



OFFICE OF THE CITY AUDITOR
Long Beach, California

LAURA L. DOUD, CPA
City Auditor

December 31, 2007

To the Citizens of Long Beach:

As a part of our continuing efforts to identify and maximize revenue sources for the City of Long Beach (City), the Office of the City Auditor recently concluded its audit of the Oil Production Tax (OPT) assessed by the City. The purpose of our audit was to analyze the City's current tax rate in comparison to nearby cities and determine whether the rate charged by the City was fair and equitable.

The City's municipal code mandates that every person conducting, managing or carrying on the business of oil production from any well located in the City pay a flat rate of \$0.15 per barrel produced. The municipal code does not include language regarding an adjustment for inflation. Further, the OPT rate was established in 1990 and has not been increased since.

We performed the following procedures during our audit:

- Reviewed the OPT rates and corresponding ordinances of surrounding cities and compared those rates and ordinances to those of Long Beach.
- Analyzed the price of crude oil between 1991 through 2006 using the West Texas Intermediate Crude Index (WTI) and compared it to OPT revenue received by the City during the same period.
- Calculated the additional revenue the City would have received if the OPT rate had been tied to an index such as the WTI or the Consumer Price Index (CPI).
- Met with oil producers, City management and other key stakeholders to discuss the current OPT rate and potential revisions to the rate structure.

Based on our audit, we determined the following:

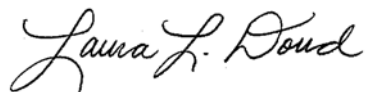
- The City's OPT rate is significantly lower than that of neighboring cities.
- The price of oil increased steadily between 1991 and 2006, while the City's OPT rate remained unchanged.
- The City would have received an additional \$9,926,000 in OPT revenue between 1991 and 2006 had the OPT rate been annually adjusted for inflation.
- If the OPT rate had been tied to the price of oil using the ratio codified by the 1990 municipal code, the current OPT rate would be \$0.40 per barrel.
- Based on current production volumes, the City will increase its annual OPT revenue by approximately \$3,700,000 if it increases its OPT rate to \$0.40 per barrel.

In conclusion, we recommend that the City Council approve placing a measure on the ballot of the next eligible election to increase the OPT rate to a minimum of \$0.40 per barrel. This proposed municipal code change should also include provisions for annual OPT rate increases based on CPI to ensure an increase to the City's revenue commensurate with inflation.

The information contained in this report was presented to the Mayor, City Council and public at the January 23, 2007 City Council meeting. See Appendix A for the presentation.

Please find attached our report with our findings and recommendations.

Sincerely,

A handwritten signature in cursive script that reads "Laura L. Doud".

Laura L. Doud, CPA
City Auditor

Audit Report

Oil Production Tax



Office of the City Auditor

December 2007

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BACKGROUND:

The Oil Production Tax (OPT), codified at Long Beach Municipal Code Section 3.80.221, mandates a set fee of \$0.15 per barrel produced for “every person conducting, managing or carrying on the business of oil production from any well located in the city...” The \$0.15 per barrel rate was established in 1990 and has remained the same through 2006.

OIL OPERATIONS

In fiscal year 2006, 14,882,817 barrels of oil were produced within the City's boundaries, generating \$2,232,423 in OPT revenue. THUMS Long Beach Company (THUMS), Tidelands Oil Production Company (TOPKO) and Signal Hill Petroleum Inc. (SHPI) are the City's current top oil producers and account for 96% of oil produced in fiscal year 2006. The source for the majority of the oil produced is the Wilmington oil field.

