

SUBMISSION COVER SHEET

IMPORTANT: Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): **19-184 (5 of 5)**

Organization: **The Board of Trade of the City of Chicago, Inc. ("CBOT")**

Filing as a: DCM SEF DCO SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): **5/23/2019**

Filing Description: **Initial Listing of Five (5) Fertilizer Futures Contracts**

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

- | | | |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Notification | § 40.6(d) |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change | § 40.10(h) |

Rule Numbers:

New Product

Please note only ONE product per Submission.

- | | | |
|-------------------------------------|---------------------------------------|------------|
| <input checked="" type="checkbox"/> | Certification | § 40.2(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.23(a) |
| <input type="checkbox"/> | Certification Swap Class | § 40.2(d) |
| <input type="checkbox"/> | Approval | § 40.3(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.23(b) |
| <input type="checkbox"/> | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/> | Swap Submission | § 39.5 |

Official Product Name: Urea (Granular) FOB US Gulf, Urea (Granular) FOB Egypt, Urea (Granular) CFR Brazil, DAP FOB NOLA, and MAP CFR Brazil Futures Contracts

Product Terms and Conditions (product related Rules and Rule Amendments)

- | | | |
|--------------------------|---|----------------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Certification Made Available to Trade Determination | § 40.6(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.24(a) |
| <input type="checkbox"/> | Delisting (No Open Interest) | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Approval Made Available to Trade Determination | § 40.5(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.24(c) |
| <input type="checkbox"/> | Approval Amendments to enumerated agricultural products | § 40.4(a), § 40.5(a) |
| <input type="checkbox"/> | "Non-Material Agricultural Rule Change" | § 40.4(b)(5) |
| <input type="checkbox"/> | Notification | § 40.6(d) |

Official Name(s) of Product(s) Affected:

Rule Numbers:

May 23, 2019

VIA ELECTRONIC PORTAL

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

Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Five (5) Fertilizer Futures Contracts. CBOT Submission No. 19-184 (5 of 5)

Dear Mr. Kirkpatrick:

The Board of Trade of the City of Chicago, Inc. ("CBOT" or "Exchange") hereby notifies the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying the initial listing of five (5) fertilizer futures contracts: Urea (Granular) FOB US Gulf Futures, Urea (Granular) FOB Egypt Futures, Urea (Granular) CFR Brazil Futures, DAP FOB NOLA Futures, and MAP CFR Brazil Futures (the "Contracts") for trading on the CME Globex electronic trading platform ("CME Globex") and for submission for clearing via CME ClearPort effective on Sunday, June 9, 2019 for trade date Monday, June 10, 2019 as provided in the table below.

<i>Contract Title/Commodity Code/Rulebook Chapter</i>	<i>Commodity Code</i>	<i>CBOT Rulebook Chapter</i>
Urea (Granular) FOB US Gulf Futures	UFV	41
Urea (Granular) FOB Egypt Futures	UFE	42
Urea (Granular) CFR Brazil Futures	UFB	43
DAP FOB NOLA Futures	DFN	47
MAP CFR Brazil Futures	MFC	49

In what follows:

- Section 1 summarizes contract terms and conditions.
- Section 2 presents the relevant pricing sources used for settlement purposes.
- Section 3 addresses compliance of the Contract terms and conditions certified herein with the pertinent Core Principles for Designated Contract Markets ("Core Principles") set forth in the Act.

The CBOT Rulebook chapters governing contract terms and conditions for all other Contracts certified herein appear in Appendixes A through E. Appendix F addresses the applicable position limits and reportable position levels pursuant to Chapter 5 of the CBOT Rulebook and Appendix G provides the market overview and analysis of deliverable supply in support of the related position limits. Appendix H sets forth the applicable CME Globex non-reviewable trading ranges as prescribed in CBOT Rule 588.H.

Section 1: Contract Terms and Conditions

Contract Specifications:

<i>Contract Title/Commodity Code/Rulebook Chapter</i>	Urea (Granular) FOB US Gulf Futures	Commodity Code UFV	CBOT Rulebook Chapter 41
	Urea (Granular) FOB Egypt Futures	UFE	42
	Urea (Granular) CFR Brazil Futures	UFB	43
	DAP FOB NOLA Futures	DFN	47
	MAP CFR Brazil Futures	MFC	49
<i>Trading Unit</i>	Urea (Granular) FOB US Gulf Futures	100 tons	
	Urea (Granular) FOB Egypt Futures	100 metric tons	
	Urea (Granular) CFR Brazil Futures	100 metric tons	
	DAP FOB NOLA Futures	100 tons	
	MAP CFR Brazil Futures	100 metric tons	
<i>Listing Schedule</i>	12 consecutive months		
<i>Initial Listing Months</i>	July 2019 – June 2020		
<i>Minimum Price Increments</i>	Urea (Granular) FOB US Gulf Futures	\$0.25/ton (\$25/contract)	
	Urea (Granular) FOB Egypt Futures	\$0.25/mt (\$25/contract)	
	Urea (Granular) CFR Brazil Futures	\$0.25/mt (\$25/contract)	
	DAP FOB NOLA Futures	\$0.25/ton (\$25/contract)	
	MAP CFR Brazil Futures	\$0.25/mt (\$25/contract)	
<i>Termination of Trading</i>	January – November contract months: Trading terminates on the last Thursday of the contract month. If this is not a U.S. or London business day, trading terminates on the prior business day. December contract month: Trading terminates on the Thursday prior to December 26th. If this is not a U.S. or London business day, trading terminates on the prior business day.		
<i>Delivery</i>	Delivery is by cash settlement by reference to the Floating price shall be based on the arithmetic average of midpoint price assessments published weekly by both ICIS and Profercy during the contract month.		
<i>Position Limits and Reportable Levels</i>		Spot Month Position Limits	All-Month Month Position Limits
	Urea (Granular) FOB US Gulf Futures	400	1,000
	Urea (Granular) FOB Egypt Futures	400	1,000
	Urea (Granular) CFR Brazil Futures	400	1,000
	DAP FOB NOLA Futures	200	1,000
	MAP CFR Brazil Futures	200	1,000
<i>Block Trade Minimum Threshold</i>	2 contracts		
<i>CME Globex Matching Algorithm</i>	F: First In, First Out (FIFO)		

As noted, CBOT is also notifying the CFTC that it is self-certifying block trading in the Contracts with a minimum block threshold level of two (2) contracts, which represents 200 tons or metric tons of fertilizer depending on the trading unit.

The Exchange is also self-certifying pre-execution communication via the G-Cross and R-Cross protocols in the Contracts during CME Globex electronic trading hours as currently noted in CBOT Rule 539.C. (“Crossing Protocols Table”).

Trading and Clearing Hours:

CME Globex and CME ClearPort	Sunday - Friday 5:00 p.m. - 4:00 p.m. Central Time/CT with a 60-minute break each day beginning at 4:00 p.m. CT
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Exchange Fees:

Level	Account Owner	Execution Type	Venue/Transaction Type	Fee
Individual Member				
1	Individual Members	Member Account Owner	CME Globex	\$3.50
			EFP/EFR/Block	\$4.00
	Individual Delegates	Delegate Trading Own Account	CME Globex	\$4.00
			EFP/EFR/Block	\$4.50
Equity Members (Individual Equity members, Clearing Firms and Equity Firms)				
2	Equity Members ¹	Member or Delegate	CME Globex	\$3.50
			EFP/EFR/Block	\$4.00
		Non Member	CME Globex	\$3.50
			EFP/EFR/Block	\$4.00
	Rule 106.S. Family of Funds Equity Member Firms	Member, Delegate or Non Member	CME Globex	\$3.50
			EFP/EFR/Block	\$4.00

¹ Clearing Closely Held Corporate Members & Sole Proprietors, Rule 106.J. Equity Closely Held Corporate Members & Rule 106.I. Affiliate Equity Member Firms, Individual Equity Members (other member/delegate executing), Clearing FCMs, Rule 106.J. Equity FCMs, Clearing Corporate Members, Rule 106.J. Equity Corporate Members & Rule 106.I. Affiliate Equity Member Firm (Affiliate of Clearing FCM, Clearing Corporate Member or Rule 106.J Equity FCM or Equity Corporate Member), Rule 106.I. Affiliate Membership Umbrella - Qualified Affiliate - Unlimited Number of Affiliates.

(Execution Not a Factor in Membership Types Below)

