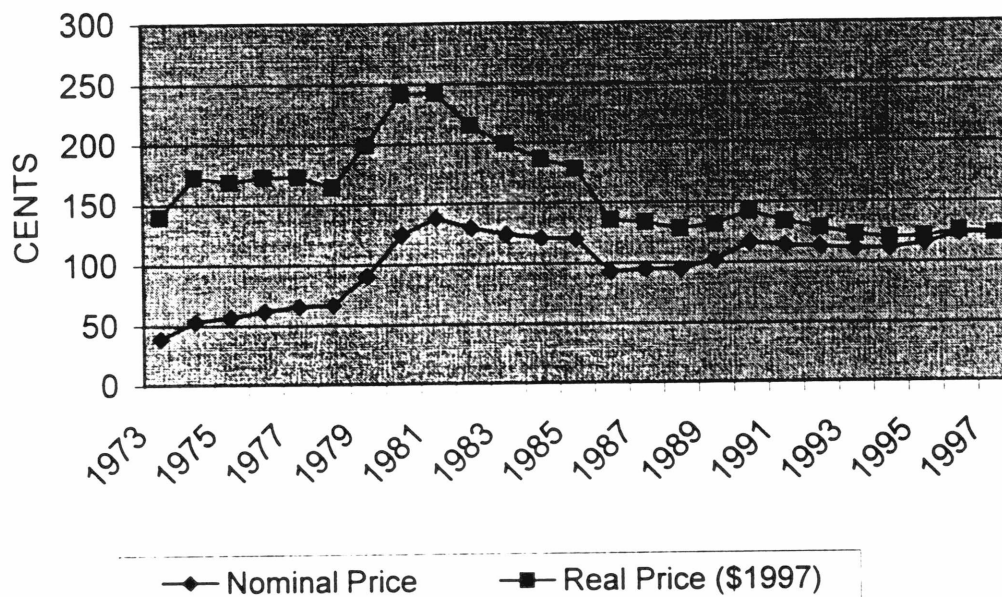
In turn, the increased availability of crude oil from several alternative sources has been accompanied by the development of substantial crude oil refining capacity. Although the United States maintains most of the world's crude oil refining capacity, as of 1996 at least 14 countries could refine more than one thousand barrels per day. Thus, the refining of crude oil into several different refined products also has become a huge business worldwide.

Growth in Competition:

The combination of improving technology and the presence of additional crude oil producers (and refiners) gradually has moved the petroleum industry to a higher plane when it comes to competitiveness. For decades policymakers and the average citizen shared the opinion that several huge integrated oil companies governed the petroleum industry. While several large international petroleum companies still exist, the market

has expanded to include intermediate size and small companies at all levels of the petroleum cycle – from the exploration of crude oil to the final retailing of gasoline. This intensity of competition has led to retail gasoline prices in the United States that are as low as they have been in 30 years (See Figure 4 which illustrates nominal and real prices for gasoline in the United States). As reported, the real price of gasoline (adjusted for inflation) has consistently declined since the 1980s.

FIGURE 4 -- NOMINAL VS. REAL PRICES OF GASOLINE IN U.S.



Source: Adapted from information from U. S. Department of Energy, *Monthly Energy Review*, July 1997.

The combined low price of crude oil and the low price of gasoline suggest that profit margins are thin throughout the petroleum industry. In some instances, this is causing less efficient business firms in the petroleum industry to drop out. In other instances, in order to improve production efficiency, corporate mergers are taking place.

The Role of Environmental Regulations:

Every society depends on the discovery and use of energy to improve living standards. In pursuing this goal, raw energy usually must be converted to more concentrated and usable forms. Sometimes the conversion is from one form of energy to another e.g., coal to electricity. In other cases, the conversion involves several different refinements of the original energy form e.g., the conversion of crude oil into several higher level petroleum-based products such as gasoline. In either case, resultant energy losses often are toxic pollutants, occurring either in water or air or both.

A certain amount of environment pollution occurs throughout the petroleum energy cycle – ranging from exploration, production and refining of crude oil to the use of its final products by consumers in various types of transportation vehicles. However, with economic growth, our economy gradually has employed more people, produced more products and served more customers. Correspondingly, the volume of pollution gradually has increased. Because property rights for natural resources such as air and water are undefined, the market system is not prepared to measure the cost of reducing water and air pollution. Consequently, the responsibility for overseeing the control of air

and water pollution has been assumed by the public sector through the Environmental Protection Agency, at both state and federal levels.

National and international concerns regarding pollution emissions have gradually caused more stringent environmental regulations to be imposed on many energy-related businesses, thus increasing production costs. Because these costs are not market based, often they are unanticipated. If pollution abatement technologies were simple and cost efficient to install and employ, this would not be an important problem. However, the costs usually are extremely high. Yet, if environmental regulations are to be fulfilled, the appropriate technologies must be installed.

Although environmental regulations impact the entire petroleum industry, oil refiners have been affected the most. Given thin profit margins and the added need to expend capital funds for technologies designed to reduce the environmental impact and stay competitive, several small refinery businesses (mainly independents) have not survived. Major oil refining businesses also are affected because they must consider allocating available capital funds to fewer refineries and closing marginal (usually smaller and inland) plants.

Growing competition and increased capital/operating expenses needed to comply with environmental regulations are raising doubt about the economic feasibility of the oil refinery in Mandan, North Dakota. This issue is discussed in more detail later in this report.

TRENDS IN NORTH DAKOTA'S PETROLEUM INDUSTRY

North Dakota is not a major producer of crude oil, being ranked 9th among U.S. states. Nonetheless, it is an important contributor in the industry, producing about 36 million barrels of crude oil in 1997. Historical trends in North Dakota have fallen in line with the major national and international trends outlined above. That is, the prices paid for crude oil in the state have been consistent with international price trends with only minor variation attributable to quality differences and transportation costs. Drilling activity and crude oil production also have followed national trends. However, there are some noteworthy differences between North Dakota's crude oil exploration-production industry and similar industries in other states.

Overview of Crude Oil Exploration in North Dakota¹

There are several characteristics of North Dakota's crude oil industry that separate North Dakota from the average producing state. Most, but not all, of these factors speak favorably for the future of oil exploration in North Dakota.

- **The Williston Basin is relatively young, geologically, and is thought by geologists to have great long-term potential for crude oil exploration.**

¹ The North Dakota Industrial Commission Oil and Gas Division provided information regarding oil exploration and production.

- **The success rate (oil discoveries/total holes drilled) is very high when compared to the nation as a whole. To a degree, this always has been true; however, recent improvements in drilling technology (horizontal technique) have dramatically increased the discovery success rate.**

Horizontal drilling has been employed since 1987. Over that period more than 90 percent of the holes that were drilled in North Dakota using this technique were successful in discovering oil.

- **A higher rate of drilling success has been accompanied by higher average daily production per well.**

Because horizontal drilling is more efficient, each successful well produces at a much higher rate than the average well. In 1997 the average production from a horizontal well was approximately 210 barrels per day. This compares with the state average of about 30 barrels per day.

- **The above factors combined have led to significant increases in rig activity in recent years despite low oil prices.**

Rig activity more than doubled during the 1994–97 period. About two-thirds of this activity was horizontal drilling.

- **In turn, crude oil production for the state also has increased.**

North Dakota's annual crude oil production peaked in 1984 at more than 52 million barrels. Subsequently, it bottomed out at 27 million barrels in 1994. Since that time, with the advent of horizontal drilling, production has increased by 30 percent to nearly 36 million barrels per year in 1997.

- **North Dakota places a high premium on securing maximum production from each well. Therefore, secondary oil recovery obtained with unitization of existing wells is a high priority. Tertiary oil recovery also is being pursued. This allows greater long-term profit potential from a given well.**

Many oil fields in North Dakota are using water flooding (secondary recovery) to extract additional barrels of oil from each well. To further increase oil recovery, heat injections (tertiary recovery) are being considered.