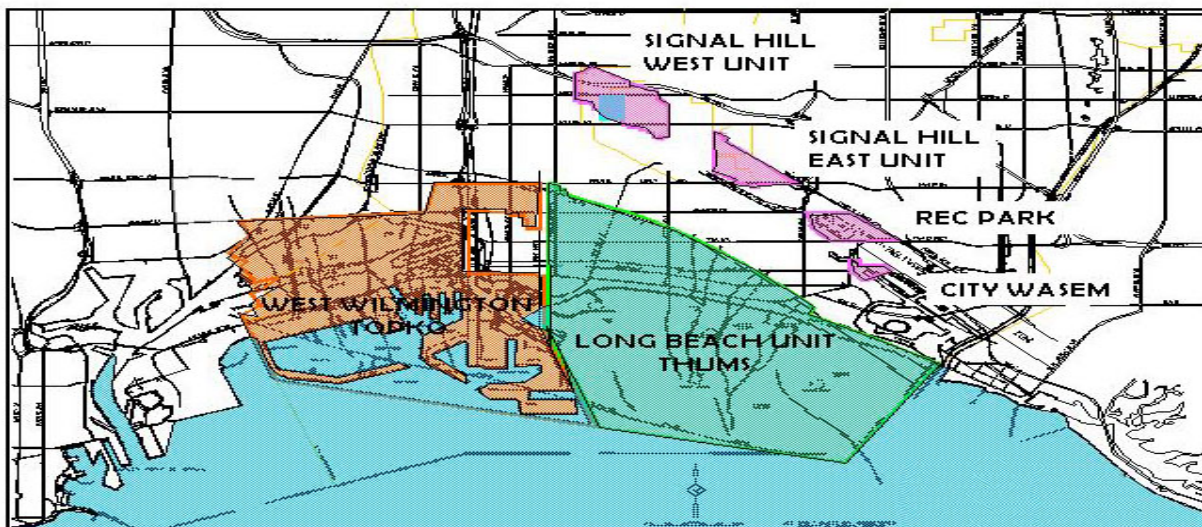


Oil drilling on one of the four small islands off the coast of Long Beach

The Wilmington oil field was discovered in Long Beach in 1932 and is 13 miles long, extending from San Pedro to Seal Beach. The field is divided into two sections: West and East. TOPKO serves as the field contractor for the western section of the oil field, and THUMS serves as the field contractor for the eastern section. Currently, the Wilmington oil field produces approximately 40,000 barrels per day and is expected to have an ultimate recovery of three billion barrels of oil.

SHPI is the operator for the Signal Hill West Unit and the Signal Hill East Unit oil fields. The oil fields are located in both Long Beach and Signal Hill. In fiscal year 2006, SHPI produced a total of 228,462 barrels of oil.

Oil Operating Areas



AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

Upon assuming office in July 2006, it came to our attention that in September of 2004, the Office of the City Auditor released a report (Previous Audit Report) stating that it supported the City's continued efforts to evaluate an increase in the OPT. Possible methodologies for increasing the OPT rate included the following:

- Tying oil production tax directly to the price of oil, as opposed to a flat amount per barrel.
- Establishing a progressive tax rate based on the price of oil, with a tax floor to ensure a minimum annual revenue amount.
- Linking OPT to revenue generated from the actual sale of oil produced within the City.

However, the City did not implement any of these methodologies, and no initiative regarding OPT was placed on the election ballot. As such, after reviewing the Previous Audit Report and discussing the issue with various stakeholders throughout the City, we determined that it was critical to the City to revisit the possibility of increasing the OPT. We initiated the audit shortly thereafter to determine whether the City's current OPT rate was fair and equitable, approximating the rates of nearby municipalities. The scope of audit covered the period from 1990 through 2006.

We performed the following procedures during our audit:

- Reviewed the OPT rates and corresponding ordinances of surrounding cities and compared those rates and ordinances to those of Long Beach.
- Analyzed the price of crude oil between 1991 through 2006 using the West Texas Intermediate Crude Index (WTI) and compared it to OPT revenue received by the City during the same period.
- Calculated the additional revenue the City would have received if the OPT rate had been tied to an index such as the WTI or the Consumer Price Index (CPI).
- Met with oil producers, City management and other key stakeholders to discuss the current OPT rate and potential revisions to the rate structure.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

ISSUES AND OBSERVATIONS

ISSUE #1:

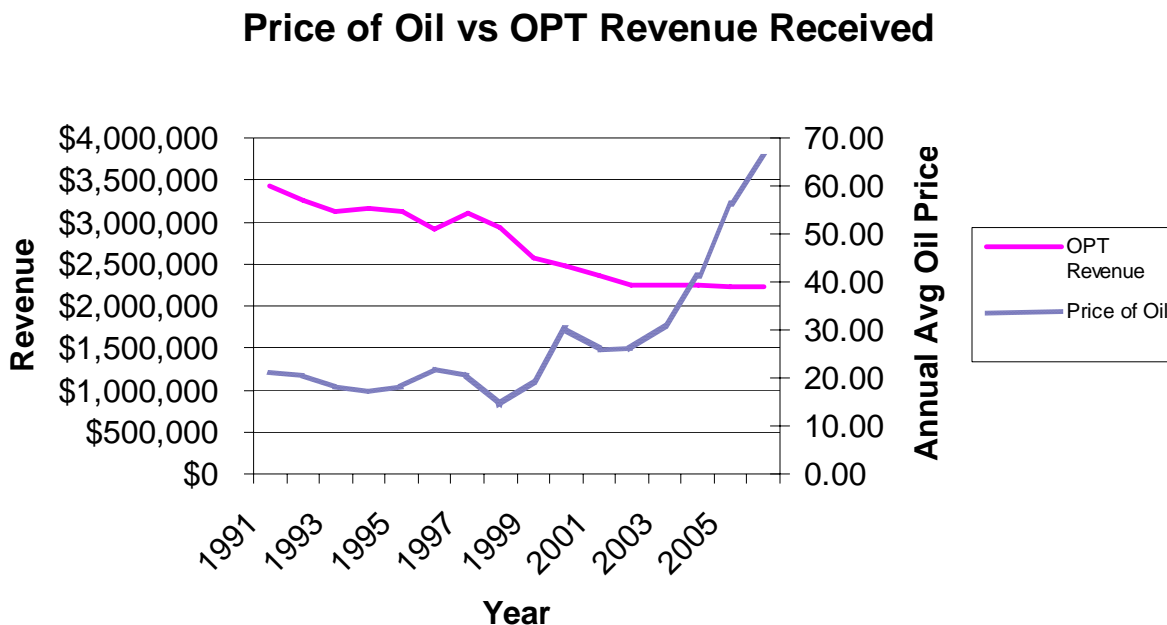
The OPT rate established in 1990 was a flat rate, rather than tied to the price of oil or to an inflation index. As such, in times of rising oil prices and rising inflation, the City has earned significantly less OPT revenue than if the OPT rate had been indexed.

OPT Rate Tied to Price of Oil

As stated above, the current OPT tax rate was established in 1990. In 1990, the average price of oil per the West Texas Intermediate Crude Index (WTI) was \$24.49 per barrel. As such, the OPT rate of \$0.15 per barrel equaled approximately \$0.006 for every dollar of oil on the WTI.

Although oil production in Long Beach has steadily declined since 1990, the price of oil during this same time has steadily grown. Between 1990 and 2006, the price of oil based on the WTI fluctuated between \$11.28 and \$74.41, while the OPT rate remained constant at \$0.15 per barrel.

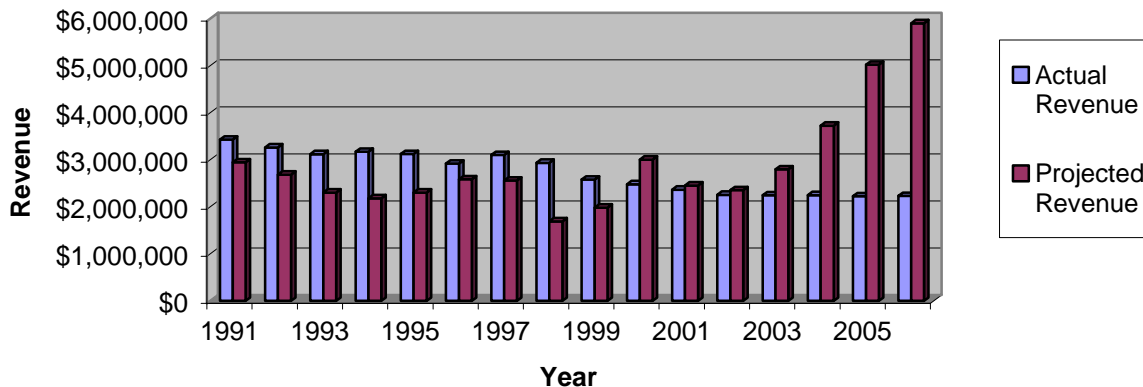
We compared the amount of revenue the City received to the price of oil between 1991 and 2006:



As illustrated above, although the price of oil increased from 1991 to 2006, the City's OPT revenue decreased due to the flat OPT rate tied to oil production.