Level	Account Owner	Execution Type	Venue/Transaction Type	Fee
Trading Members (Individual Non-Equity Members and Non-Equity Member Firms)				
3	Individual Non-Equity Members (other member/delegate executing); Rule 106.H. Corporate Trading Firms; Rule 106.H. Trading FCMs; & Rule 106.I. Affiliate Trading Member Firms	Member, Delegate or Non Member	CME Globex	\$4.00
			EFP/EFR/Block	\$4.50
	Individual Delegates (Other Member or Delegate executing the trade) & Rule 106.I. Affiliate Trading Member Firms	Member, Delegate or Non Member	CME Globex	\$4.00
			EFP/EFR/Block	\$4.50
	Rule 106.S. Family of Funds Trading Member Firms	Member, Delegate or Non Member	CME Globex	\$4.00
			EFP/EFR/Block	\$4.50
Electronic Corporate Member Firm				
4	Rule 106.R Electronic Corporate Member Firms (For other than CME Globex - Non-Member rates apply)	Member, Delegate or Non Member	CME Globex	\$4.50
Non Members				
5	International Incentive Program (IIP) and International Volume Incentive Program (IVIP) Participants (Open Outcry at same rate as CME Globex for Interest Rate products only)	Member, Delegate or Non Member	CME Globex	\$4.50
	Central Bank Incentive Program (CBIP), Emerging Markets Bank Incentive Program (EMBIP), Latin American Fund Manager Incentive Program (FMIP) Participants (For other than CME Globex - Non-Member rates apply)	Member, Delegate or Non Member	CME Globex	\$4.50
	Non-Members	N/A	CME Globex	\$4.50
			EFP/EFR/Block	\$5.00

CBOT Processing Fees	Fee
Exchange Fees for Non Trades (Member/Delegate/Non-Member)	\$4.00
Exchange Fees for Non-Trades - Expired Options	\$0.10

Facilitation Fee	\$0.40
Give-Up Surcharge	\$0.06
Brokerage Fees – with discretion 106F within/106D or 106F outside	\$0.00/\$0.15
Brokerage Fees – without discretion Member or 106F within/106D, 106F outside or CMACE Permit Holder	\$0.04/\$0.17
Position Adjustment/Position Transfer	\$0.10

Section 2: Price Reporting Agencies

The Exchange will settle each of the Contracts on two different weekly assessments, as listed below, from two price reporting agencies: ICIS and Profercy. The final settlement price is based on these weekly assessments for each contract month. The weekly prices from both sources are listed, and the highest overall price (regardless of source) per week and the lowest overall price (regardless of source) per week are removed from the data set. The arithmetic average of the remaining data points is calculated to represent the weekly average price and used to settle the contract.

Contract Title	ICIS Assessment Name	Profercy Assessment Name
Urea (Granular) FOB US Gulf Futures	Urea granular bulk (spot): US Gulf ps ton fob	Urea granular bulk (spot): US Gulf pst fob to 30 days
Urea (Granular) FOB Egypt Futures	Urea granular bulk (spot) Egypt FOB	Urea granular bulk (spot): Egypt fob
Urea (Granular) CFR Brazil Futures	Urea granular bulk (spot) Brazil CFR	Urea granular bulk (spot): Brazil cfr
DAP FOB NOLA Futures	DAP Bulk: Nola ps ton fob barge	DAP \$ Bulk: NOLA fob barge (short ton)
MAP CFR Brazil Futures	MAP bulk Brazil CFR sight	MAP \$ Bulk - Brazil cfr (11-52)

Section 3: Compliance with Core Principles

The Exchange reviewed the designated contract market core principles (“Core Principles”) as set forth in the Commodity Exchange Act (“CEA” or “Act”) and identified that the following Core Principles may be impacted by this initiative as follows:

- **Compliance with Rules:** Trading in the Contracts will be subject to all CBOT Rules, including prohibitions against fraudulent, noncompetitive, unfair and abusive practices as outlined in CBOT Rule Chapter 4, the Exchange’s trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the CBOT Rulebook, and the dispute resolution and arbitration procedures of CBOT Rule Chapter 6. As with all products listed for trading on one of CME Group’s designated contract markets, trading activity in the Contract will be subject to monitoring and surveillance by CME Group’s Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.
- **Contracts not Readily Subject to Manipulation:** The Contracts are based on a cash price series that is reflective of the underlying cash market and is commonly relied on and used as a reference price by cash market brokers and commercial market participants.
- **Prevention of Market Disruption:** Trading in the Contracts will be subject to the rules of the Exchange, which include prohibitions on manipulation, price distortion, and disruption to the cash settlement process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the option contract proposed herein will be subject to monitoring and surveillance by CME Group’s Market Regulation Department.