However, not all characteristics of exploration and drilling are favorable to continued development.

- **Because crude oil is found at uncommonly low depths, the average drilling cost for an oil well in North Dakota is considerably more than the national average. In addition, unfavorable weather is a contributing factor to high drilling costs.**

The average cost of drilling oil wells in North Dakota was about \$715,000 in 1996.

This compares with a national average drilling cost of about \$490,000.

- **The direct taxation of crude oil production in North Dakota is the highest among oil producing states.**

North Dakota imposes two taxes on crude oil production -- the oil production tax and the oil extraction tax. Combined these taxes collected \$1.57 cents per barrel of crude oil production in 1997. This is relatively high in comparison to other crude oil producing states.

Crude Oil Refining in North Dakota

A key link in the petroleum industry in North Dakota is the oil refinery located at Mandan, North Dakota. The presence of this oil refinery guarantees a ready market for much of the crude oil produced in state. Crude oil is brought to the refinery by pipeline from various locations in North Dakota's oil producing counties. It is refined into twelve different products, including gasoline, fuel oil, diesel oil, and jet fuel, which are delivered by pipeline or truck to various wholesale locations in the region.

Some key characteristics of the Mandan Oil Refinery are as follows:²

- **Built in 1954, the Mandan Refinery was designed to process 33,000 barrels of crude oil per day. Currently, the plant is capable of processing up to 60,000 barrels per day.**
- **The refinery manufactures twelve different products with approximately 55 percent of its total output being gasoline.**
- **About 40 percent of the gasoline and diesel fuel oil produced by the refinery are used in North Dakota; in addition, refinery products are exported to customers in South Dakota, Minnesota, Illinois, Iowa and Wisconsin.**
- **The refinery supports a direct payroll of \$20.8 million (salaries and benefits) in North Dakota.**
- **The refinery pays about \$1.7 million in yearly dividends to approximately 800 shareholders in North Dakota.**
- **The refinery spends an average of \$5.5 million per year in operating expenses related to the fulfillment of environmental standards. This is more than 15 percent of average plantwide operating expenditures. In addition, the refinery normally has spent about \$1 million per year in capital expenditures to install appropriate equipment needed to meet environmental regulations.**

² Based on information provided by Amoco Oil Company.

For several reasons, the Mandan Oil Refinery has been a solid economic fixture in the state of North Dakota. It is located in North Dakota because of the presence of abundant reserves of crude oil. Without a supply of crude oil, there would be no economic rationale for an oil refinery in the state. The economic health of the oil fields of North Dakota is interconnected with the economic health of the Mandan Oil Refinery. The oil fields of North Dakota, more than 1100 miles of pipelines, and the Mandan Oil Refinery constitute an important integrated economic unit in the state.

The crude oil exploration-production and refining industry is, in terms of economic impact, one of the most important industries in the state of North Dakota.

ECONOMIC IMPACT OF THE PETROLEUM INDUSTRY IN NORTH DAKOTA

The petroleum industry, like the coal-electric power industry in North Dakota, gives rise to a significant economic impact on the state's economy. This occurs at two key levels of economic activity: oil exploration-production and oil refining. At each of these levels, direct economic activity is created. This direct economic activity is multiplied forward to create additional indirect economic activity.

Theoretical Background

Every state's economy needs basic industries that produce products and services for export to other states and regions. As this is accomplished, primary income and employment are created. Agricultural and energy products, for North Dakota, are the two key employment and income creating sectors. The economic impact that the state derives from the petroleum industry, for example, is as follows. First, the **direct sale** of crude oil creates dollars to be expended as payment for the various resources (inputs) needed to produce those products. To illustrate, the exploration/drilling segment of the petroleum industry in North Dakota pays wages to rig workers and purchases equipment/materials/services needed to operate rigs. Similarly, the Mandan Oil Refinery, by producing and selling many types of refined oil products, pays wages to refinery workers and purchases equipment/materials/services from regional businesses (See Figure 5A).

The familiar **multiplier concept** explains how exporting goods and services from a community or state generates additional economic activity in that community or state (See Figure 5B). For example, employees working on drilling rigs and the businesses that support the rigs spend part or all of their earnings in North Dakota purchasing economic goods and services that they need or want. Similarly, workers at the Mandan Oil Refinery and businesses that support the refinery spend most of their earnings in the Bismarck-Mandan local economy. In both cases, these expenditures create additional sales for various retail business organizations. This is the beginning of an economic ripple effect. That is, basic retail businesses pay their employees who then expend their earnings, for the most part, in regional retail businesses. Ultimately, the total gain in economic activity is some multiple of the original base economic activity.

It follows that state and local governments also depend on economic activity to provide tax revenues for needed government services (See Figure 5). In some respects, the petroleum industry is similar to other industries in the state because additional income and sales created by the petroleum industry give rise to additional income taxes and sales taxes. Also, the increased demand for real estate leads to new real estate developments and higher real estate valuations, thus increasing local property tax revenues. However, unlike other industries, the petroleum industry pays severance taxes on the production of each barrel of crude oil. As noted earlier, oil severance taxation in North Dakota actually consists of two taxes -- the crude oil production tax and the oil extraction tax. Combined, these taxes are major tax revenue sources for the state.

Figure 5A – Direct Economic Impacts

Direct Economic Activity	Economic Benefits
Oil Exploration and Drilling	Wages, Salaries, Benefits Materials & Equipment Purchases Lease Income Royalty Income Profits Severance Taxes
Oil Refining	Wages, Salaries, Benefits Materials & Equipment Purchases Profits Corporate Income Taxes Sales Taxes Property Taxes

Figure 5B – Indirect Economic Impacts

Types of Businesses	Economic Benefits
Public Utilities Construction Finance Real Estate (Sales and Valuations) Entertainment Wholesale Trade Retail Trade Health Services	Wages, Salaries, Benefits Materials & Equipment Purchases Corporate Income Taxes Interest Income Profits Sales Taxes Property Taxes

As long as the foundation economic activity is sustained (in this case, petroleum exploration, production and refining), the direct and indirect economic benefits that accrue for the state's economy continue going forward. However, if it slows or stops, the multiplier works in reverse. That is, if the Mandan Refinery was closed both the direct and indirect economic activity brought forth by the refinery gradually would fade away.

This means both employment and earnings would drop significantly, both for the Bismarck-Mandan region and the state.

Economic Impact³

The state's economy is stimulated by several key broad-based economic impacts brought about by the petroleum industry. These are summarized below and detailed in Figures 6, 7 and 8.

- **The combined business operations of oil exploration-production-refining created total direct sales of \$829 million in 1996.**

The most important aggregate measure of economic impact is direct economic activity consisting of total sales. In Figure 6, both direct and indirect sales activity for the oil exploration-production and oil refining sectors of the North Dakota economy are shown.⁴ For crude oil exploration-production, direct sales activity is comprised of the sales of crude oil (market value of crude oil sold). A portion of North Dakota crude oil is sold on the open market (valued at approximately \$416 million or about 55 percent of total state production), and a portion is purchased by the Mandan Oil Refinery (about 45 percent of total production valued at approximately \$342 million). Subsequently, in creating several petroleum products for final sale, the Mandan

³ Estimates of economic impact were provided by Dr. Larry Leistritz, Department of Agricultural Economics, North Dakota State University (1996 data). These estimates were based on an input-output model for the state of North Dakota. Data were from the U.S. Department of Energy and business surveys.

⁴ It is important to view the exploration-production and oil refining sectors as a single economic unit. The oil refinery would not be present except for the availability of crude oil nearby. In

Refinery added approximately \$71 million in value, ultimately selling final products for \$413 million.