Using the same ratio codified by the current municipal code (\$0.006 per barrel per dollar on the WTI), the OPT would have fluctuated between \$0.07 and \$0.46 within this time frame. Based on the City's oil production figures from 1991 to 2006, we analyzed the amount of revenue the City would have received had the OPT been tied to the price of oil using the \$0.006 ratio.

Revenue Comparison: Current OPT vs OPT Tied to WTI

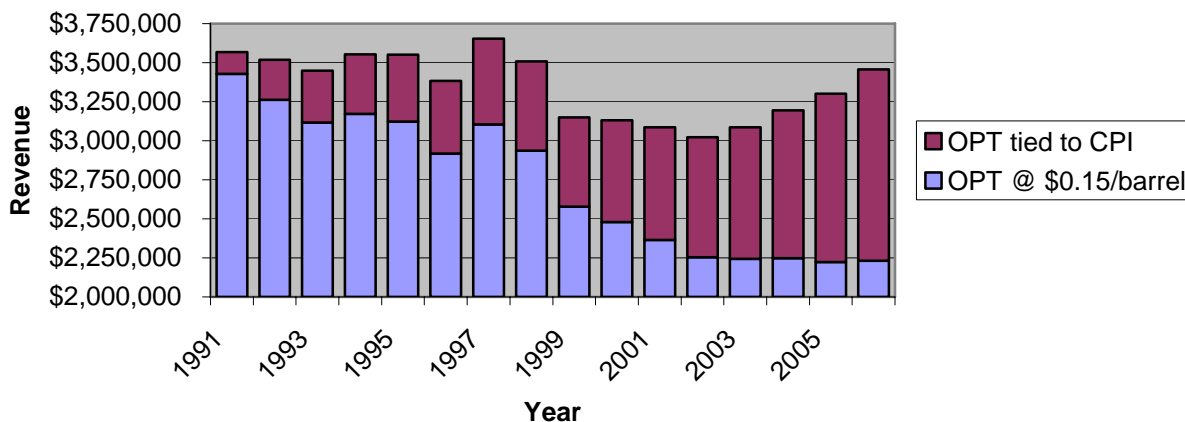


From 1991 through 2006, the City would have received an additional \$2,800,000 in revenue had the OPT rate been tied to the WTI index.

OPT Rate Indexed to Inflation

We compared the actual OPT revenue received by the City to the amount of revenue the City would have received had the OPT rate been adjusted annually for inflation based on the Consumer Price Index (CPI):

Additional Revenue Received: OPT Tied to CPI



From 1991 through 2006, the City would have received an additional \$9,926,000 in OPT revenue had the OPT rate been tied to CPI.

ISSUE #2:

The City's current OPT rate is significantly lower than that of neighboring cities, many of which use a rate tied to inflation or other industry indices.

We obtained the OPT rates currently used by surrounding cities and determined that Long Beach's rate remains less than that of neighboring cities, although its production levels far exceed the other cities' production. The weighted average (taking into account production volume) tax rate of neighboring cities is approximately \$0.28 per barrel, with the simple average at \$0.38 per barrel. Details are provided in the table below:

City	Tax per Barrel	Estimated Production	Estimated Revenue
Beverly Hills	\$0.34	193,000	\$65,620
Huntington Beach	\$0.31	935,000	\$289,850
Inglewood*	\$0.22	3,100,000	\$682,000
Santa Fe Springs*	\$0.20	935,000	\$187,000
Seal Beach	\$0.58	193,000	\$111,940
Signal Hill	\$0.60	540,000	\$324,000
Long Beach	\$0.15	14,882,817	\$2,232,423

* Similar to Long Beach, these cities have a flat rate tax that has not been increased within the last 15 years.

RECOMMENDATIONS

In order to bring Long Beach in line with surrounding cities and in order to capture revenue from a fair and equitable OPT rate, we recommend that the current OPT rate be increased from \$0.15 per barrel to \$0.40 per barrel, with an annual adjustment based on CPI. Although the Previous Audit Report recommended tying the OPT rate to the price of oil, we believe using CPI will be more amenable to the budget needs of the City, providing a less volatile, more stable source of revenue.