- **Position Limitations or Accountability:** The speculative position limits for the Contracts as demonstrated in this submission are consistent with the Commission's guidance.
- **Emergency Authority:** As with all CME Group futures and options product, the Exchange shall have full authority to act appropriately and as necessary in emergency situations.
- **Availability of General Information:** The Exchange will publish on its website information in regard to contract specifications, terms, and conditions, as well as daily trading volume, open interest, and price information for the Contracts. The Exchange will issue a Special Executive Report ("SER") regarding the launch of the Contracts. The SER will also be posted on the CME Group website.
- **Daily Publication of Trading Information:** The Exchange will publish contract trading volumes, open interest levels, and price information daily on its website and through quote vendors for the Contracts.
- **Execution of Transactions:** The Contracts will be listed for trading on the CME Globex and for submission of clearing through the CME ClearPort platform. The CME Globex trading venue provides for competitive and open execution of transactions and affords the benefits of reliability and global connectivity.
- **Trade Information:** All requisite trade information for the Contracts will be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.
- **Financial Integrity of Contracts:** The Contracts will be cleared by the CME Clearing, a derivatives clearing organization registered with the CFTC and subject to all CFTC Regulations related thereto.
- **Protection of Market Participants:** CBOT Rulebook Chapters 4 and 5 set forth multiple prohibitions that preclude intermediaries from disadvantaging their customers. These rules apply to trading in all of the Exchange's competitive trading venues.
- **Disciplinary Procedures:** Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in the Contracts will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in these products are identified.
- **Dispute Resolution:** Disputes with respect to trading in the Contract will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all non-members to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a non-member is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.6(a), the Exchange hereby certifies that the listing of the Contracts complies with the Act, including regulations under the Act. There were no substantive opposing views to this proposal.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

Should you have any questions concerning the above, please contact the undersigned at 212-299-2200 or via e-mail at CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments: Appendix A – CBOT Rulebook Chapter 41
Appendix B – CBOT Rulebook Chapter 42
Appendix C – CBOT Rulebook Chapter 43
Appendix D – CBOT Rulebook Chapter 47
Appendix E – CBOT Rulebook Chapter 49
Appendix F – Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the CBOT Rulebook (attached under separate cover)
Appendix G – Market Overview and Analysis of Deliverable Supply
Appendix H – CBOT Rule 588.H. – (“Globex Non-Reviewable Trading Ranges”) Table

Appendix A

Chapter 41 Urea (Granular) FOB US Gulf Futures

41100. SCOPE OF CHAPTER

The provisions of these rules shall apply to all futures contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

41101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month shall be based on price assessments for "Urea granular bulk (spot): US Gulf ps ton fob" published weekly by ICIS during the contract month and price assessments for "Urea granular bulk (spot): US Gulf pst fob to 30 days" published weekly by Profercy during the contract month, as described in paragraph (A) below.

Notwithstanding the above, the Floating Price for all listed December contract months shall be based on price assessments published up to and including the last trading day of the December contract month.

(A) For each set of weekly data published by ICIS and Profercy, comprising both a high and a low price from each source, the highest overall price (or in the case of multiple prices, one of the highest prices) and the lowest overall price (or in the case of multiple prices, one of the lowest prices) shall be removed from the data set, subject to paragraph (B). The arithmetic average of the remaining data points shall be calculated as the weekly average price. The Floating Price shall be the arithmetic average of the weekly average prices determined from price assessments published during the contract month.

(B) Should either ICIS or Profercy, for any reason, publish a single price in respect of a weekly price assessment, such price shall be used twice in the formulation described in paragraph (A) in order to determine the weekly average price. Should either ICIS or Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, the weekly average price shall be determined as the arithmetic average of the remaining published prices. Should both ICIS and Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, no weekly average price shall be recorded for that week, and that week shall not be included in calculation of the Floating Price.

41102. TRADING SPECIFICATIONS

Contracts shall be listed for a series of contract months. The number of months open for trading at any given time shall be determined by the Exchange.

41102.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

41102.B. Trading Unit

The contract size shall be 100 short tons. Each contract shall be valued as the contract size multiplied by the settlement price.

41102.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per ton. The minimum price fluctuation shall be \$0.25 per ton. The minimum fluctuation in respect on the Floating Price shall be \$0.01 per ton. There shall be no maximum price fluctuation.

41102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

41102.E. Termination of Trading

Trading shall terminate on the last Thursday of the contract month. If that day is not a business day, trading shall terminate on the preceding business day. If that day is not an Exchange business day

or a London business day, trading shall terminate on the preceding Exchange business day that is also a London business day.

Notwithstanding the above, all listed December contract months shall terminate on the Thursday immediately preceding December 26, unless that day is not a business day in which case all listed December contract months shall terminate on the preceding business day. As such, in no circumstance shall a December contract month terminate on December 26.

41103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

Appendix B

Chapter 42 Urea (Granular) FOB Egypt Futures

42100. SCOPE OF CHAPTER

The provisions of these rules shall apply to all futures contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

42101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month shall be based on price assessments for "Urea granular bulk (spot) Egypt FOB" published weekly by ICIS during the contract month and price assessments for "Urea granular bulk (spot): Egypt fob" published weekly by Profercy during the contract month, as described in paragraph (A) below.

Notwithstanding the above, the Floating Price for all listed December contract months shall be based on price assessments published up to and including the last trading day of the December contract month.

