

C.F.T.C. OFFICE OF THE SECRETARIAT

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August 17, 2010

VIA E-MAIL

Mr. David Stawick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

Re:

Rule Certification. New York Mercantile Exchange, Inc. Submission # 10-224: Notification Regarding the Listing of Mont Belvieu Spot Ethylene In-Well (PCW) Futures Contract for Trading on the NYMEX Trading Floor and for Clearing through CME ClearPort®

Dear Mr. Stawick:

The New York Mercantile Exchange, Inc. ("NYMEX" or the "Exchange") is notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying the listing of Mont Belvieu Spot Ethylene In-Well (PCW) Futures contract for trading on the NYMEX trading floor and for submission for clearing through CME ClearPort beginning at 6:00 p.m. on Sunday, August 22, 2010 for trade date Monday, August 23, 2010.

The contract, commodity codes, rule chapter and listing schedule are as follows:

Contract	<u>Code</u>	Rule Chapter	First Listed Month	Listing Period
Mont Belvieu Spot Ethylene In- Well (PCW) Futures	MBE	242	September 2010	24 consecutive months

This new, physically delivered ethylene futures contracts will be available during normal trading hours on the NYMEX trading floor and through CME ClearPort. Open outcry trading is conducted Monday through Friday from 9:00 a.m. until 2:30 p.m. (New York prevailing time), except on Exchange holidays. CME ClearPort is available from 6:00 p.m. Sunday until 5:15 p.m. Friday (New York prevailing time). There is a 45-minute halt each day between 5:15 p.m. (current trade date) and 6:00 p.m. (next trade date).

In addition, the Exchange will allow the exchange for related position (EFRP) transactions to be submitted through CME ClearPort. EFRP transactions in these futures contracts will be governed by the provisions of Exchange Rule 538.

Although the analysis of deliverable supply attached herewith includes the recommended position limits for this contract, a separate filing will be submitted to the Commission to self-certify those position limits.

Pursuant to Section 5c(c) of the Commodity Exchange Act ("Act") and CFTC Rules 40.2 and 40.6, the Exchange hereby certifies that the attached contract complies with the Act, including regulations under the Act. This submission will be made effective on trade date August 23, 2010.

Should you have any questions concerning the above, please contact Daniel Brusstar at (212) 299-2604 or the undersigned at (312) 648-5422.

Sincerely,

/s/ Stephen M. Szarmack Regulatory Counsel

Attachments:

Contract terms and conditions Cash Market Overview and Analysis of Deliverable Supply

8403

## Chapter 242

# Mont Belvieu Spot Ethylene In-Well (PCW) Futures

## 242.01 SCOPE

The provisions of these Rules shall apply to Ethylene bought or sold for clearing on the Exchange with delivery in Mont Belvieu, Texas.

## 242.02 DEFINITIONS

- (A) "Williams" refers to Williams Olefins, L.L.C., a Delaware limited liability company, with offices at One Williams Center, Tulsa, Oklahoma 74172.
- (B) "Williams Storage Facility" refers to the storage wells in the salt structure and all associated surface facilities used in connection with storage in these wells, which are owned and operated by Louis Dreyfus Mont Belvieu, L.P., and leased by Williams as a storage facility for Ethylene.
- (C) "Ethylene" refers to the product ethylene as specified in Rule 242.05.
- (D) The terms "seller" and "buyer" shall mean the short Clearing Member and the long Clearing Member, respectively.
- (E) "Seller's Customer" and "Buyer's Customer" shall mean the seller and buyer, respectively, of the physical product.

## 242.03 FINAL SETTLEMENT PRICE

The final settlement price for the delivery month shall be the Petrochem Wire ("PCW") closing price on the last trading day for Ethylene Free-On-Board (F.O.B.) Mont Belvieu.

## 242.04 CONTRACT UNIT

The contract unit to be delivered by the seller shall be 100,000 U.S. pounds. There shall be no volume tolerance permitted under these Rules.