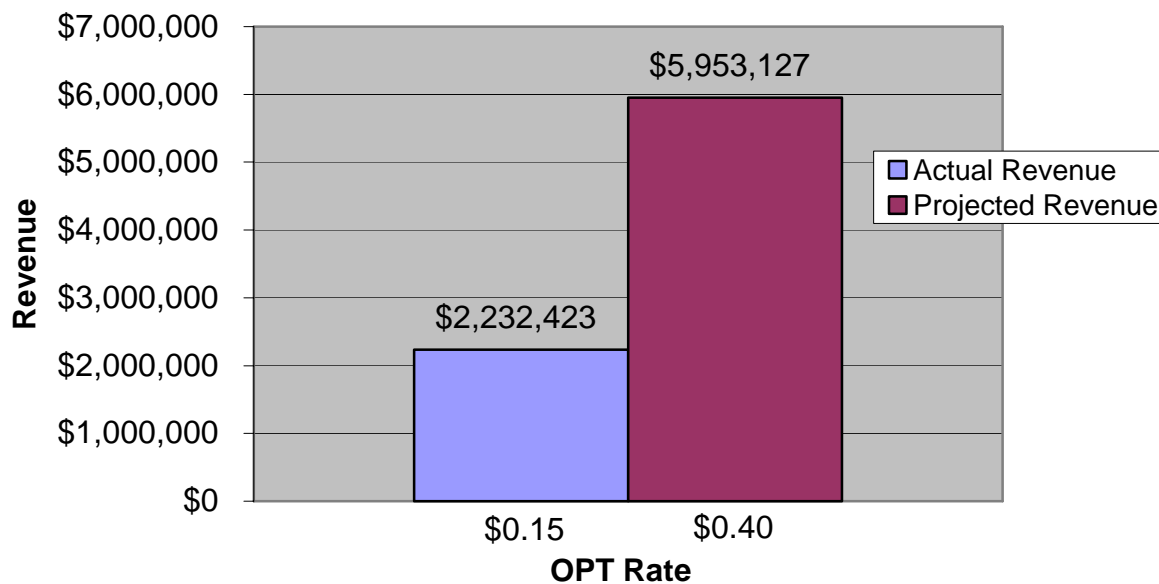
We reached the recommended amount of \$0.40 per barrel based on the following methodology:

$$\frac{\text{OPT rate established in 1990}}{\text{1990 avg. price per barrel per WTI}} = \frac{\$0.15}{\$24.49} = 0.006 \times \$66.08 \text{ (2006 avg. price per barrel per WTI)} = \mathbf{\$0.40}$$

We further recommend establishing an emergency provision in the ordinance. Such a provision would temporarily reduce the OPT rate in the event that the price of oil fell below a minimum threshold, thereby preventing undue hardship on the oil producers, which might otherwise lead to loss of oil production.

In 2006, oil production was 14,882,817 barrels, generating \$2,232,423 in OPT revenue to the City. Assuming consistent production levels, increasing the OPT rate to \$0.40 per barrel will generate additional General Fund revenue of \$3,720,704 each year, as illustrated below.

Annual Revenue Comparison: Current OPT vs Proposed OPT



MANAGEMENT'S RESPONSE

At its meeting on January 23, 2007, the City Council approved the recommendation from the Office of the City Auditor to increase the current oil production tax from \$0.15 per barrel to \$0.40 per barrel with an annual adjustment based on the consumer price index.

Appendix A

Oil Production Tax Presentation to City Council
on January 23, 2007



Date: January 23, 2007
To: Honorable Mayor and Members of the City Council
From: Laura Doud, City Auditor *ld*
Subject: **OIL PRODUCTION TAX**

RECOMMENDATION FROM THE OFFICE OF THE CITY AUDITOR TO INCREASE THE CURRENT OIL PRODUCTION TAX (OPT) FROM \$0.15 PER BARREL TO \$0.40 PER BARREL WITH AN ANNUAL ADJUSTMENT BASED ON THE CONSUMER PRICE INDEX (CPI):

Over the course of the last two months, the Office of the City Auditor, in conjunction with the Office of the Mayor, the Office of Councilmember Gary DeLong, and the Department of Financial Management, has been reviewing and analyzing the current Oil Production Tax utilized by the City of Long Beach. The Oil Production Tax (OPT), created by City Ordinance No. C-6751 and currently codified at LBMC Section 3.80.221, mandates a set fee for "every person conducting, managing or carrying on the business of oil production from any well located in the City" at \$0.15 per barrel. FY2006 oil production citywide was 14,882,817 barrels, generating a total revenue from the OPT tax of \$2,232,423. The average price of oil in FY2006 was \$67.28.