- **The combined business operations of oil exploration-production-refining created expanded sales (indirect) activity totaling \$1.0 billion in 1996.**

The direct sales activity generated by the oil exploration-production and refining businesses was multiplied forward (like ripples in the water) into economic activity in several different sectors, ranging from construction to retail trade. As reported in Figure 6, the expanded sales resulting from that portion of the exploration-production of crude oil sold on the open market generated additional sales of more than \$384 million, mostly consisting of construction and retail trade. The crude oil that went to the refinery was converted into higher valued products that together expanded sales activity by \$650.6 million. Again, the major benefiting sectors were retail trade, construction and transportation.

- **The combined business operations of oil exploration-production-refining were responsible for more than \$1.8 billion in direct and expanded economic activity in 1996. This represents about 5.5 percent of North Dakota's gross business volume.**

addition, while crude oil exploration-production can exist on its own, it would not be developed to its present level if there were no in-state refining.

The gross business volume (see Figure 6) is the sum of all direct and indirect business sales. The export of crude oil and its expanded economic activity was responsible for about \$800 million and the crude oil delivered to the Mandan Oil Refinery ultimately led to more than \$1.0 billion of additional economic activity. Notably, for every \$1 in market value (crude oil) at the Mandan Oil Refinery, more than \$3 of additional economic activity was created.

FIGURE 6 – ECONOMIC ACTIVITY CREATED BY PETROLEUM INDUSTRY
(1996 Data, Millions)

EXTRACT/PRODUCTION OF CRUDE OIL		REFINING CRUDE OIL		TOTAL
DIRECT SALES	\$416.3	CRUDE OIL TO REFINERY	\$341.9	
		VALUE ADDED	\$71.1	
		DIRECT REFINERY SALES	\$413.0	\$413.0
EXPANDED SALES		EXPANDED SALES		
Construction	\$47.8	Construction	\$38.7	\$86.5
Trans/Com/PU	\$28.7	Trans/Com/PU	\$25.4	\$54.1
Retail Trade	\$76.5	Retail Trade	\$69.2	\$145.7
Fin/Ins/RE	\$16.2	Fin/Ins/RE	\$14.8	\$31.0
Services	\$14.5	Services	\$13.3	\$27.8
Pet. Explor	\$40.8	Pet Explor		\$40.8
Other	\$26.9	Other	\$25.4	\$52.3
Household Income	\$133.4	Household Income	\$121.9	\$255.3
Total	\$384.8	Total	\$650.6	\$1,035.4
Total Gross Business Volume	\$801.1	Total Gross Business Volume	\$1,063.6	\$1,864.7

- **The combined business operations of oil exploration-production-refining created direct employment of 2,742 in 1996. An additional 13,700 jobs were created due to expanded economic activity attributable to the petroleum industry. Each job in the combined oil exploration-production-refining sectors led to the creation of approximately five additional jobs for a total employment multiplier of 6.**

The employment creating effects of the petroleum industry is summarized in Figure 7. In 1996 direct employment in the crude oil exploration-production sector was 2,341. Direct employment attributable to the oil refining was 384 for a total direct employment of 2725. Due to the expanded multiplier effects, crude oil exploration-production created additional jobs totaling 6,649. The additional jobs attributable to the presence of the refinery exceeded 7000 for a total of 13,700. The resultant employment multiplier is about 6, meaning each new job in

FIGURE 7 -- EMPLOYMENT CREATED BY PETROLEUM INDUSTRY
(1996 Data)

	DIRECT EMPLOYMENT	EXPANDED EMPLOYMENT	TOTAL EMPLOYMENT
PET EXPLOR/PROD	2341	6649	8,990
PET REFINING	384	7052	7,436
TOTAL	2725	13701	16,426

the petroleum sector created about five additional jobs in supporting businesses.⁵

The total employment impact of the petroleum industry represents about 4.5 percent of total nonfarm employment for the state.

- **The combined economic activities of crude oil exploration-production-refining were responsible for nearly 8 percent of the state's total tax revenue collections. In addition, the Mandan Refinery pays more than \$2.0 million per year in property taxes in Morton County, North Dakota. The businesses that support the refinery also pay local property taxes.**

The economic activity generated by the petroleum industry creates considerable tax revenue for the state of North Dakota. Far and away, the major contributor to tax revenue by either the exploration-production sector or the refining sector are the two severance taxes on the production of crude oil – the oil production tax and the oil extraction tax. Together they generated more than 40 million in 1996 and 54 million in 1997 (fiscal years). The tax revenues generated by sales/use taxation, income taxation and corporate income taxation are very modest by comparison⁶ (See Figure 8).

⁵ The job multiplier may be somewhat high since certain retail businesses (mostly gasoline related) may have been present even if the crude oil exploration-production and oil refining business were not. However, this estimate is consistent with the employment multiplier reported in a recent study for the state of Louisiana.

⁶ These estimates are understated because they do not include direct taxes paid by oil exploration-production firms or the oil refinery. Also, it does not include local tax revenue creation.

Viewed in its entirety, the petroleum sector is directly or indirectly responsible for about 8 percent of the state's revenue collections as well as considerable property tax revenue support in the Bismarck-Mandan region.

FIGURE 8 – STATE TAX REVENUE GENERATED BY PETROLEUM INDUSTRY
(1996 Data, Millions)

TYPE OF TAX	EXPLOR/PROD	REFINING	TOTAL
OIL PRODUCTION TAX	\$26.9		\$26.9
OIL EXTRACTION TAX	\$16.5		\$16.5
SALES & USE TAX	\$4.5	\$3.2	\$7.7
INDIVIDUAL INCOME TAX	\$1.7	\$1.6	\$3.3
CORPORATE INCOME TAX	\$2.3	\$1.6	\$3.9
TOTAL	\$51.9	\$6.4	\$58.3

In summary, the economic impact of the oil exploration-production and oil refining businesses in North Dakota is substantial. As a combined unit, this sector of the North Dakota economy is responsible for between 4 and 5 percent of the state's total economic activity.

THE FUTURE OF THE PETROLEUM INDUSTRY IN NORTH DAKOTA

It is clear that the petroleum industry is very important to North Dakota's economy. One cannot conclude, however, that the industry is in great economic health or that it will continue its historic economic role to the same degree that it has in the past. North Dakota, like other states, has coped with low oil prices, tight profit margins, faltering consumer spending and intense competition.

There is no doubt that low crude oil prices have been unfavorable for oil exploration and development in North Dakota. However, important technological improvements in exploration and drilling have cushioned that trend. Presently, North Dakota crude oil exploration-production is more than holding its own. In fact, during the last few years, production has increased substantially. Of course, it is very difficult to know if crude oil prices will reach levels conducive to a faster pace of exploration. North Dakota or the United States as a whole will not be able to increase the international market price of crude oil. This is an issue that worldwide petroleum markets will have to sort out. Still, it is unlikely that even the worst-case crude oil price scenario will drive North Dakota out of the business of crude oil exploration and production.

The Issue of Oil Severance Taxation:

During the last decade, crude oil severance taxation in North Dakota has been improved with tax incentives that encourage new drilling activity. However, the level of taxation is still high. In 1997 the average severance tax per barrel was \$1.55. This is approximately

the same amount as was reported in a 1993 study on the comparative taxation of crude oil by oil producing states. In that study, North Dakota's average tax per barrel was about 50 cents higher than the next highest taxing state.⁷ This is a substantial difference.

It is important to understand that intense price competition accentuates the role played by direct taxation. Crude oil producers cannot pass the severance tax forward to crude oil purchasers, given competition. As such, the severance tax must be viewed by crude oil producers as part of the cost of doing business in North Dakota.

In comparison with other states, North Dakota's sales and corporate taxes imposed on oil exploration-production activities are very reasonable and among the lowest for oil producing states. However, because of its relatively high severance tax, North Dakota is the highest taxing state for petroleum exploration-production of crude oil.