## 242.05 GRADE AND QUALITY SPECIFICATIONS

Ethylene shall conform to the Williams ethylene specifications, which may be amended from time to time, as outlined below:

Components	Specifications	Test Method	Specifications
	(weight basis)		(mole basis)
Ethylene (Minimum)	99.90 wt. %	ASTM D 2505	99.90 mol %
Methane + Ethane +	1,000 ppm wt.	ASTM D-2505/D-	
Nitrogen		2504	
Methane	200 ppm wt.	ASTM D 2505	350 ppm mol
Ethane	500 ppm wt.	ASTM D 2505	465 ppm mol
Acetylene	1.5 ppm wt.	ASTM D 2505	1.6 ppm mol
Propylene & Heavier	5 ppm wt.	ASTM D 2505	3.3 ppm mol
Carbon Dioxide	1.5 ppm wt.	ASTM D-2505	1.0 ppm mol
Carbon Monoxide	0.15 ppm wt.	ASTM D 2504	0.15 ppm mol
Water	1 ppm wt.	Panametrics	1.6 ppm mol
Total Sulfur	1 ppm wt.	ASTM D-3246	0.9 ppm mol
Oxygen	1 ppm wt.	ASTM D 2504	1.75 ppm mol
Hydrogen	0.4 ppm wt.	ASTM D 2504	0.5 ppm mol
Methanol	1 ppm wt.	ASTM D 5234	

## 242.06 DELIVERY MONTHS

Trading shall be conducted in contracts providing for delivery in such months as shall be determined by the Exchange.

#### 242.07 PRICES AND FLUCTUATIONS

Prices shall be quoted in dollars and cents per pound. The minimum price fluctuation shall be 0.00001 (.001) per pound.

#### 242.08 TERMINATION OF TRADING

No trades in Mont Belvieu Spot Ethylene In-Well (PCW) Futures deliverable in the current month shall be made after the second-to-last business day of the delivery month (the "last trade date"). In the event that the originally listed last trade date is declared a holiday, the last trade date will move to the business day immediately prior. Any contracts remaining open after the last trade date must be either:

- (A) Settled by delivery which shall take place on the last business day of the delivery month.
- (B) Liquidated by means of a bona fide Exchange for Related Position ("EFRP"). An EFRP is permitted in the expiring futures contract at any time before 2:30 p.m. on the last day of trading for the futures contract, provided, however, that an EFRP shall not be permitted on the first business day following the expired futures contract.

#### 242.09 DELIVERY

- (A) Delivery shall be made Free-On-Board (F.O.B.) the Williams Storage Facility in Mont Belvieu, Texas, or, with the mutual agreement of the buyer and the seller, at any pipeline or storage facility in Mont Belvieu, Texas. Delivery shall be made with all applicable Federal, State and Local laws and regulations.
- (B) For the purposes of this Rule, the term F.O.B. shall mean a delivery in which the Seller's Customer delivers Ethylene to the Buyer's Customer that shall be free and clear of all liens, claims, encumbrances, fees and other charges.
- (C) The title to, and the risk of loss of, Ethylene shall be passed between counterparties on the effective date specified in the transfer document.

#### 242.10 DELIVERY METHODS

Delivery shall be made by any of the following methods:

- (A) By "in-well" transfer in the Williams Storage Facility, by mutual agreement of the buyer and seller:
- (B) By book transfer, provided that both the buyer and the seller mutually agree to such transfer. For purposes of this Rule, book transfer is defined as a book adjustment effecting a title transfer between seller and buyer which is not documented on the books of an eligible facility.
- (C) At any delivery location in Mont Belvieu, by mutual agreement of the counterparties.

#### 242.11 DELIVERY PROCEDURE

- (A) NOTICE OF INTENTION TO DELIVER AND NOTICE OF INTENTION TO ACCEPT By 6:00 p.m. on the final day of trading:
  - (1) Each Clearing Member holding an open short position shall file with the Exchange a properly completed and signed Notice of Intention to Deliver. The Notice of Intention to Deliver shall be in the form prescribed by the Exchange and shall include:
    - (a) Name of the seller's customer;
    - (b) Number of contracts to be delivered;
    - (c) Any additional information as may be required by the Exchange.
  - (2) Each Clearing Member holding an open long position shall file with the Exchange a properly completed and signed Notice of Intention to Accept. The Notice of Intention to Accept shall be in the form prescribed by the Exchange, and shall include:
    - (a) Name of the buyer's customer;
    - (b) Number of contracts to be accepted;

(c) Any additional information as may be required by the Exchange.

#### (B) NOTICE DAY

The Clearing House shall allocate Notices of Intention to Deliver and Notices of Intention to Accept by matching size of positions and preferred locations, to the extent possible. The Clearing House shall provide Tender Allocation Notices to the respective Clearing Members on the morning of the first business day after the final day of trading. The day the Tender Allocation Notices are provided to the Clearing Members shall be referred to as "Notice Day". Tender Allocation Notices are not transferable.