HISTORY OF PRODUCTION IN LONG BEACH:

In 1990 when the \$0.15 OPT was passed, the average price of oil (using the West Texas Oil Index (WTI)) was \$24.49. This equals approximately 0.006 cents for every dollar of oil on the WTI. Production, at the time the original ordinance was adopted, was higher than it is today. Since 1990, production in Long Beach has declined, as confirmed by the selected years of production set forth below:

<u>Year</u>	<u>Total Production (bbl)</u>
1990-1991	22,861,620
1992-1993	20,784,093
1995-1996	19,458,147
2000-2001	15,767,633
2004-2005	14,823,713

Concurrently, however, the price of oil during this same period of time has steadily grown. Between 1990 and the present, the price of oil based on the WTI has fluctuated between \$18.58 and \$74.41. Utilizing the same ratio codified by the original ordinance (.006 per bbl on the WTI), and indexing that ratio to the fluctuation in oil prices, the OPT would have fluctuated concurrently between \$0.11 and \$0.46 in any given year within this time frame.

NEIGHBORING CITIES:

The City's current OPT rate is significantly lower than that of other neighboring cities, many of which use a rate tied to inflation or other industry indices. The weighted average (taking into account production volume) of neighboring cities is approximately \$0.28 with the un-weighted average at \$0.37.

In October of 2004, the Office of the City Auditor released a report with recommendations for increasing the OPT. Our office has reviewed this report and provided updates accordingly. Namely, our office has verified the OPT rates currently used by surrounding cities and we have confirmed that Long Beach in fact remains near the bottom of the list, while Signal Hill currently charges four times more per barrel than Long Beach does (\$0.60 per barrel) with less annual production overall.¹ Likewise, other lower-producing cities such as Torrance, Montebello and Inglewood are nevertheless charging over \$0.20 for their respective OPT fees.

RECOMMENDATIONS BY THE CITY AUDITOR:

In order to bring Long Beach in line with surrounding cities and in order to capture revenue from a competitive and fair OPT rate, we recommend that the current ordinance be changed to increase the OPT currently charged by the City of Long Beach. After reviewing and discussing these issues with the key stakeholders including oil producers and Long Beach constituents, and taking into account both the average of surrounding cities as well as the potential revenue that could have been generated using an index at the same ratio codified in the current ordinance, we recommend that the OPT be increased from \$0.15 to \$0.40 with an annual adjustment based on the CPI index. Given the volatile nature of the oil industry as well as the costs associated with production in the Tidelands area, we believe this fee is fair and equitable for both the residents of the City and the Oil producers. We would also recommend some "safety net" language be placed in the ordinance consistent with other City ordinances that would reduce the OPT in the event of a true emergency. We would defer to the City Attorney and the Department of Oil & Gas to develop appropriate language.

We believe such an increase would be consistent with surrounding cities and the amount of oil extracted within the city boundaries. Such an incremental adjustment is anticipated to raise an additional \$4,000,000.00 in the General Fund annually.

We further recommend that the City Council consult with the City Attorney and the City Clerk regarding the issue of ballot timing and placement for purposes of any such increase.

¹ We note, however, that the cost of production for oil in the Tidelands area in Long Beach exceeds that of Signal Hill.



Recommendation To Revise Oil Production Tax Ordinance

Laura L. Doud, City Auditor

January 23, 2007

Collaborative Effort

- *Working with Mayor Bob Foster, Councilmember Gary DeLong and appropriate stakeholders (including oil producers)*
- *Determination was made that Oil Production Tax (OPT) should be updated*
- *Discussions held to determine tax rate that is fair, equitable and appropriate for all parties*

History of Oil Production Tax in Long Beach

- *Oil Production Tax (OPT) was created by City Ordinance No. C-6751; currently codified at LBMC Section 3.80.221*
- *Mandates a set fee for “every person conducting, managing or carrying on the business of oil from any well located in the City at \$0.15 per barrel”*
- *This fee was set in 1990*

FY 2006 oil production was 14,882,817 barrels, generating \$2,232,423 in revenue to the City

Who Pays the Tax?