(A) For each set of weekly data published by ICIS and Profercy, comprising both a high and a low price from each source, the highest overall price (or in the case of multiple prices, one of the highest prices) and the lowest overall price (or in the case of multiple prices, one of the lowest prices) shall be removed from the data set, subject to paragraph (B). The arithmetic average of the remaining data points shall be calculated as the weekly average price. The Floating Price shall be the arithmetic average of the weekly average prices determined from price assessments published during the contract month.

(B) Should either ICIS or Profercy, for any reason, publish a single price in respect of a weekly price assessment, such price shall be used twice in the formulation described in paragraph (A) in order to determine the weekly average price. Should either ICIS or Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, the weekly average price shall be determined as the arithmetic average of the remaining published prices. Should both ICIS and Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, no weekly average price shall be recorded for that week, and that week shall not be included in calculation of the Floating Price.

42102. TRADING SPECIFICATIONS

Contracts shall be listed for a series of contract months. The number of months open for trading at any given time shall be determined by the Exchange.

42102.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

42102.B. Trading Unit

The contract size shall be 100 metric tons. Each contract shall be valued as the contract size multiplied by the settlement price.

42102.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per ton. The minimum price fluctuation shall be \$0.25 per ton. The minimum fluctuation in respect on the Floating Price shall be \$0.01 per ton. There shall be no maximum price fluctuation.

42102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

42102.E. Termination of Trading

Trading shall terminate on the last Thursday of the contract month. If that day is not a business day, trading shall terminate on the preceding business day. If that day is not an Exchange business day or a London business day, trading shall terminate on the preceding Exchange business day that is also a London business day.

Notwithstanding the above, all listed December contract months shall terminate on the Thursday immediately preceding December 26, unless that day is not a business day in which case all listed December contract months shall terminate on the preceding business day. As such, in no circumstance shall a December contract month terminate on December 26.

42103.

FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

Appendix C

Chapter 43

Urea (Granular) CFR Brazil Futures

43100.

SCOPE OF CHAPTER

The provisions of these rules shall apply to all futures contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

43101.

CONTRACT SPECIFICATIONS

The Floating Price for each contract month shall be based on price assessments for "Urea granular bulk (spot) Brazil CFR" published weekly by ICIS during the contract month and price assessments for "Urea granular bulk (spot): Brazil cfr" published weekly by Profercy during the contract month, as described in paragraph (A) below.

Notwithstanding the above, the Floating Price for all listed December contract months shall be based on price assessments published up to and including the last trading day of the December contract month.

(A) For each set of weekly data published by ICIS and Profercy, comprising both a high and a low price from each source, the highest overall price (or in the case of multiple prices, one of the highest prices) and the lowest overall price (or in the case of multiple prices, one of the lowest prices) shall be removed from the data set, subject to paragraph (B). The arithmetic average of the remaining data points shall be calculated as the weekly average price. The Floating Price shall be the arithmetic average of the weekly average prices determined from price assessments published during the contract month.

(B) Should either ICIS or Profercy, for any reason, publish a single price in respect of a weekly price assessment, such price shall be used twice in the formulation described in paragraph (A) in order to determine the weekly average price. Should either ICIS or Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, the weekly average price shall be determined as the arithmetic average of the remaining published prices. Should both ICIS and Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, no weekly average price shall be recorded for that week, and that week shall not be included in calculation of the Floating Price.

43102.

TRADING SPECIFICATIONS

Contracts shall be listed for a series of contract months. The number of months open for trading at any given time shall be determined by the Exchange.

43102.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

43102.B. Trading Unit

The contract size shall be 100 metric tons. Each contract shall be valued as the contract size multiplied by the settlement price.

43102.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per ton. The minimum price fluctuation shall be \$0.25 per ton. The minimum fluctuation in respect on the Floating Price shall be \$0.01 per ton. There shall be no maximum price fluctuation.

43102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

43102.E. Termination of Trading

Trading shall terminate on the last Thursday of the contract month. If that day is not a business day, trading shall terminate on the preceding business day. If that day is not an Exchange business day or a London business day, trading shall terminate on the preceding Exchange business day that is also a London business day.

Notwithstanding the above, all listed December contract months shall terminate on the Thursday immediately preceding December 26, unless that day is not a business day in which case all listed December contract months shall terminate on the preceding business day. As such, in no circumstance shall a December contract month terminate on December 26.

43103.

FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

Appendix D

Chapter 47 DAP FOB NOLA Futures

47100.

SCOPE OF CHAPTER

The provisions of these rules shall apply to all futures contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

47101.