#### (C) BUYER'S DELIVERY INSTRUCTIONS

As soon as possible after receipt from the Exchange of a Tender Allocation Notice, but not later than 10:00 a.m. on the last business day of the delivery month, the buyer shall deliver to the seller identified in such Tender Allocation Notice, with copy to the Exchange, properly completed and signed Delivery Instructions, in the form prescribed by the Exchange, which shall include the following information:

- (1) Name of seller;
- (2) Tender number:
- (3) Seller's choice of the eligible facility;
- (4) Number of contracts;
- (5) The method of delivery;
- (6) Any additional information as may be required by the Exchange.

#### (D) AMENDMENT OF DELIVERY INSTRUCTIONS

Except as provided in this Section (D), Notices of Intention to Deliver and Notices of Intention to Accept may not be amended after they have been given. However, upon mutual consent of the parties and upon written notice to the Exchange, the parties may change the delivery facility and/or the method of delivery named by the buyer.

## 242.12 DELIVERY MARGINS AND PAYMENT

(A) Margins.

The seller shall obtain from its customer margin in an amount fixed, from time to time, by the Exchange.

- (B) On the first business day following the last day of trading, the long clearing member shall obtain from the long, if any, margin equal to the full value of the product to be delivered. The short clearing member shall obtain from the short, if any, margin in an amount fixed, from time to time, by the Exchange.
- (D) The long clearing member and the short clearing member shall deposit with the Clearing House margins in such amounts and in such form as required by the Exchange. Such margins which shall not be greater than the margins charged to the longs and the shorts, shall be returned on the business day following notification to the Exchange that delivery and payment have been completed.
- (C) Payment Net 5 Days.

The buyer shall pay the seller at the office of the seller by certified check by 12:00 noon of the fifth business day following completion of delivery. The amount of payment shall be based on the volume delivered as determined in Rule 242.04. If the seller requires multiple delivery dates, payment for partial delivery shall be required for each portion of product transferred. The seller, upon receipt of payment, shall give the buyer all appropriate documents necessary to transfer ownership of the product to the buyer. Alternatively, buyer and seller may mutually agree to effect payment or adjustment, as otherwise prescribed in this Rule, by federal funds money wire as a substitution for a certified check.

#### 242.13 VALIDITY OF DOCUMENTS

The Exchange makes no representation respecting the authenticity, validity or accuracy of any Inspection Certificate, Notice of Intention to Deliver, Notice of Intention to Accept, Check or of any document or instrument delivered pursuant to these Rules.

## 242.14 INSPECTION

Inspection of product shall be conducted in accordance with Williams' standard operating practice.

#### 242.15 ALTERNATIVE DELIVERY PROCEDURE

The matched counterparties may agree to make and take delivery under terms or conditions which differ from the terms and conditions prescribed by this Contract. In such a case, Clearing Members shall execute an Alternative Notice of Intention to Deliver on the form prescribed by the Exchange and shall deliver a completed executed copy of such Notice to the Exchange. The delivery of an executed Alternative Notice of Intention to Deliver to the Exchange shall release the Clearing Members and the Exchange from their respective obligations under the Exchange contracts.

In executing such Notice, Clearing Members shall indemnify the Exchange against any liability, cost or expense it may incur for any reason as a result of the execution, delivery, or performance of such contracts or such agreement, or any breach thereof or default thereunder. Upon receipt of an executed Alternative Notice of Intention to Deliver, the Exchange will return to the Clearing Members all margin monies held for the account of each with respect to the contracts involved.

## 242.16 FORCE MAJEURE, LATE PERFORMANCE AND FAILURE TO PERFORM

- (A) DEFINITIONS. As used in this Rule 242.16 the following terms, as well as variations thereof, shall have the meanings described below.
  - (1) "Force Majeure" shall mean any circumstance (including, but not limited to, a strike, lockout, national emergency, governmental action, or act of God) which is beyond the control of such buyer or seller, and which prevents the buyer or seller from making or taking delivery of product or effecting payment when and as provided for in this Chapter.
  - (2) "Failure to Perform" shall mean the failure of the seller to make or the buyer to receive delivery of product in accordance with the requirements set forth in this Chapter 242.
  - (3) "Contract Value" shall mean the amount equal to the settlement price on the last day of trading in a futures contract times one hundred thousand (100,000) times the number of contracts to be delivered.
  - (4) (a) "Party" means a buyer or seller.
    - (b) "Other Party" means the corresponding buyer when the seller has failed to perform and the corresponding seller when the buyer has failed to perform.
- (B) RESPONSIBILITIES OF PARTIES TO THE DELIVERY
- (1) The parties to a delivery shall make commercially reasonable efforts to perform their respective delivery obligations at all times until a party has failed to perform.
- (2) A party which has failed to perform its obligations may no longer perform such obligations.
- (3) When a buyer or a seller has failed to perform, the buyer or the seller, respectively, through which the delivery is effected shall be liable to the other party for any damages awarded pursuant to Section (E) of this Rule and to the Exchange for any assessments made pursuant to Section (D) of this Rule.
- (C) DELIVERY COMMITTEE
- (1) Force majeure and failure to perform shall be determined by a Panel of the Delivery Committee as set forth below.
- (2) The Chairman of the Delivery Committee shall appoint a Panel, which shall consist of three (3) members of the Committee, to review a delivery:
  - (a) when the Chairman of the Delivery Committee is advised by the President of the Exchange or any person designated by the President of the Exchange that it appears that a party to the delivery has failed or may fail to perform;