- *The Oil Production Tax (OPT) is a tax that is paid by the companies who are producing oil from the oil resources in the City of Long Beach*
- *This is **not** a tax paid by consumers*
- *Oil that is extracted in Long Beach is not high enough quality for gasoline – mostly “heavy sludge” used for industrial purposes*

History of Production

In 1990 when the \$0.15 OPT was passed, the average price of oil was \$24.50.*

- *Equals \$0.006 cents of every dollar of the price of oil*
- *Production was higher than it is currently*
- *Price per barrel remained roughly \$24.50*

History of Production *(con't)*

Annual Production Levels Since Ordinance was passed

<i>YEAR</i>	<i>BBL – TOTAL PRODUCTION</i>
1990 – 1991	22,861,620
1995 – 1996	19,458,147
2000 – 2001	15,767,633
2004 – 2005	14,823,713

OPT had a greater impact on operations at a time where production was higher and the price of oil, as compared to today's prices, was significantly lower

History of Production *(con't.)*

Between 1990 and 2006 the price of oil fluctuated from \$24.50 to \$78.00

- *Using the .006 index, the OPT during the same period would range from \$0.14 and \$0.47*
- *In FY 2006 the average price of oil was \$67.28*
- *Using the .006 index, the OPT for FY 2006 = \$0.40*

Long Beach – Comparison with Other Cities

Long Beach's OPT rate is significantly lower than that of neighboring cities

<u>City</u>	<u>Tax per Barrel</u>	<u>Estimated Production</u>	<u>Estimated Revenue</u>
Beverly Hills	\$0.34	193,000	\$ 65,620
Huntington Beach	\$0.31	935,000	\$ 291,720
Inglewood	\$0.22	3,100,000	\$ 682,000
Santa Fe Springs	\$0.20	935,000	\$ 187,000
Seal Beach	\$0.58	193,000	\$ 112,210
Signal Hill	\$0.60	540,000	\$ 327,240
Long Beach	\$0.15	14,882,817	\$2,232,423

Determining Appropriate Fee

- *Reviewed the OPT rates that neighboring oil production cities pay*
 - *Weighted average of surrounding cities = \$0.29*
 - *True or unweighted average = \$0.37*
 - *Historic range tied to .006 index = \$0.14 to \$0.47*
- *Acknowledged that cost of production in Tidelands area is greater than that of other cities*
- *Reviewed and discussed fee with stakeholders*

***\$0.40 determined to be fair and equitable OPT rate for
FY 2007***

Previous Attempts to Raise OPT

- *September 2004: Long Beach City Auditor released report recommending an increase in the OPT*
- *Specifically recommended appropriate measure be placed on April 2006 ballot*
- *Recommendation never implemented*

Recommendation for Action

- *Update 1990 ordinance to impose flat fee tax per barrel production at \$0.40*
- *Further rate adjustments to the OPT should be tied to the Consumer Price Index annually*
- *New formula:*

of barrels produced x \$0.40

Recommendation for Action *(con't)*

Sample Equation

# Barrels Produced Annually	x	\$0.040	
15,000,000*	x	\$0.40	=

Revenue to the General Fund: **\$6,000,000**

OPT Revenue FY 2006	\$2,232,423
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ESTIMATED OPT Revenue FY 2007	\$6,000,000*
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NET INCREASE IN REVENUE	\$3,767,577
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****indicates estimates only for sample equation purposes***

Recommendation for Action *(con't)*

- *Recommend that City Council consult with City Attorney regarding issues of ballot timing and placement for purposes of proposed change in ordinance*
- *Include “safety net” language in the ordinance that would reduce flat fee in event of an emergency*
- *Tie further OPT rate adjustments to Consumer Price Index annually*

City Auditor Commitment

*Work with Mayor Bob Foster,
Councilmember Gary DeLong and all
stakeholders in drafting proposed new
ordinances and implementing
recommendations as approved by City
Council*

Conclusion

- *Updating the OPT brings fairness and equity to this issue, resulting in appropriate revenue increase to city*
- *Increase would be consistent with surrounding cities*
- *Tax adjustment allows oil producers within the City to remain competitive*