

June 20, 2012

Key Findings: Impacts of East Coast Refinery Closures Prepared by EnSys June 9, 2012

The recent recession, among other factors, reduced petroleum product demand across OECD regions and has precipitated refinery sales and closures. Several of these closures have occurred or are threatened in the Northeast¹.

U.S. East Coast Refineries Operating Capacity					
Owner	City	State	Operating Crude Unit Capacity (bbl/calendar day)	Percent of Region	Status
Operating and Idled Refine	eries				
Phillips66	Linden	NJ	238,000	17%	operating
PBF Energy Co. LLC	Delaware City	DE	182,200	13%	operating
PBF Energy Co. LLC	Paulsboro	NJ	160,000	12%	operating
United Refining Co.	Warren	PA	65,000	5%	operating
American Refining	Bradford	PA	10,000	1%	operating
Ergon West Virginia	Newell/Congo	WV	20,000	1%	operating
Hess Corp	Port Reading	NJ	0*		operating
Sunoco Inc.	Philadelphia	PA	335,000	24%	operating, for sale
Sunoco Inc.	Marcus Hook	PA	178,000	13%	idled 12/2011, for sale
Phillips66	Trainer	PA	185,000	13%	idled 9/2011, sold**
Total Operating & Idled			1,373,200		
Recently Shut Refineries					
Western Refining	Yorktown	VA	66,300		shut 9/2010
Sunoco Inc.	Eagle Pt./Westville	NJ	145,000		shut 2/2010
* Hess Port Reading has a p	production capacity of	70,000 bł	ol/calendar day but no	crude capaci	ty
** Phillips66 Trainer refine	ry has been sold to De	lta Airlin	ies		
Listed refineries exclude to	wo that produce prima	rily asph	alt		
Source: EIA					

Underlying drivers for refinery closures or threats for closure have caused major financial losses:

- Reliance on higher cost low sulfur crude oils
- Production orientation toward gasoline (now less economic than distillates to produce)
- Increasing international competition
- Flat/declining demand, and
- Substantial environmental compliance costs.

¹ The 375,000 bpd HOVENSA (Hess/PdVsa) refinery on St. Croix also closed in February 2012. It too supplied products into the Northeast. This closure and conversion to an operating terminal may have a role in facilitating a changing supply chain but one which contributes toward foreign replacement of products.



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Potential consequences exist for refined product and regional crude oil markets:

- The industry will adapt to recent closures and new supply chains will evolve in the long term; but there are two potential scenarios:
 - Gulf coast and Midwest domestic refineries can and do supply the replacement volumes, or
 - Foreign "export" refineries supply replacement product to the Northeast.

In the short term, the winter 2012/13 may present a potential challenge for distillate supply depending on several factors, including:

- Whether it is a very cold winter
- Whether Sunoco, Philadelphia, remains open or closes, and
- Whether NY state implements or delays its ULS heating oil standards this July 1st.

Policymaking at all levels will impact how the situation evolves. Supporting infrastructure developments that:

- Bring domestic crude oils and low cost natural gas to northeast refineries to help them stay open
- Bring additional Canadian and Lower 48 crude supplies to Gulf and Midwest refineries to help them replace lost East coast production
- And environmental policies that are cost-effective and which do not put US refineries at a disadvantage with their global competitors
- Will reinforce the ability of U.S. rather than foreign refineries to meet East Coast product demands and thus the value added and employment retained within the U.S.