- (b) upon written request of both the buyer and seller;
- (c) when the President of the Exchange or any person designated by the President of the Exchange requests such appointment; or,
- (d) if either party to the delivery notifies the Exchange that circumstances constituting a force majeure prevent the performance of delivery obligations at the time and site designated by the parties.
- (3) The Chairman of the Delivery Committee shall not appoint to any Panel any person who has a direct or indirect interest in the delivery in question. Each Panel Member shall disclose to the Chairman of the Delivery Committee any such interest which might preclude such Panel Member from rendering a fair and impartial determination. Any Panel so appointed shall retain jurisdiction over the delivery in question until the delivery has been completed or a party has been found to have failed to perform such delivery. Exchange Counsel shall serve as advisor to the Panel.
- (4) The Panel shall meet within one business day of notification as provided in these Rules. Unless good cause for delay exists, within one business day the Panel shall determine whether force majeure exists or whether a buyer or seller has failed to perform its obligations as provided in the Rules, and advise the Market Regulation Department of such determination, and its findings in support thereof immediately. The Panel shall cause its determination to be communicated to the parties to the delivery as expeditiously as possible.
- (5) Absent a declaration of a force majeure, the Panel may, with the consent of both the buyer and the seller, take any one or combination of the following actions as it deems suitable:
  - (a) grant an extension of time not to exceed five days from the date of the scheduled delivery, provided, however, that each delivery shall be completed no later than the fifth business day of the calendar month following the delivery month or the last day of the period provided for late performance of the contract, whichever is earlier;
  - (b) change the delivery site to a site within Mont Belvieu, provided that the seller has product or will have product at such site in time for delivery; or,
  - (c) modify the method of taking delivery.

This Subsection shall not preclude a party of the Exchange from seeking the remedies set forth in Sections (D) and (E) of this Rule.

- (6) Upon a finding of a failed performance, the Panel shall:
  - (a) in the case of a failure to perform by a seller: (i) notify the President, or his designee, of its determination, who shall instruct the Exchange's Clearing House to retain all delivery margins deposited by the seller for the delivery until any amounts determined to be due to the Exchange or the buyer pursuant to Sections (D) or (E) of this Rule have been paid; and (ii) apprise the buyer of the remedies provided pursuant to Section (E) of this Rule.
  - (b) in the case of a failure to perform by a buyer: (i) notify the President, or his designee, of its determination, who shall instruct the Exchange's Clearing House to issue a delivery margin call to the buyer in an amount equal to the original margin then in effect for a Mont Belvieu Spot Ethylene In-Well (PCW) futures contract carried at the Clearing House on the last day of trading in such contract times the number of contracts to be delivered and to retain such delivery margin until any amounts determined to be due to the Exchange or the seller pursuant to Sections (D) and (E) of this Rule have been paid; and (ii) apprise the seller of the remedies provided pursuant to Section (E) of this Rule.
- (7) Upon a finding of force majeure, the Panel may take any one or combination of the following actions as it deems suitable:
  - (a) grant an extension of time for delivery up to two months from the scheduled time;
  - (b) change the delivery site to a site within Mont Belvieu, provided that the seller has deliverable product at the new site or will have deliverable product at such site in time for delivery and such alternate delivery site is acceptable to buyer;
  - (c) modify the method of taking delivery if such method is acceptable to the buyer and such modification is acceptable to seller;

- (d) allocate deliveries;
- (e) modify the method or timing of payment, but not the price; or,
- (f) refer the matter to the Exchange, represented by the Market Regulation Department, for consideration of emergency action pursuant to Exchange Rules.