The Issue of the Mandan Refinery

The Mandan Oil Refinery has been a long-term source of strength for the petroleum industry in North Dakota. More recently, however, due to market pricing pressures and increased environmental regulatory requirements, the future of this refinery is uncertain.

The Mandan Oil Refinery is small by industry standards. Its average producing capacity is about 55,000 barrels per day as compared to an industry average of about 150,000 barrels per day. The industry giants produce as much as 650,000 barrels per day. The

⁷ See Loren Scott and Associates, The Energy Sector: A Giant Economic Engine for the Louisiana Economy, December 1996. The data included in the tax study was from 1986-90.

economics of size (economies of scale) work against small refineries in any average market situation. However, during the last several years, market competition has intensified, gradually eroding already thin profit margins. Many small refineries, mostly independent inland refineries, have been closed because they have been unable to compete.

The tight economic margins being experienced by oil refineries in general, but small refineries in particular, are being compounded by the increasing costs of environmental regulation. The Mandan Oil Refinery has an excellent record of environmental air and water pollution control. Typically, the refinery spends an average of \$1 million per year upgrading and adding equipment designed to meet regulatory requirements. It also incurs more than \$5 million per year in ongoing expenses to minimize environmental impacts. While these costs are not insignificant, the refinery has come to expect this level of spending dedicated to meeting environmental standards. However, during the next five years, the refinery must undertake a new wave of capital expenditures to satisfy environmental regulations. These expenditures will average about \$8 million per year, totaling more than \$40 million over the 1999-2004 period. To make matters worse, nearly one-half of these expenditures must take place during the year 1999.⁸

Even though government (as opposed to the market) mandates environmental compliance costs, all oil refineries must incur similar costs. Theoretically, the incremental capital costs mentioned above could be spread across refinery output and passed forward to

However, when using North Dakota oil production and tax data for 1997, the results were similar.

customers. If this were true, little or no damage to profits would result. Unfortunately, even if all such costs could be passed forward to customers, small refineries have less output over which to spread the incremental fixed capital costs. The already troublesome cost-price squeeze thereby becomes intensified.

Few would disagree that the oil refinery in Mandan has been and is a positive contributor to the state of North Dakota and its economy. However, the refinery ownership has no choice but to view the refinery from a business perspective. As such, the following question must be asked. Would the corporate ownership be better off closing the Mandan Oil Refinery and allocating \$40 million of capital expenditures to alternative larger and more efficient refineries? The answer to this question depends on several different factors that will not be addressed here. It is clear, however, that closing the refinery would sever a vital link in North Dakota's petroleum industry. The negative economic impact would include reduced expenditures, income and tax revenues directly related to the oil refinery. It would extend to North Dakota oil fields and wholesale-retail sectors as well.

⁸ The Mandan Oil Refinery made information regarding anticipated capital expenditures and related costs to fulfill pollution emission requirements available.

SUMMARY

The state of North Dakota has a long history of crude oil exploration, production and refining. It is not unusual for the petroleum industry to be characterized by economic fluctuations, mostly due to volatility in the price of crude oil. Economically, the oil fields have tended to be characterized by a boom and bust economic cycle. While these have lessened in recent decades, economic instability is still commonplace. Some years are great while others are disappointing. Strong rig activity followed by weak rig activity has become a way of life.

In contrast, oil refining in North Dakota has been a strong and stable component of the state's economy. Generally, despite the volatility in drilling activity, the oil fields of North Dakota have been able to provide sufficient additions to crude oil reserves to assure a consistent flow of crude oil to the Mandan Refinery. Now, for the first time, the economic future of the important middle link in North Dakota's petroleum industry is uncertain. To a degree, therefore, the future of the entire petroleum industry in the state is also uncertain.

*Senate Finance and Taxation Committee
Senator Herb Urlacher, Chairman
February 8, 1999*

Senate Bill No. 2421

Mr. Chairman, Members of the Committee:

My name is Daniel Porter, and I am the new Manager of the BP Amoco Mandan Refinery. As Ric Glaser has described, the BP Amoco Corporation has already agreed to move forward on much needed investment in the Mandan site and some of you may be asking yourselves why you should support Senate Bill 2421 to provide a sales tax exemption for certain machinery and equipment used in the refining of crude oil. I believe the reason you should support this bill is not so much a concern about whether the existing projects will proceed, but more on the signal you send to the new BP Amoco Corporation about the attractiveness of spending future limited capital resources in the Mandan refinery.

I have worked for the past twenty one years in the petroleum refining business. During that time I have seen many changes in this industry, but none as profound as what I believe we are about to experience over the next few years. The industry, as we speak, is in economic turmoil. Crude prices are the lowest they have been in decades. Refining margins have also recently taken a steep decline and we expect to see these remain low on average for the foreseeable future. Rarely have we seen the economic climate in all sectors of our business: oil exploration and production, refining and marketing and petrochemicals, look so poor at the same time.

Under these circumstances, large international corporations, like BP Amoco, must continuously review the demand for and allocation of precious capital resources. I have spent many years of my career in this industry wrestling with this difficult issue. Just before I joined the Mandan Refinery team this past week, I worked in the now BP Amoco headquarters in London, England and I can tell you that there is no limit to the number of great projects a corporation of this size has to choose from in spending its limited investment dollars. Mandan refinery is not only competing for

capital resources with the other six refineries which BP Amoco has within the US, but it is competing on an international basis where BP Amoco has interest in 20 refineries, almost all of which are significantly bigger in size and benefit from the principals associated with economies of scale.

A large number of these sites are already receiving economic incentives from the local, regional, state or national governments. I have personally worked in refineries where we have obtained exemptions from real and personal property tax on new investment, where we have obtained exemptions from sales tax on certain machinery and equipment involved in the manufacturing process, where we have received tax exemptions on financing of certain investments made in the refinery and where we have attained enterprize zone status to reduce both sales and property taxes.

These tax exemptions help these sites to be more competitive in the allocation of limited capital resources. In the short time that I have become a resident in the state of North Dakota, I have come to appreciate some of the difficult fiscal issues which you now face. Mandan Refinery is likewise facing difficult times ahead with industry margins reaching rock bottom levels. At the same time, we must now compete for available capital resources on an international basis where other refineries are obtaining strong support from their local and national governments.

Mr. Chairman, Members of the Committee, I urge you to support Senate Bill No. 2421. Your support will send a strong signal to the BP Amoco Corporation about you commitment to working hand in hand with industry in North Dakota.

Thank you for your time and I would be glad to entertain any questions you may have.

Mr. Chairman, members of the House
Finance & Taxation Committee. For the record,
my name is Raelene Kilsch, Representative of
Dist. 34, Mandan.

It is an honor to be here today to introduce Senate Bill 2421 and to ask for your support. This is a very important piece of legislation not only for the people of Mandan and Bismarck but also for the entire state of North Dakota.

Senate Bill 2421 provides for a temporary sales tax exemption for certain machinery and equipment for the refining of crude oil. Yes, fellow ^{Reps.}, this would be for the Mandan refinery. This tax exemption would be in effect for taxable sales occurring after January 31, 1999, and before August 1, 2002, the time it takes to make expensive environmental upgrades to this plant. The fiscal impact is estimated at \$500,000.

I believe we all know what a tremendous impact this refinery has on our state. This refinery alone contributes \$6.4 million in state tax revenue. Increased spending for wages and salaries for the upcoming construction project is estimated to be \$15 million, which would result in an estimated \$420,000 in increased state income tax.

I also believe we all know the economic turmoil the oil industry presently is in. Conditions that today challenge this refinery's mere survival. Testimony that will follow will further address these conditions. You are also going to hear testimony about the astonishing manner in which a deal was put together between the refinery and British Petroleum AMOCO, despite these adverse conditions. A deal to reinvest millions of dollars into this plant.

