



**BOBBY JINDAL**  
GOVERNOR

**State of Louisiana**  
**DEPARTMENT OF NATURAL RESOURCES**  
**OFFICE OF CONSERVATION**

**SCOTT A. ANGELLE**  
SECRETARY

**JAMES H. WELSH**  
COMMISSIONER OF CONSERVATION

June 15, 2012

Derek Reese  
ExxonMobil  
P O Box 551  
Baton Rouge, LA 70821

Re: Conservation Order No. ENV 2012-GW011  
Water Well Owner Groundwater Withdrawal Reporting Requirements

Dear Derek Reese:

This letter is intended to provide guidance and assist you with complying with recent reporting requirements for applicable groundwater withdrawals from wells registered as owned by ExxonMobil. In summary, on May 23, 2012, the Office of Conservation (Conservation) issued Order No. ENV 2012-GW011 (Order) requiring ExxonMobil to provide current and projected short and long-term groundwater withdrawal reports to Conservation on or before September 28, 2012. The Order requires companies to submit "a written report of its company's current annual groundwater withdrawal volume per water well, projected near-term (within 5 years) annual groundwater withdrawal volume per existing and new well(s), projected long-term (5 to 30 years) annual groundwater withdrawal volume per existing and new well(s) and current, near-term and long-term plans for reducing groundwater withdrawal or preventing further migration of saltwater toward its wells." For your convenience, enclosed is a form that if properly completed and submitted prior to September 28, 2012 will satisfy the reporting requirements of the Order. Please note that all requirements of Conservation Order No. ENV 2012-GW011 are enforceable under the provisions of La. R.S. 38:3097.3.F. It is therefore important that ExxonMobil take all necessary steps to ensure that the requirements set forth in the Order are satisfactorily and timely addressed to prevent issuance of any enforcement actions by this office which may include an assessment of civil penalty.

Conservation staff looks forward to assisting ExxonMobil with any questions regarding the reporting requirements or guidance provided herewith. Please contact Brandon Breaux at 225-342-5718 at your earliest convenience for assistance.

Yours very truly,

James H. Welsh

AR Commissioner of Conservation

**Environmental Division**

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**EXXONMOBIL**  
**BATON ROUGE COMPLEX**

DATE: 9/28/2012

Office of Conservation

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TO: OFFICE OF CONSERVATION

ATTN: BRANDON BREAUX

FAX NUMBER: (225) 242-3505

FROM: ExxonMobil (DAVE AUCOIN)

**BATON ROUGE COMPLEX**

TELEPHONE: 225-977- 7829

FAX NUMBER: 225-977- 5334

**IF YOU ENCOUNTER ANY PROBLEMS WITH THIS TRANSMISSION, PLEASE CONTACT THE SENDER.**

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THANK YOU

**To:** Department of Natural Resources, Commissioner of Conservation

**Subject:** ExxonMobil Baton Rouge Complex Response to Order No. ENV 2012-GW011

Dear Commissioner,

ExxonMobil Baton Rouge Complex and its partner Entergy Louisiana Station are committed to managing our well water usage to mitigate salt water intrusion as part of a comprehensive regional plan. We have demonstrated our commitment by making continued investments to reduce well water use, especially at the 2000 foot level. Over the years, we have expanded the capacity of our operations and are manufacturing new products, all while using less groundwater.

In order to effectively mitigate salt water intrusion, we strongly support hydrological modeling of groundwater flows, currently ongoing, by the U.S. Geological Survey, to predict salt water intrusion in the various aquifers. The hydrological model will help evaluate the most effective and efficient ways to support our drinking water resource while also meeting the needs of Louisiana Industry. For years we have implemented steps to eliminate and reduce well water usage in the 1,500 & 2,000 ft. aquifers under the guidance of the Capital Area Ground Water Conservation Commission (CAGWCC) based on USGS engineering surveys. The CAGWCC has played an active role in protecting the area's ground water. As a result, industrial zone usage at the 1,500 ft. level has been eliminated and usage at the 2,000 ft. level has been limited to 26 MGD. Our plan is to continue reducing our consumption at the 2,000 ft. aquifer. Any reduction efforts at aquifer levels other than 1,500 and 2,000 ft. should be supported by the USGS engineering model to ensure the effectiveness of these steps.

Also, please be aware there are local and regional regulatory constraints that could restrict the Baton Rouge Complex from further offsetting well water with river water. Examples are the increase in particulate matter in air emissions and TDS levels that result from converting cooling towers from well water to river water. In addition EPA's upcoming rule 316(b), which is meant to protect aquatic species at intake structures will limit pumping capability. We recommend a dialogue between the regional agencies to balance these constraints against the objectives to reduce well water usage.

The ExxonMobil Baton Rouge Complex and Entergy Louisiana Station do not have plans to completely discontinue use of ground water since high quality water for certain processes is required to avoid equipment reliability issues and safety concerns. However, ExxonMobil will continue to expand use of Mississippi River water, where possible, evaluate alternate less strained well water sources and continue progressing site initiatives to conserve water such as condensate collection, water reuse, blow down control for towers and boilers, etc.

Enclosed please find response to DNR Order No. ENV 2012-GW011, which includes our short term plan for well water reduction and long term strategy to manage reduce usage from the targeted aquifers.