CONTRACT SPECIFICATIONS

The Floating Price for each contract month shall be based on price assessments for "DAP Bulk: Nola ps ton fob barge" published weekly by ICIS during the contract month and price assessments for "DAP \$ Bulk: NOLA fob barge (short ton)" published weekly by Profercy during the contract month, as described in paragraph (A) below.

Notwithstanding the above, the Floating Price for all listed December contract months shall be based on price assessments published up to and including the last trading day of the December contract month.

(A) For each set of weekly data published by ICIS and Profercy, comprising both a high and a low price from each source, the highest overall price (or in the case of multiple prices, one of the highest prices) and the lowest overall price (or in the case of multiple prices, one of the lowest prices) shall be removed from the data set, subject to paragraph (B). The arithmetic average of the remaining data points shall be calculated as the weekly average price. The Floating Price shall be the arithmetic average of the weekly average prices determined from price assessments published during the contract month.

(B) Should either ICIS or Profercy, for any reason, publish a single price in respect of a weekly price assessment, such price shall be used twice in the formulation described in paragraph (A) in order to determine the weekly average price. Should either ICIS or Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, the weekly average price shall be determined as the arithmetic average of the remaining published prices. Should both ICIS and Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, no weekly average price shall be recorded for that week, and that week shall not be included in calculation of the Floating Price.

47102. TRADING SPECIFICATIONS

Contracts shall be listed for a series of contract months. The number of months open for trading at any given time shall be determined by the Exchange.

47102.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

47102.B. Trading Unit

The contract size shall be 100 short tons. Each contract shall be valued as the contract size multiplied by the settlement price.

47102.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per ton. The minimum price fluctuation shall be \$0.25 per ton. The minimum fluctuation in respect on the Floating Price shall be \$0.01 per ton. There shall be no maximum price fluctuation.

47102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

47102.E. Termination of Trading

Trading shall terminate on the last Thursday of the contract month. If that day is not a business day, trading shall terminate on the preceding business day. If that day is not an Exchange business day or a London business day, trading shall terminate on the preceding Exchange business day that is also a London business day.

Notwithstanding the above, all listed December contract months shall terminate on the Thursday immediately preceding December 26, unless that day is not a business day in which case all listed December contract months shall terminate on the preceding business day. As such, in no circumstance shall a December contract month terminate on December 26.

47103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be

Appendix E

**Chapter 49
MAP CFR Brazil Futures**

49100. SCOPE OF CHAPTER

The provisions of these rules shall apply to all futures contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

49101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month shall be based on price assessments for "MAP bulk Brazil CFR sight" published weekly by ICIS during the contract month and price assessments for "MAP \$ Bulk - Brazil cfr (11-52)" published weekly by Profercy during the contract month, as described in paragraph (A) below.

Notwithstanding the above, the Floating Price for all listed December contract months shall be based on price assessments published up to and including the last trading day of the December contract month.

(A) For each set of weekly data published by ICIS and Profercy, comprising both a high and a low price from each source, the highest overall price (or in the case of multiple prices, one of the highest prices) and the lowest overall price (or in the case of multiple prices, one of the lowest prices) shall be removed from the data set, subject to paragraph (B). The arithmetic average of the remaining data points shall be calculated as the weekly average price. The Floating Price shall be the arithmetic average of the weekly average prices determined from price assessments published during the contract month.

(B) Should either ICIS or Profercy, for any reason, publish a single price in respect of a weekly price assessment, such price shall be used twice in the formulation described in paragraph (A) in order to determine the weekly average price. Should either ICIS or Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, the weekly average price shall be determined as the arithmetic average of the remaining published prices. Should both ICIS and Profercy, for any reason, fail to publish any price in respect of a weekly price assessment, no weekly average price shall be recorded for that week, and that week shall not be included in calculation of the Floating Price.

49102. TRADING SPECIFICATIONS

Contracts shall be listed for a series of contract months. The number of months open for trading at any given time shall be determined by the Exchange.

49102.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

49102.B. Trading Unit

The contract size shall be 100 metric tons. Each contract shall be valued as the contract size multiplied by the settlement price.

49102.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per ton. The minimum price fluctuation shall be \$0.25 per ton. The minimum fluctuation in respect on the Floating Price shall be \$0.01 per ton. There shall be no maximum price fluctuation.

49102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

49102.E. Termination of Trading

Trading shall terminate on the last Thursday of the contract month. If that day is not a business day, trading shall terminate on the preceding business day. If that day is not an Exchange business day or a London business day, trading shall terminate on the preceding Exchange business day that is also a London business day.

Notwithstanding the above, all listed December contract months shall terminate on the Thursday immediately preceding December 26, unless that day is not a business day in which case all listed December contract months shall terminate on the preceding business day. As such, in no circumstance shall a December contract month terminate on December 26.