Mr. Chairman and members of the Committee: As you listen to all who are about to testify, I would ask that you keep in the back of your minds an understanding of the relationship that has been built over the past 48 years:

- a relationship between employees and their employer;

- employees committed to being the best they can be and an employer committed to providing a safe working environment with high paying jobs and opportunities for continued personal growth;

- a relationship between a company and the communities that company calls home; a relationship built on employees volunteering their time in service clubs and special projects such as getting together on weekends to fix or remodel needy families' homes;

- a relationship built on large financial contributions from a company committed to being one of our communities' most generous contributors; a relationship between a company and our state;

- a company that forms the core of one of our state's leading industries - oil production;

- a company that measures its success, not on profit alone, but also on safety, environment, people, and its community.

Mr. Chairman and Members of the Committee: Senate Bill 2421 is more than just allowing this relationship to continue. It's about expanding this relationship to British Petroleum AMOCO. It's about making a new friend; a friend positioned to compete in a global market; a friend that offers our oil industry continued growth and success in the years to come.

Leaders of the AMOCO refinery and of our state have, to some extent, made a deal. A deal that will allow one of our state's finest corporate partners the chance to raise its level of performance. These leaders have extended their hand, in good old North Dakota fashion, to this new friend. They have put a deal on the table that will benefit both BP AMOCO and this great state we call home.

Fellow ^{representatives}, Senate Bill 2421 secures the deal. It opens doors of continued growth and opportunity. It puts the grip in a North Dakota handshake. I ask again, that you give Senate Bill 2421 a "Do Pass".

Respectfully submitted by:

Rep. Rae Ann Kibler

SENATE BILL NO. 2421

Mr. Chairman, Members of the Committee:

My name is Richard Glaser, and until recently, the Refinery Manager of the BP Amoco Mandan Refinery. I appreciate this time in front of you, to solicit your support of Senate Bill 2421.

The packets that are being passed around include an Amoco brief paper, the recent University of North Dakota Study of the Oil Industry in North Dakota and texts of this mornings presentations.

As I am sure most of you know, the Mandan Refinery has recently received support from the BP Amoco Corporation for major upgrades in the refinery and support of its future viability. This support was not easily won and goes against the recent trend of divesting small inland refineries, which are refineries that run less than 150M barrels of crude a day and do not have access to international crude supplies. For example, of the 180 plus refineries that have been shutdown in the United States since 1970 over 90% were small inland refineries.

With your indulgence, I would like to share with you the sequence of the effort that was done to secure this Corporate support and explain why I am here today asking for sales tax exemption for projects already publicly announced as being approved.

Several years ago it became apparent that the Mandan Refinery was going to come to a cross road in the future. That of remaking itself so that it could compete in the world we were entering or one of gradual decline. Although it was unclear when we would come to this cross road, the Management Team of the refinery decided to conduct studies of the entire crude to customer value chain to prepare for the decision regarding the future viability of the Mandan Refinery.

We first looked at crude oil supply. The Corporation believed that Mandan's supply of North Dakota crude was finite and would gradually diminish. Over the last three years we developed and implemented a strategy that would change this belief. We made investments, changed how we contracted for the majority of the North Dakota crude

production, and added new alternatives for its transportation. We took an issue that could have made us victims of change, and were able to inform the Corporation that even if there was not another drop of crude found in North Dakota, we had secured sufficient crude to sustain our customers to beyond the year 2010.

A second area we looked at was the Market side of our business. Mandan, has historically been underutilized, meaning that our production was lower than the capacity of the facility. To address this a major study was initiated to evaluate the market we serve, North Dakota, South Dakota, and Minnesota primarily, to see:

1. If there was sufficient demand of products to support the Refinery in the future
2. What products would the customer demand; and
3. If Amoco could compete sufficiently to increase the utilization of the refinery

The study revealed that the Mandan Refinery could compete in the future IF we were able to supply the Environmental Highway Diesel Fuels that we are currently unable to make, as well as continuing to supply our Premier Diesel Fuels for Agriculture. It also estimated that the \$50MM book value Refinery would have to spend approximately \$100MM over the next 10 years to meet environmental and sustaining demands.

The third area of self help was the implementation of major organizational changes within the Refinery and reskilling of the employees to optimize the Refinery units, improve their reliability, and to reduce costs. The results so far have demonstrated that the Refinery can operate competitively and produce higher quality products on a consistent basis.

Would all of the above work guarantee that the Corporation would support the needs of the Refinery and make the investments required to keep it competitive? I did not believe so. There was only going to be one chance and we wanted to make sure that we went in with the best possible package to secure corporate support. Accordingly, we sponsored a study by the University of North Dakota to detail the impact of the Oil Industry and Amoco in North Dakota. The study found that of the \$1.9 billion of business volume the industry contributes yearly to the State, Amoco's presence was responsible for almost \$1.1 billion and of the 16,400 jobs created in the State, Amoco's presence creates over 7,400 of them. Quite a bit different impact versus just looking at the 225 jobs at the Refinery.

Recent events dictated that the formal viability review by the Corporation had to be accelerated. The project work for the facilities that would be needed to produce environmental diesel fuels identified that the only cost feasible way to do so was to purchase a unit already built in Texas. The owners of the unit wanted immediate

commitment for its purchase. If we had a shot at gaining support from the Corporation we only had a few weeks to pull everything together.

To prepare for the viability presentation to the Corporation, we sponsored the University of North Dakota study, which they completed and released in record time. We also openly communicated the current status of the Refinery with the public and many State and local officials. I felt that the people that could be affected needed to know that this issue was going on. I also spent time with many of the leaders of the State trying to determine if there were programs available that I could use to further improve the odds that the Corporation would support the initial investments needed immediately in the Refinery.

A furious amount of work was done between Amoco and the State Economic Development Group to research what Amoco could be eligible for and what other support programs that there was a potential for. Because of the need to get the support of the Corporation we took our best assumptions and presented them, along with the self help actions we had taken. In discussions with the Governor, it was not an issue of a Stadium by which I meant that either we get it or we fold up, but a matter of improving the odds of support from what I considered a 50/50 chance to a 51/49 probability of support. As you now know, the Corporation approved our viability and the initial investment of over \$40 million based upon our work and the support that I portrayed was probable from the County and the State. They approved it based upon our relationship with North Dakota and my assurance that there would be some support from the State. To me, their approval to proceed indicated the trust and goodwill they have for North Dakota and the desire to continue this long relationship.

So today I am here to urge your consideration and support for exempting the purchase of equipment needed for the two approved projects, the Distillate Desulphurization Unit and the complete changeout of our computer controls, from sales tax. Compared to incentive packages that have been proposed and accepted for new companies entering the State, this is a very modest request. It was however, enough to improve the odds, and that was the intent of our effort.

If you decide not to support this bill, does it mean the corporation will not move ahead with the projects? There are no guarantees but most probably not. It would however make the hill we have to climb for future investments needed much steeper and more importantly, it would hurt the refinery's credibility with the Corporation in the future.

We have tried to be very open in our efforts to address the refinery's viability issue. We covet our relationships with the people of this great State and want to help fuel the future of it. By your support it helps assure that:

- * The environment will benefit by removing 14,000,000 pounds of sulphur dioxide from our fuels and over 300 tons/year of nitrogen oxide out of the refinery stacks.
- * There is continued demand for North Dakota crude at market values
- * And future growth opportunities in the State are still possible.

Providing the sales tax exemption will have a fiscal year impact of an estimated \$500,000. This fiscal impact would be offset by increased tax revenues resulting from additional construction phase employment and local spending during the two to three year construction phase of the projects.