## (D) EXCHANGE ACTION

- (1) Whenever a buyer or a seller is found by the Panel to have failed to perform a delivery, the Exchange, represented by the Market Regulation Department, shall issue a Notice of Assessment in accordance with subsection (2) of this section (D), specifying the findings of the Panel with respect to the failed delivery.
- (2) When a party has failed to perform, the Market Regulation Department shall issue a Notice of Assessment assessing penalties of twenty percent of the contract value, but not less than \$3,000 per contract, to be paid to the Exchange.
- (3) (a) A party may appeal a Notice of Assessment by filing a Notice of Appeal with the Hearing Registrar of the Exchange and by serving a copy of the same on the Exchange's Market Regulation Counsel, within two business days of receipt of Notice of Assessment from the Market Regulation Department. The party filing the appeal ("Appellant") shall file, within twenty (20) days after filing the Notice of Appeal, a Memorandum of Appeal setting forth the factual and legal basis for the appeal. The Memorandum of Appeal must be filed with the Hearing Registrar and a copy of the same served upon the Exchange's Market Regulation Counsel.
  - (b) The Market Regulation Department may file with the Appellant and the Hearing Registrar an Answering Memorandum to the Memorandum of Appeal within ten (10) days of receipt of that memorandum.
- (4) Failure by the party to file a Notice of Appeal or a Memorandum of Appeal within the time specified in subsection (D)(3)(a) of this Rule shall constitute a waiver, and the penalties shall be paid within five days to the Exchange. Failure to pay such penalties in accordance with this Rule shall subject the party to the sanctions set forth in Chapter 4. In the event a party fails to appeal, or waives the opportunity to appeal, a Notice of Assessment, the Assessment and Findings of the Delivery Committee shall constitute a final disciplinary action of the Exchange.
- (5) Within ten (10) days after receipt of the Market Regulation Department's reply, the Appellant shall be entitled to examine all books, documents and other tangible evidence in possession or under the control of the Exchange that are to be relied upon by the Market Regulation Department or are otherwise relevant to the matter.
- (6) In the event of an appeal by a party, the Market Regulation Department, or its designee, shall appoint a Performance Appeal Panel to hear and decide the appeal. No member of the Performance Appeal Panel may have a direct or indirect interest in the matter under the appeal. Each Panel Member shall disclose to the Market Regulation Department, or its designee, any such interest which might preclude such Panel Member from rendering a fair and impartial determination. The formal Rules of Evidence shall not apply to such appeal, and the Performance Appeal Panel shall be the sole judge with respect to the evidence presented to it. Exchange outside counsel shall advise the Performance Appeal Panel.
- (7) The procedures for the hearing of the appeal before the Performance Appeal Panel shall be as follows:
  - (a) At a date to be set by order of the Performance Appeal Panel, and prior to such hearing, the Appellant and the Market Regulation Department shall furnish each other with a list of witnesses expected to be called at the hearing, and a list of documents and copies thereof expected to be introduced at the hearing.
  - (b) At such hearing, the Appellant may appear personally and may be represented by counsel or other representative of his choice at the appeal.
  - (c) The Market Regulation Department shall be entitled to offer evidence relating to the delivery and shall be entitled to call witnesses and introduce documents in support thereof. It shall be the burden of the Market Regulation Department to demonstrate, by the weight of the evidence, the appropriateness of the sanction set forth in the Notice of Assessment.

- (d) The Appellant shall be entitled to rebut the Market Regulation Department's evidence and shall be entitled to call witnesses and introduce documents in support thereof.
- (e) The Market Regulation Department and the Appellant shall be entitled to cross-examine any witness called by the opposing party at the hearing.
- (f) The Notice of Assessment, the Notice of Appeal, the Memorandum of Appeal, any Answering Memorandum, the stenographic transcript of the appeal, any documentary evidence or other material presented to and accepted by the Performance Appeal Panel by either party shall constitute the record of the hearing. The decision of the Performance Appeal Panel shall be based upon the record of the hearing.
- (g) The Performance Appeal Panel shall have the power to impose a penalty against any person who is within the jurisdiction of the Exchange and whose actions impede the progress of a hearing.
- (h) The Performance Appeal Panel shall issue a written decision in which it may affirm, reduce or waive the charges assessed against the Appellant and shall state the reasons therefor.
- (i) The decision of the Performance Appeal Panel shall be a final decision of the Exchange, and shall constitute a final disciplinary action of the Exchange. The fine is payable on the effective date of the decision or as specified. The effective date shall be fifteen (15) days after a copy of the written decision has been delivered to the Appellant and to the Commission.
- (8) The Performance Appeal Panel shall consider, and make recommendations to the Exchange concerning acceptance or rejection, of any offer of settlement submitted by Appellant. In the case of an offer of settlement, acceptance by the Exchange shall constitute the final disciplinary action of the Exchange.
- (E) ARBITRATION PROCEDURE
- (1) Any claim for damages arising between a buyer and a seller as a result of a delivery pursuant to this contract shall be settled by arbitration in accordance with these Rules.
- (2) Notice of Intent to Arbitrate must be submitted to the Market Regulation Department within three business days of the occurrence upon which the claim is based or the decision of the Petroleum Delivery Committee with respect to a late or failed performance. Failure to submit a Notice of Intent to Arbitrate within the prescribed period will be deemed a waiver of a party's rights to arbitrate such delivery dispute under the special or Regular Arbitration Rules.
- (3) The Arbitration will be governed by Chapter 6 of the Rules with the following exceptions:
  - (a) The Market Regulation Department, or its designee, shall appoint an Arbitration Panel.
  - (b) The Arbitration Panel shall render its award, if any, in writing, which award shall be based on the damages proven by the injured party which may include such other relief which the Panel deems just and equitable.
  - (c) The award of the Arbitration Panel shall be final and binding upon each of the parties to the arbitration.
  - (d) Failure to comply with the terms of the award may subject the party that fails to comply with such terms to disciplinary proceedings pursuant to Chapter 6 Rule 618.