49103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

Appendix F
CBOT Rulebook
Chapter 5
(“Trading Qualifications and Practices”)

Position Limits, Position Accountability and Reportable Level Table

(attached under separate cover)

Appendix G
Market Overview and Analysis of Deliverable Supply

Urea (Granular) FOB US Gulf Futures

Market Overview:

Urea is a fertilizer that is commonly used in the agricultural industry. Urea is a combination of ammonia, carbon dioxide and oxygen, and is comprised of 46% nitrogen. Urea can be purchased in two forms: prilled or granulated. The CBOT futures contract, which is based on two assessments from price reporting agencies, includes only granular urea and excludes prilled urea.

Urea is one of the most commonly used nitrogen fertilizers, and is produced around the world. Currently, over 170 million metric tons of urea is produced annually,¹ though global production capacity is expected to increase. The largest increases in overall fertilizer capacity will come from urea. The largest producers of urea – China and India – are also the largest consumers of urea, which means only about a quarter of urea produced around the world is traded across border. Global trade of urea, which is about 50 million metric tons annually, is concentrated among the top few exporting countries, mostly found in the Black Sea and Middle Eastern regions.

The United States is one of the largest importers of urea globally. The agricultural sector in the United States relies on imported fertilizer – namely nitrogen products like urea – to continually increase yield in field crops. The other major importers of urea include India and Brazil. Demand is expected to increase and supply is expected to stabilize in the next few years. It takes approximately four years to build out urea plants, so aside from those already known to be under construction (a few plants in Brazil and in Iran), global production and supply is not expected to grow significantly. However, as the United States and Brazil continue to plant large acreage for agricultural production, demand will continue to grow.

The Urea (Granular) FOB US Gulf Futures contract is based on two aggregated assessments from price reporting agencies: Profercy and ICIS.

Urea Production/Imports:

The assessments used by Profercy and ICIS cover both imported and domestically produced urea. However, the United States produces a negligible amount of urea when compared to imports, and no good data are available on US production. Therefore, deliverable supply will focus solely on US urea imports.

On average, the United States makes up about 15-20% of global urea imports. As of only a few years ago, it was the largest importer of urea in the world. As Brazil’s agricultural growth has exploded, so has its need for fertilizer. The US

¹ [Fertilizer Industry Handbook](#).

imports from a wide variety of suppliers, mainly located in the Middle East and the Black Sea. The United States also relies on Canada for urea supply.

US Urea Suppliers (MT) 2018	
Qatar	1,393,121
Canada	755,903
Saudi Arabia	681,444
Russia	520,694
Algeria	422,285
United Arab Emirates	330,117
Trinidad and Tobago	223,944
Oman	187,566
Egypt	163,671
Netherlands	161,936
WORLD	5,546,196

The following table aggregates all the suppliers to the US into one table and breaks down the imports on a monthly basis over the last three years.²

US Urea Imports (Short Tons)				
	2016	2017	2018	AVERAGE
January	649,212	1,076,097	637,464	787,591
February	621,407	1,237,867	730,650	863,308
March	1,425,179	1,025,663	912,216	1,121,019
April	1,323,043	746,425	802,951	957,473
May	768,184	502,975	532,027	601,062
June	365,881	352,964	372,609	363,818
July	238,601	124,938	135,127	166,222
August	285,878	242,658	249,158	259,232
September	375,970	292,730	348,360	339,020
October	630,748	422,092	473,809	508,883
November	406,322	359,086	371,398	378,935
December	782,403	330,752	547,802	553,652
TOTAL	7,872,828	6,714,247	6,113,572	6,900,216
AVERAGE	656,069	559,521	509,464	575,018

The assessments used to settle the fertilizer contract look at urea imported into the US Gulf. The U.S. Census Bureau provides monthly data broken down by import port, which is found in the table below. While deliverable supply is based on three years of data, 2015 was included to show that parts of 2018 were historically low, though not the case in each month, based on increases in domestic production.

US Urea Imports (Gulf Districts) (Short Tons)					
	2015	2016	2017	2018	3-Year AVERAGE
January	704,584	466,368	876,916	478,590	607,291

² USDA, Foreign Agricultural Service, Global Agricultural Trade System (GATS).