A study recently completed by Larry Leistriz of the North Dakota State University indicates the total direct and secondary impacts of the BP Amoco Refinery enhancement projects were estimated to total about \$39.2 million. Direct expenditures are estimated to total about \$13.2 million. The \$13.2 million of direct impacts lead to about \$26 million in secondary impacts. Sectors with substantial total impacts include *households* (\$18 million), *retail trade* (\$9 million), and *construction* (\$3.4 million). The additional economic activity associated with the projects also results in additional jobs in various sectors of the state economy. The secondary employment associated with the projects was estimated to total about 426 jobs.

Additional business activity, retail sales, and personal income resulting from the refinery enhancement projects and their secondary effects generate additional state tax revenues. Additional sales and use tax, personal income tax, and corporate income tax revenue resulting from the BP Amoco projects are estimated to total about \$735,000. It should be noted that these tax revenues are in addition to taxes paid directly by BP Amoco. This \$735,000 in additional tax revenue more than offsets the estimated \$500,000 fiscal note for this legislation.

Mr. Chairman, Members of the Committee, the families of the Mandan Refinery urge your support of Senate Bill 2421

Thank you for your time, I would be glad to entertain any questions you may have.

Mr. Chairman, Members of the Committee, it is my pleasure to introduce Mr. Dan Porter the new Business unit Leader of the Mandan Refinery who would like to share with you his views of the current status of the Refinery. Thank you.

Briefing Paper on a Temporary Sales Tax Exemption
For the BP Amoco Mandan, ND Refinery (SB2421)

Introduction

The petroleum industry is in economic turmoil. Crude prices are the lowest they have been in decades. These conditions are driving major changes in the industry as evidenced by the recent British Petroleum-Amoco merger. The Mandan Refinery is a small refinery (60,000 bbls/day) as compared to the average size refinery in the industry (150,000 bbls/day). Consequently it does not enjoy the economy of scale that allows it to distribute costs over more barrels of capacity. To ensure the long-term viability of the Mandan Refinery, work has been done to secure its future crude supply, optimize its assets, and meet environmental requirements. However, there is an immediate need to install a Distillate Desulfurizer Unit to produce a low sulfur diesel fuel product for sale in the Refinery's tri-state marketing area (North Dakota, Minnesota, and South Dakota). In addition, the Refinery's existing process control instrumentation needs to be upgraded to advanced computer control, and consolidated into one control room. This project will allow the Refinery to increase optimization and improve efficiency of its process units. These projects are critical to the economic and long-term success of the Mandan Refinery.

The Mandan Refinery is a key link in the North Dakota petroleum industry. Crude oil exploration, production, and refining contributed more than \$800 million to direct sales of crude oil and refined petroleum products in 1996. In turn, expanded economic activity due to the multiplier effect totaled more than \$1.0 billion (\$651 million - Mandan Refinery), inducing total economic activity of \$1.87 billion (\$1.1 billion - Mandan Refinery). The total business activity created by the presence of the petroleum industry contributes more than 16,000 total jobs (over 7,000 - Mandan Refinery) to the North Dakota economy. In addition, the petroleum industry accounts for nearly 8 percent of state tax revenue and millions of dollars of local property tax revenue. The Mandan Refinery alone contributes about \$6.4 million in state tax revenue.

Background

Distillate Desulfurization Project

Installation of a Distillate Desulfurizer Unit (DDU) will allow the Mandan Refinery to begin manufacturing a low sulfur diesel fuel product required for on-road diesel powered vehicles. The project involves the purchase of a used DDU from a West Texas Refinery, transportation to, and installation at Mandan. This project will eliminate a crude run constraint currently being experienced due to limited high sulfur demand. The cost of the DDU project is \$25 million.

Control and Optimization Project

The Control and Optimization Project (C&OP) involves the modernization of existing process control instrumentation to advanced computer controls consolidated into a single control room. The project will allow for increased optimization and improved efficiency of the Refinery through enhanced technology. The cost of this project is estimated at \$15 million.

Environmental Impact

The completion of the Distillate Desulfurization and Control and Optimization projects will have a favorable effect on the environment. The installation of the Distillate Desulfurization Unit will result in a reduction of vehicle tailpipe emissions of sulfur dioxide (SO₂) of more than 14 million pounds per year. In addition, nitrogen oxides (NO_x) emissions from the Refinery will be reduced by approximately 300 tons per year. Modernizing existing process control instrumentation will improve process optimization and increase efficiency of refining process units resulting in increased product yields and reduced waste generation.

Tax Incentives

Corporate management uses the comparison of net income and cash flow to make value judgments on assets. As in any business, there is competition for future investments. The Mandan Refinery essentially competes against 19 other BP Amoco refineries for investment funds. The track record of each refinery and merits of specific projects are considered. During difficult economic times, investment funds are reduced, portfolios rationalized and additional incentives often sought.

Several BP Amoco refineries have been provided economic incentives by the states where they are located. Examples include enterprise zone status, manufacturers' tax and Advalorem tax exemptions. These help them be more competitive both internally and externally.

Manufacturing Exemption

Section 57-39.2-04.3 of the North Dakota Century Code currently provides a sales tax exemption for machinery or equipment used in a physical or economic expansion of an existing manufacturing plant. Subdivision e of subsection 5 of 57-39.2-04.3 of the NDCC defines "Manufacturing" and specifically excludes "refining" from this exemption.

Effect of Senate Bill 2421

Senate Bill 2421 amends and reenacts subdivision e of subsection 5 of section 57-39.2-04.3 of the North Dakota Century Code to provide a sales tax exemption for certain machinery and equipment for the refining of crude oil. This tax exemption would be in effect for taxable events occurring after January 31, 1999, and before August 1, 2002, and is thereafter ineffective. Subdivision e currently excludes refining from the sales tax exemption for manufacturing machinery and equipment.

Sales Tax Impact and Offsets

Providing a temporary sales tax exemption for certain machinery and equipment for the refining of crude oil will have a fiscal impact of an estimated \$500,000. This fiscal impact would be offset by increased tax revenues resulting from additional construction phase employment and local spending during the two to three year construction phase of the projects.

A study recently completed by Larry Leistritz of the North Dakota State University indicates the total (direct and secondary) impacts of the Amoco Refinery enhancement projects were estimated to total about \$39.2 million. Direct expenditures are estimated to total about \$13.2 million. The \$13.2 million of direct impacts led to about \$26 million in secondary impacts. Sectors with substantial total impacts include *households* (\$18 million), *retail trade* (\$9 million), and *construction* (\$3.4 million). The additional economic activity associated with the projects also results in additional jobs in various sectors of the state economy. The secondary employment associated with the projects was estimated to total about 426 jobs.

Additional business activity, retail sales, and personal income resulting from the refinery enhancement projects and their secondary effects generate additional state tax revenues. Additional sales and use tax, personal income tax, and corporate income tax revenue resulting from the Amoco projects are estimated to total about \$735,000. (It should be noted that these tax revenues are in addition to taxes paid directly by Amoco.)

Economic Impact of Amoco Refinery Enhancement Projects

F. Larry Leistritz¹

Extraction and refining of petroleum products has long been an important component of North Dakota's economic base. The Amoco refinery, located near Mandan, is a key component of the petroleum industry in the state. Recently, Amoco officials have initiated two projects aimed at increasing the refinery's productivity and efficiency. These are (1) a distillate desulfurization unit (DDU) which will enable the refinery to produce low sulfur diesel fuel and (2) a control optimization project that will improve the facility's efficiency, enabling it to achieve better yields with lower energy expenditures. These projects both represent substantial investments and will result in significant expenditures to North Dakota firms and workers. The purpose of this report is to estimate the economic impact of the two Amoco refinery enhancement projects.

Methods

The analysis was based on information provided by Amoco concerning the estimated expenditures associated with each of the refinery enhancement projects and the proportion of those expenditures that were expected to go to North Dakota entities. The North Dakota Input-Output Model was used to estimate the secondary economic impacts based on these data.