# 242.17 TIME REFERENCES

For purposes of these Rules, unless otherwise specified, times referred to herein shall refer to and indicate New York prevailing time.

## 242.18 DISCLAIMER

Petrochem Wire, LLC ("Petrochem Wire") licenses the New York Mercantile Exchange, Inc. ("NYMEX") to use various Petrochem Wire price assessments in connection with the trading of the contracts.

NEITHER NYMEX AND ITS AFFILIATES NOR PETROCHEM WIRE GUARANTEES THE ACCURACY AND/OR COMPLETENESS OF THE ASSESSMENT OR ANY OF THE DATA

INCLUDED THEREIN. NYMEX AND ITS AFFILIATES AND PETROCHEM WIRE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY ANY PERSON OR ENTITY FROM USE OF THE ASSESSMENT, TRADING BASED ON THE ASSESSMENT, OR ANY DATA INCLUDED THEREIN IN CONNECTION WITH THE TRADING OF THE CONTRACT, OR, FOR ANY OTHER USE. NYMEX AND ITS AFFILIATES AND PETROCHEM WIRE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND HEREBY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE ASSESSMENT OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL NYMEX AND ITS AFFILIATES OR PETROCHEM WIRE HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

#### **CASH MARKET OVERVIEW**

## **Price Source**

The price reporting services utilized for the Mont Belvieu Spot Ethylene In-Well (PCW) Futures contract is Petrochem Wire, LLC ("PCW"). This price source is the major pricing service used in the cash market as well as the over-the-counter (OTC) market for pricing of ethylene, and their methodology is well-known in the petrochemical industry. PCW's prices are widely used and serve as benchmarks in the petrochemical industry. The Exchange has entered into a license agreement with PCW to utilize their price index.

The Exchange is proposing to list a physically delivered Mont Belvieu Spot Ethylene In-Well (PCW) Futures contract. The final settlement price for the contract will be based on the PCW closing price on the last trading day for Ethylene Free-On-Board (FOB) Mont Belvieu. The methodology for ethylene pricing is elucidated on the PCW website at the following link:

http://www.petrochemwire.com/PCW\_Olefins Methodology.pdf

## **Ethylene Description**

Ethylene<sup>1</sup> is an olefinic hydrocarbon recovered from refinery processes or petrochemical processes. It is called a "base chemical" because it is a feedstock for nearly every other petrochemical. Its major and immediate downstream uses are in the production of plastic resins and chemicals that are components of the cosmetic, coatings, ink and industrial cleanser industry.

Ethylene is produced by processing natural gas liquids or naphtha by heating the liquid molecules and "cracking" them. For this reason, ethylene plants are called "steam crackers" or just "crackers" – not to be confused with FCCs, or fluid catalytic crackers, the heart of an oil refinery.

There are 42 steam crackers in the United States. According to PCW, from these plants, a combined total of 50 billion pounds of ethylene is produced primarily in the Petroleum Administration for Defense District III (PADD III) region of the U.S. (Texas and Louisiana). Ethylene is mainly a regional commodity that is transported via pipeline throughout Texas and Louisiana to feed the majority of

<sup>&</sup>lt;sup>1</sup> http://www.eia.doe.gov/glossary/index.cfm?id=E

petrochemical plants in the U.S. There are storage hubs located in Mont Belvieu, Texas and Choctaw Louisiana. Ethylene is stored in underground caverns, similar to the storage of natural gas.