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**A. Well Registration Information**

State Registration Water Well No.	Registered Well Location	ExxonMobil Well No.	Complex Owner	Registered Aquifer
033-587	Latitude 30 29 00, Longitude 91 10 56	64	Refinery	2000' Sand Southern Hill
033-722	Latitude 30 29 46, Longitude 91 10 35	67	Chemicals	2000' Sand Southern Hill
033-810	Latitude 30 28 54, Longitude 91 10 37	69	Refinery	2000' Sand Southern Hill
033-851	Latitude 30 29 01, Longitude 91 11 11	72	Refinery	2000' Sand Southern Hill
033-855	Latitude 30 28 47, Longitude 91 10 56	74	Refinery	2000' Sand Southern Hill
033-856	Latitude 30 30 00, Longitude 91 10 17	70	Chemicals	2000' Sand Southern Hill
033-884	Latitude 30 29 04, Longitude 91 10 18	76	Refinery	2000' Sand Southern Hill
033-962	Latitude 30 29 43, Longitude 91 10 23	75	Chemicals	2000' Sand Southern Hill

State Registration Water Well No.	Registered Well Location	ExxonMobil Well No.	Complex Owner	Registered Aquifer
033-398	Latitude 30 29 2, Longitude 91 11 16	48	Refinery	1000' and 1200' Southern Hill
033-403	Latitude 30 29 36, Longitude 91 10 22	59	Chemicals	1200' Sand Southern Hill
033-557	Latitude 30 29 57, Longitude 91 10 35	61	Chemicals	1200' Sand Southern Hill
033-567	Latitude 30 29 35, Longitude 91 10 17	77	Chemicals	1200' Sand Southern Hill
033-576	Latitude 30 29 17, Longitude 91 10 32	62	Refinery	1200' Sand Southern Hill
033-580	Latitude 30 29 03, Longitude 91 10 18	63	Refinery	1200' Sand Southern Hill
033-649	Latitude 30 29 47, Longitude 91 10 23	65	Chemicals	1200' Sand Southern Hill
033-1377	Latitude 30 28 54 Longitude 91 10 38	80	Refinery	1200' Sand Southern Hill

Note: Projected well water usage has been combined for multiple wells, in the same aquifer, to take advantage of different combinations of wells in the aquifer. Close proximity of wells on plant site would likely not cause an appreciable difference on aquifer.

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**B. Current Use**

1. Provide the total volume of groundwater withdrawn from the well in 2011.

2,000 ft. wells  Million Gallons per Day – Average

1,200 ft. wells  Million Gallons per Day – Average

2. Provide the total volume of groundwater withdrawn from the well from January 1, 2012 up to the date of submitting the water use report for this well.

2,000 ft. wells  Million Gallons per Day from Jan 1 through  2012

1,200 ft. wells  Million Gallons per Day from Jan 1 through  2012

**C. Near-Term Use**

Provide the total annual volume in gallons of groundwater projected to be withdrawn from this well within 5 years for each year starting from January 1, 2012 through December 31, 2016.

YEAR	2,000'		1,200'	
	PROJECTED USAGE - MGD	% REDUCTION FROM YEAR 2012	PROJECTED USAGE - MGD	% REDUCTION FROM YEAR 2012
2012	6.4	BASE	6.8	BASE
2013	5.4	15%	6.8	0%
2014	4.8	25%	6.8	0%
2015	4.8	25%	6.8	0%
2016	4.8	25%	6.8	0%
2017	4.8	25%	6.8	0%

Should well owner plans include the installation and use of any new well(s) from January 1, 2012 through December 31, 2016, provide details of the anticipated date of new well(s) installation and projected groundwater withdrawal on annual basis from each well completed through December 31, 2016. If using this form, supplemental information may be provided on the back of this page or by attachment.

ExxonMobil installs replacement wells after an operating well fails. On average, wells can last up to 50 years however; the actual age is highly variable. Because well failures cannot be predicted, we cannot outline need for replacement wells at this time.

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#### D. Long-Term Use

**Provide the total annual volume in gallons of groundwater projected to be withdrawn from this well each year starting from January 1, 2017 through December 31, 2041.**

We have been asked to project usage until 2042, but this is not possible since we do not release potential investments until they have been approved by our corporate organization. Reduction efforts that have been funded were shared with the USGS as part of input for the scenarios in the model study.

ExxonMobil does not have plans to completely discontinue use of ground water. High quality water for certain processes is required to avoid equipment reliability issues and even safety concerns.

ExxonMobil installs replacement wells after an operating well fails. On the average, wells can last up to 50 years however, the actual age is highly variable. Because well failures cannot be predicted, we cannot outline future needs for replacement wells at this time.

Managing aquifers within the confines of a lesser withdrawal limit is under technical review. Further reductions after 2018 will be dependent on model development and subsequent feedback. Existing and / or replacement wells in shallow aquifers including the 1200' aquifer will replace 2000' through 2018.

#### E. Groundwater Use Reduction Plans

##### Well Water Reduction Strategy

- Limit use of 2,000 ft. aquifer well water to critical users
  - ✓ High Pressure Boiler Feed Water, Safety Showers, Eyewash Stations, and Drinking Water
- Maintain adequate well water capacity on 400-800 ft. aquifers and reduce well water letdown from 1,200 & 2,000 ft. aquifers
- Evaluate alternate water sources (e.g. condensate recovery, CRW, etc.) as opposed to new well water users
- Maximize the utilization of the River Water Clarification Unit
- Continue to progress site initiatives to reduce well water consumption
  - ✓ Condensate recovery, automated steam gen. blow-down control, automated cooling tower blow-down control, process unit wash water rate minimization, and steam leak repairs

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**F. Certification**

I certify that I am authorized to provide information on this matter on behalf of my company and that the information provided herein is true and correct to the best of my knowledge.

09/27/2012  
DATE

Steven L. Blume  
NAME

*Steven L. Blume*  
SIGNATURE

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