The North Dakota Input-Output Model consists of interdependence coefficients or multipliers that measure the level of business activity generated in each economic sector from an additional dollar of expenditures in a given sector. (A sector is a group of similar economic units, e.g., the firms engaged in retail trade make up the retail trade sector.) For a complete description of the input-output model, see Coon and Leistritz (1989). This model estimates the changes in gross business volume (gross receipts) for all sectors of the state economy that arise from the direct expenditures associated with the proposed Amoco refinery projects. The increased gross business volumes are used to estimate secondary employment and tax revenues based on historic relationships. The procedures used in the analysis are parallel to those used in estimating the impact of other manufacturing and processing facilities (Leistritz 1995a,b; Bangsund and Leistritz 1998).

Results

The direct expenditures to North Dakota entities resulting from the Amoco refinery enhancement projects are estimated to total about \$13.15 million (Table 1). North Dakota expenditures for the DDU project are estimated to be about \$6.2 million, of which \$6 million would be wage and salary payments (*Households* sector). North Dakota expenditures from the

¹Dr. Leistritz is an economist based in Fargo, ND.

control optimization project would be about \$7 million, of which \$2.2 million would be contracts with local construction firms and \$4.3 million would be wage and salary payments.

The total (direct and secondary) impacts of the Amoco refinery enhancement projects were estimated to total about \$39.2 million (Table 2). Thus, the \$13.2 million of direct impacts led to about \$26 million in secondary impacts. Sectors with substantial total impacts include *households* (\$18 million), *retail trade* (\$9 million), and *construction* (\$3.4 million). The additional economic activity associated with the projects also results in additional jobs in various sectors of the state economy. The secondary employment associated with the projects was estimated to total about 426 jobs.

Additional business activity, retail sales, and personal income resulting from the refinery enhancement projects and their secondary effects generate additional state tax revenues. Additional sales and use tax, personal income tax, and corporate income tax revenue resulting from the Amoco projects are estimated to total about \$735,000 (Table 3). (It should be noted that these tax revenues are in addition to taxes paid directly by Amoco.)

In summary, the Amoco Mandan Refinery is an example of a facility that adds value to one of North Dakota's primary export commodities (crude petroleum). The planned enhancement projects will generate additional economic activity, jobs, and tax revenue for the state treasury. In addition, these projects will enhance the efficiency and competitiveness of the refinery in the future.

References

- Bangsund, Dean A., and F. Larry Leistritz. 1998. *Economic Contribution of the Sugarbeet Industry to North Dakota and Minnesota*. Agr. Econ. Rpt. No. 395. Fargo: North Dakota State University.
- Coon, R. C., and F. L. Leistritz. 1989. *The North Dakota Economy in 1988: Historic Economic Base, Recent Changes, and Projected Future Trends*. Agr. Econ. Stat. Series No. 45. Fargo: North Dakota State University.
- Leistritz, F. Larry. 1995a. *Potential Local Socioeconomic Impacts of the Proposed ProGold Processing Plant*. Agr. Econ. Rpt. No. 328. Fargo: North Dakota State University.
- Leistritz, F. Larry. 1995b. *Economic Impact of the North Dakota Ethanol Industry*. AE 95001. Fargo: North Dakota State University.

Table 1. Direct Impacts of Amoco Refinery Enhancement Projects, by sector, 1999

Economic Sector	DDU	Control	Total
		Optimization	
		-----\$ 000 -----	
Construction	149	2,171	2,320
Retail Trade	4		4
Professional Services		480	480
Households	6,016	4,333	10,349
<u>Total</u>	<u>6,169</u>	<u>6,984</u>	<u>13,153</u>

Table 2. Total (direct plus secondary) Impacts of Amoco Refinery Enhancement Projects, by sector, 1999

Economic Sector	DDU	Control Optimization	Total
	-----\$ 000 -----		
Construction	699	2,708	3,407
Transportation, communications, and public utilities	702	713	1,415
Retail Trade	4,546	4,437	8,983
Finance, insurance, and real estate	1,024	977	2,001
Services	965	1,388	2,353
Households	9,432	8,549	17,981
Other *	1,523	1,510	3,033
<u>Total</u>	<u>18,891</u>	<u>20,282</u>	<u>39,173</u>
Secondary Employment (FTE)	185	241	426

* Includes agriculture, mining, manufacturing, and government.

Table 3. Estimated Revenue from Selected State Taxes Resulting from Amoco Refinery Enhancement Projects¹

Tax	DDU	Control Optimization	Total
	-----\$ 000 -----		
Sales and use	211	205	416
Personal income	123	137	260
Corporate income	26	33	59
Total	360	375	735

¹ Tax revenues do not include taxes that may be paid directly by Amoco (i.e., revenue estimates reflect taxes that would arise from the secondary economic effects of the projects).



Fifty-Sixth Legislative Assembly
Of North Dakota

March 2, 1999
House Fin/Tax Cmte.

Testimony of Jerry Splonskowski, Chairman
Bismarck-Mandan Chamber of Commerce
On SB 2421

Chairman Belter, members of the committee, my name is Jerry Splonskowski, Chairman of the Board the Bismarck-Mandan Chamber of Commerce, an organization that represents just over one thousand businesses in Bismarck and Mandan.

The Chamber fully supports Senate Bill 2421. We believe the management of BP/Amoco has shown its commitment to the city of Mandan and state of North Dakota first, by deciding to keep their smallest plant in full operation, and second, by deciding to spend 40-million dollars to upgrade the refinery. In return for that commitment, the Chamber believes it is only right to grant BP/Amoco a sales tax exemption to help them make those necessary repairs.

You've heard the numbers in terms of the economic impact of the refinery on Mandan and North Dakota. The amount of sales tax not collected as a result of this exemption pales in comparison to those numbers. Bottom line, they've made a commitment to us, and the Chamber believes the state should, in turn, show our commitment to BP/Amoco by granting the tax exemption through the passage of Senate Bill 2421.

Mr. Chairman that concludes my prepared testimony and I'll be happy to answer any questions.



Greater North Dakota Association

STATEMENT BY DALE O. ANDERSON, PRESIDENT, GREATER NORTH DAKOTA ASSOCIATION, IN SUPPORT OF SB 2421 NORTH DAKOTA HOUSE FINANCE AND TAXATION COMMITTEE, MARCH 2, 1999.

Chairman Belter and members of the North Dakota House Finance and Taxation Committee. I am Dale O. Anderson, President, Greater North Dakota Association. Thank you for this opportunity to provide testimony in support of SB 2421. SB 2421 would provide a sales tax exemption for machinery or equipment used in a physical or economic expansion of an existing manufacturing plant.

The Greater North Dakota Association, and its divisions of Manufacturing and Processing and Wholesaling, is the voice for business and principal advocate for positive change for North Dakota. GNDA was organized in 1925 as a statewide, general business organization. The organization's membership of 950 is an economic and geographic cross section of North Dakota's private sector, including statewide associations and local chambers of commerce, development organizations and convention and visitors organizations. GNDA is governed by a 25 member Board of Directors. The Board of Directors establishes the organization's policy.

A HISTORICAL PERSPECTIVE

GNDA historically has been and continues to be a leader in job creation in North Dakota. Recently, GNDA was one of the participants in the Vision 2000 process. Nearly 7,000 people participated in town hall meetings to provide input into the development of a common vision for economic development in North Dakota.

The Vision 2000 Committee articulated a new vision for North Dakota which is to unite together to build a new North Dakota so we may realize our highest potential in creating a solid, diversified and successful rural economy, tailored to our needs and accomplished at a pace we can afford.