## **Production and Inventories**

We have looked extensively at the U.S. Energy Information Administration (EIA) statistics, and we believe that the EIA data for ethylene are not complete for a number of reasons. First, the EIA data is incomplete for the ethylene market because it does not report information from petrochemical companies. The EIA provides an estimate for net petroleum refinery production of ethylene, but the oil refinery sector accounts for only a small percentage of ethylene production. Most of the ethylene production comes from petrochemical plants that are not part of the EIA survey of petroleum refiners or natural gas processing. Second, the EIA statistics refer to production from petroleum refineries and natural gas processing plants, which account for only a small percentage of ethylene production.

The National Petrochemical and Refiners Association (NPRA) provides the best source of data on the ethylene cash market. The NPRA is a national trade association that is based in Washington D.C. with over 450 members consisting of U.S. refiners and petrochemical manufacturers.

Table 1 below illustrates quarterly production and inventories for ethylene for years 2007 through second quarter 2010 as provided by the NPRA.

Table 1. Selected Statistics for Ethylene: United States Production and Inventories<sup>2</sup>

(Thousand Pounds)

Date	Production	Stocks
1Q2007	13,618,000	1,119,489
2Q2007	14,104,064	763,246
3Q2007	14,230,800	695,648
4Q2007	14,071,009	992,397
2007 Total	56,023,873	
1Q2008	13,538,507	769,655
2Q2008	13,834,077	932,176
3Q2008	11,642,701	915,522
4Q2008	10,708,079	1,089,082

<sup>&</sup>lt;sup>2</sup> NPRA Petrochemical Surveys, Production & Inventory Statistics, Years 2007, 2008, 2009, and First and Second Quarter 2010.

Date	Production	Stocks
2008 Total	49,723,364	
1Q2009	10,924,803	771,137
2Q2009	12,754,085	950,128
3Q2009	13,049,528	504,186
4Q2009	13,117,367	685,919
2009 Total	49,845,783	
1Q2010	12,724,368	509,284
2Q2010	13,070,952	603,771

According to the NPRA data, ethylene stocks were approximately 603.8 million pounds at the end of the second quarter 2010. This level of stocks is equivalent to approximately four days of U.S. ethylene production. The majority of these stocks are stored in Mont Belvieu, Texas, which is the main trading hub and delivery area for the ethylene futures contract. In the past three years, ethylene stocks have varied from a high of 1.1 billion pounds in the first quarter 2007 to a low of 504 million pounds in the third quarter 2009.

The annual production of ethylene was 49.8 billion pounds in 2009, or approximately 4.2 billion pounds per month, which is equivalent to approximately 140 million pounds per day. The majority of this production occurred at plants located within the PADD III region. According to PCW, 95% of the U.S. production capacity is concentrated in Texas and Louisiana, which are located within PADD III near the delivery area for the ethylene futures contract. Furthermore, the ethylene plants in Texas account for approximately 70% of U.S. production capacity.

Further, the NPRA survey list captures data from the large petrochemical producers of ethylene (see Table 2 below). Please note that the ethylene data collected by the EIA is based on EIA's survey of only two petroleum refineries (Exxon Mobil and Shell) whereas the NPRA survey list for ethylene production is collected from nineteen plants, including Exxon Mobil and Shell. This also contributes to the discrepancy between the EIA and NPRA ethylene production data. EIA does not survey petrochemical producers of ethylene as the EIA does not classify petrochemical producers of ethylene as oil refineries or natural gas processing plants.

Table 2. NPRA Ethylene Survey Companies<sup>3</sup>

BASF Corporation	INEOS
Chevron Phillips Chemical Company, LP	Koch Supply & Trading
E. I. DuPont de Nemours & Co. Inc.	MarkWest Energy Partners L.P
Eastman Chemical Company	SABIC Innovative Plastics
Equistar/LyondellBasell Industries	Sasol North America
ExxonMobil Chemical Company	Shell Chemical Company
Flint Hills Resources, L.P.	The Dow Chemical Company
Formosa Plastics Corporation, USA	The Williams Companies
Huntsman Company, LLC	Westlake Chemical Corporation
Huntsman Polymers Corporation	

Further, there are several feedstocks that are used as inputs for production of ethylene: ethane, propane, butane, and natural gasoline. As background, it takes more than a pound of feedstock to produce a pound of ethylene. This can vary depending on the production plant, but these are widely used figures for pounds of feedstock needed per pound of ethylene. Provided in Table 3 below are the respective conversion factors for each of ethane, propane, butane and natural gasoline needed to produce a pound of ethylene.