One consensus which emerged through the Vision 2000 process is that North Dakota should pursue a “four-part” economy which builds on our existing strengths. When these interrelated economies grow, they tend to help strengthen and diversify each other in order to meet the needs of the global marketplace. This four-part economy would consist of:

- 1) Advanced agriculture and food processing;**
- 2) Energy and energy by-product development;**
- 3) Export services and tourism; and**
- 4) Advanced manufacturing.**

Every dollar of new wealth created in North Dakota is generated by the four-part economy identified above. Sustained economic activity in each of these four basic sectors provide the base for North Dakota’s private sectors profitability such as wholesale and retail trade, health care, services, etc.

During the last 10 years, the North Dakota Legislature has enacted a large number of measures to help North Dakota be more competitive in a new, global marketplace. These measures, which were directed at North Dakota’s four primary sectors, include the Growing North Dakota program, financing programs, tax incentive measures and workforce training programs.

Dr. David Birch told the North Dakota Business Conference in November 1997, in assessing the progress North Dakota has made since 1986, that “You’ve done a remarkable job of changing your future,” ... “creating over 40,000 jobs.” The public policy

changes enacted by the North Dakota Legislature have had a positive impact on turning our economy around.

The Mandan Amoco oil refinery is a vital segment of North Dakota's growing manufacturing sector. You have heard considerable discussion today regarding the turmoil in the petroleum industry. In order to assure long term viability of the Mandan refinery, the refinery management has secured its future crude supply, optimized its assets and formulated plans to meet environmental requirements.

GNDAs believes that passage of SB 2421 is sound public policy because:

- 1) helps ensure 225 Mandan Refinery families of long term job security;**
- 2) the environment will benefit from Amoco's investment of more than \$40 million over the next five years to meet regulatory standards;**
- 3) sends a strong, positive message to BP Amoco management of North Dakota's pro-business philosophy; and,**
- 4) the local and state economy will be strengthened because it provides an incentive to a primary sector business with its resulting multiplier effect through the economy.**

Chairman Belter and members of the House Finance and Taxation Committee, the North Dakota business community through GNDAs urges a do pass on SB 2421.

Thank you Chairman Belter and members of the Committee. I welcome your questions.

*House of Representatives
House Appropriations Committee
Representative Dalrymple, Chairman*

March 15, 1999

SENATE BILL NO. 2421

Mr. Chairman, Members of the Committee:

My name is Daniel J. Porter and I am the new Business Unit Leader of the BP-Amoco Mandan Refinery. I appreciate this time before you to solicit your support of Senate Bill 2421.

The packets that are being passed around include a BP-Amoco brief paper, the recent University of North Dakota Study of the Oil Industry in North Dakota, an NDSU study of North Dakota tax revenues impacted by the planned BP-Amoco projects which are the subject of Senate Bill 2421, and the text of this presentation.

As I am sure you know, succeeding in today's global economy and competitive business climate can be a difficult challenge. This is particularly true for a small facility such as BP-Amoco's refinery in Mandan which does not benefit from the principles associated with economies of scale.

To ensure our economic and long-term success, we must constantly work to secure and maintain an adequate crude supply, meet our customers' product demands, upgrade our equipment to optimize our operations, and meet environmental standards. Over the next 10 years, we estimate our capital investment required to meet these needs at approximately \$100 million. That is a very large investment for a refinery that has a book value of about \$50 million. Forty million dollars of that capital investment is to meet an immediate need for a Distillate Desulfurization Unit to produce a low sulfur diesel fuel product for sale in the Refinery's marketing area. In addition, the Refinery's existing process control instrumentation needs to be upgraded to advanced computer control, and consolidated into a single control room. This will allow the Refinery to increase optimization and improve efficiency of its process units. These projects are critical to the economic and long-term success of the Mandan Refinery.

As you may know, the Mandan Refinery has recently received support from the BP-Amoco Corporation for these much needed investments – investments that will support its future viability. This support was not easily won and goes against the recent trend of divestment or closure of small inland refineries. Since 1970, over 180 refineries have been shut down in the United States with over 90% of them being small inland refineries.

Due to the economic turmoil that is existing in the oil industry today, the Mandan Refinery has already had to reduce its planned capital investments for 1999 from \$34 million to \$20 million in just the past two weeks. The potential exists that we will need to shed an additional \$10 million from our current plans in the next few weeks as we continue to debate the appropriate allocation of capital investments with the other 19 BP-Amoco refineries around the world, almost all of which are significantly bigger in size and benefit from the principals associated with economies of scale. Obviously, BP-Amoco will make these decisions based on which projects will provide the best return for the investment made.

Many of the other BP Amoco refineries are already receiving economic incentives from the local, regional, state or national governments. I have personally worked in refineries where we have obtained exemptions from real and personal property tax on new investment, where we have obtained exemptions from sales tax on certain machinery and equipment involved in the manufacturing process, where we have received tax exemptions on financing of certain investments made in the refinery and where we have attained enterprize zone status to reduce both sales and property taxes. There is no doubt that these tax exemptions help these sites to be more competitive in the allocation of limited capital resources.

In the short time that I have been a resident in the state of North Dakota, I have come to appreciate some of the difficult fiscal issues that you now face. The Mandan Refinery is likewise facing difficult times ahead with industry margins reaching rock bottom levels.

I am sure many of you may wonder whether passage of the proposed sales and use tax exemption will have any impact on the decision to proceed with the projects at the Mandan Refinery. I believe passage of this bill will not only have an impact on the decision to continue to invest at the reduced level

of capital spending on these projects in 1999, but it will also have a material affect on future decisions about investing in Mandan. Senate Bill 2421 provides a narrow window of opportunity (January 31, 1999 to August 1, 2002) to move forward on these key projects. At this stage of development any further delays will increase the ultimate risk of cancellation at a later date.

If the BP-Amoco enhancement projects proceed, the sales tax exemption proposed in Senate Bill 2421 will have a fiscal impact of an estimated \$500,000. This fiscal impact would be offset by increased tax revenues resulting from additional construction phase employment and local spending during the two-to three-year construction phase of the projects.

A study recently completed by Dr. Larry Leistritz of the North Dakota State University, indicates the total direct and secondary impacts of the BP-Amoco Refinery enhancement projects were estimated to total about \$39.2 million. Direct expenditures are estimated to total about \$13.2 million. The \$13.2 million of direct impacts lead to about \$26 million in secondary impacts. Sectors with substantial total impacts include *households* (\$18 million), *retail trade* (\$9 million), and *construction* (\$3.4 million). The additional economic activity associated with the projects also results in additional jobs in various sectors of the state economy. The secondary employment associated with the projects was estimated to total about 426 jobs.

Additional business activity, retail sales, and personal income resulting from the Refinery enhancement projects and their secondary effects generate additional state tax revenues. Additional sales and use tax, personal income tax, and corporate income tax revenue resulting from the BP-Amoco projects are estimated to total about \$735,000. It should be noted that these tax revenues are in addition to taxes paid directly by BP-Amoco. This \$735,000 in additional tax revenue more than offsets the estimated \$500,000 fiscal note for this legislation.

The Mandan Refinery also contributes \$6.4 million per year in state tax revenue and about \$1.8 million in property taxes to Morton County which amounts to a significant portion of Morton County's total tax revenue. Of the \$1.8 million, about \$1 million is earmarked for Morton County school districts.

Mr. Chairman, Members of the Committee, this bill has received broad-based support from business and industry, labor, the Association of Counties, local and state economic development associations, the Greater North Dakota Association, local Chambers of Commerce, and the Governor's Office – not to mention general community support. I urge your support of Senate Bill 2421. This will send a strong message to the BP-Amoco Corporation about the willingness of legislators to work hand-in-hand with a vital link in the North Dakota petroleum industry and about the attractiveness of making future investments in the Mandan Refinery. This could not be more important than at this time when key decisions are being made in BP-Amoco about 1999 capital investment allocations – especially with several other locations already having the benefit of sales and use tax exemptions.

Thank you for your time; I would be glad to entertain any questions you may have.

Daniel J. Porter
Business Unit Leader
BP-Amoco Mandan Refinery