Table 3.

Ethane	1.289
Propane	2.381
Butane	2.504
Natural gasoline (C5 is in the NPRA category of "Heavier than C4")	3.247

Source: PCW

## Import and Export of Ethylene

In addition, the NPRA has detailed statistics on imports and exports of ethylene. According to the NPRA, in 2009, there was a net export trade balance for ethylene of approximately 118 million pounds. As of the first quarter of 2010, there was a net export trade balance for ethylene of approximately 89 million pounds. Net export data represents a fraction of the production volume in the U.S. Table 4 below

<sup>&</sup>lt;sup>3</sup> National Petrochemicals and Refiners Association, NPRA Petrochemical Surveys – 2<sup>nd</sup> Quarter 2010.

illustrates the monthly trade data for ethylene. Please note that ethylene is not traded globally due to transportation difficulties from the U.S. with no functioning import terminals and only one export terminal.

Table 4. Selected Statistics for Ethylene: NPRA Trade Data<sup>4</sup> (Thousand Pounds)

	2009			2010		
<u>Month</u>	<u>Imports</u>	<u>Exports</u>	Net Exports	<u>Imports</u>	<u>Exports</u>	Net Exports
Jan	838.6	396.8	(441.8)	1,440.9	60,221.8	58,780.9
Feb	1,069.4	807.4	(262.0)	1,461.5	503.7	(957.8)
Mar	1,031.5	5,600.6	4,569.1	1,163.5	33,021.9	31,858.4
Apr	1,444.1	612.2	(831.9)	-	-	
May	1,071.7	759.8	(311.9)	-	-	
Jun	1,247.8	993.6	(254.1)	-	-	
Jul	1,298.7	13,465.3	12,166.5	-	-	
Aug	1,334.7	31,133.0	29,798.3	-	-	
Sep	-	30,930.2	30,930.2	-	-	
Oct	4.5	10,172.4	10,167.9	-	-	
Nov	4,163.2	28,474.0	24,310.8	-	-	
Dec	1,260.9	9,815.3	8,554.4	-	-	
Total	14,765.1	133,160.8	118,395.6	4,065.9	93,747.4	89,681.5

# **Market Participants**

The market participation in Mont Belvieu is diverse, and the participants include 30 to 40 commercial companies. A partial listing is as follows:

Refiners/Producers	Traders/End Users	<u>Brokers</u>	Financial (Swaps)
ConocoPhillips	Louis Dreyfus	Lozier Energy	Barclays
Valero	Vitol	Liquidity Partners	JPMorgan Chase
Shell	Glencore	MF Global	Goldman Sachs
ExxonMobil	Muehlstein	ICAP	Morgan Stanley
BP	Trafigura		
Total	Cargill		
Koch Petroleum	Vinmar Trading		
Lyondell	Marubeni		
Dow Chemical			
Lyondell Basell			
Ineos (formerly BP)	•		
Westlake Chemical			

<sup>&</sup>lt;sup>4</sup> NPRA Selected Petrochemical Statistics, U.S. Trade Data, January 2009 – March 2010.

## Analysis of Deliverable Supply

In its analysis of deliverable supply, the Exchange has focused on U.S. ethylene production data as the main source of deliverable supply. Due to the variability of the stocks, we have determined not to include ethylene stocks in our analysis of the monthly deliverable supply estimate.

Further, we prefer not to adjust the deliverable supply estimate based on the spot availability of ethylene because spot market liquidity is not restrictive and tends to vary depending on the market fundamentals of demand and supply. In addition, the spot trading volume are estimates of reported deals that are done by market participants, and many deals are done confidentially, as there is no requirement to report spot deals. As a market matures, the spot trading volume tends to increase. Therefore, we believe that it is not necessary to adjust the deliverable supply estimate on the basis of the spot trading because this does not restrict the deliverable supply and spot trading volume can expand to allow for more supply to flow if needed in the spot market.

For the year 2009, the monthly U.S. ethylene production was approximately 4.2 billion pounds. If we use the conservative estimate by limiting our estimate and using the Texas production capacity of ethylene at 70% of U.S. ethylene production, this represents a monthly production estimate of approximately 2.9 billion pounds of ethylene (equivalent to 29,000 contracts).

The Exchange has set the position limit at 1,500 contract units, which is equivalent to 150 million pounds of ethylene (each contract is 100,000 pounds in size). This position limit is equivalent to 5% of the monthly ethylene production in Texas of approximately 2.9 billion pounds. We believe that the position limit of 1,500 contract units is a reasonable initial spot month position limit for this contract.