February	732,250	393,693	936,789	483,334	604,605
March	832,029	1,143,500	756,097	683,673	861,090
April	487,072	962,719	484,423	505,247	650,796
May	272,091	404,442	200,054	253,885	286,127
June	244,245	234,130	159,907	193,369	195,802
July	553,252	100,245	25,590	1,815	42,550
August	450,194	152,594	74,692	125,672	117,653
September	542,521	205,124	137,011	173,288	171,808
October	538,023	383,916	197,284	384,515	321,905
November	346,746	190,376	178,061	200,473	189,637
December	416,038	465,733	270,892	416,943	384,523
TOTAL	6,119,045	5,102,838	4,297,718	3,900,805	4,433,787
AVERAGE	509,920	425,236	358,143	325,067	369,482

Imports of urea are generally seasonal. The United States imports more urea in the late winter/early spring for application in April and May. Urea imports into the US dry up during the height of the summer months. The Exchange evaluates seasonality on the deliverable supply across all fertilizer futures contract expirations. To the extent that 25 percent of any contract month's future estimated deliverable supply falls below the current spot month limit, the Exchange will evaluate whether there is a need to adjust the spot-month position limit for that corresponding contract month.

These figures represent overall urea imports, both prilled and granular. As the futures contract and underlying assessments only price granular urea, a trimming of the data is required to retrieve only granular urea imports into the US. Both price reporting agencies have experts that estimate over 90% of urea imported into the US is granular, while only a small segment is prilled. To that end, the following table shows a haircut of 10% of urea imports into US Gulf ports, and should represent only granular imports.

US Granular Urea Imports (Gulf Districts) (Short Tons)				
	2016	2017	2018	AVERAGE
January	419,731	789,224	430,731	546,562
February	354,324	843,110	435,001	544,145
March	1,029,150	680,488	615,306	774,981
April	866,447	435,981	454,722	585,717
May	363,997	180,049	228,497	257,514
June	210,717	143,917	174,032	176,222
July	90,221	23,031	1,634	38,295
August	137,334	67,223	113,105	105,887
September	184,611	123,310	155,959	154,627
October	345,524	177,556	346,064	289,715
November	171,338	160,255	180,426	170,673
December	419,159	243,803	375,248	346,070
TOTAL	4,592,554	3,867,946	3,510,724	3,990,408
AVERAGE	382,713	322,329	292,560	332,534

Additionally, the Exchange excludes all urea under long term contract. Estimates from the price reporting agencies suggest that approximately 30% of urea imported into the US is under long term contract, and not considered part of underlying deliverable supply. The table below cuts 30% off of the granular urea imports into US Gulf ports.

US Granular Urea Imports (Gulf Districts) (Short Tons)				
	2016	2017	2018	AVERAGE
January	293,812	552,457	301,512	382,593
February	248,027	590,177	304,501	380,901
March	720,405	476,341	430,714	542,487
April	606,513	305,187	318,306	410,002
May	254,798	126,034	159,948	180,260
June	147,502	100,742	121,822	123,355
July	63,155	16,122	1,144	26,807
August	96,134	47,056	79,173	74,121
September	129,228	86,317	109,172	108,239
October	241,867	124,289	242,245	202,800
November	119,937	112,179	126,298	119,471
December	293,412	170,662	262,674	242,249
TOTAL	3,214,788	2,707,562	2,457,507	2,793,286
AVERAGE	267,899	225,630	204,792	232,774

Analysis of Deliverable Supply:

The assessments from Profercy and ICIS are based on transactions, bids, and offers on US Gulf FOB prices. The assessment captures the value of imports into the US through Gulf ports from all countries in the world, which is why granular urea imports were used to determine the amount of the underlying commodity.

Using the average of the last three years of available data, the deliverable supply of granular urea from the US Gulf is 2,793,286 tons (27,933 contract equivalents) annually, or 232,774 tons (2,328 contract equivalents) per month. This figure represents the average of 2016-2018 granular urea imports into the US Gulf not under long term contract. Using the spot-month speculative position limit formula of 25 percent of deliverable supply, the maximum deliverable supply for the Urea (Granular) FOB US Gulf Futures contract supports position limits of 582 contracts ($2,328 \times 0.25$). However, due to the seasonality of urea imports into the US Gulf, there are a few summer months that have average import volumes below 232,774 tons which is, in part due to lower demand in these months once the crops have been planted in the US. To account for this difference, the Exchange recommends a spot month position limit well below 582 contracts. Ultimately, the Exchange recommends a spot month position limit of 400 contracts, and will continue to evaluate whether there is a need to adjust the spot-month position limit for any specific contract month.

Urea (Granular) FOB Egypt Futures

Market Overview:

Urea is a fertilizer that is commonly used in the agricultural industry. Urea is a combination of ammonia, carbon dioxide and oxygen, and is comprised of 46% nitrogen. Urea can be purchased in two forms: prilled or granulated. The CBOT futures contract, which is based on two assessments from price reporting agencies, includes only granular urea and excludes prilled urea.

Urea is one of the most commonly used nitrogen fertilizers and is produced around the world. Currently, over 170 million metric tons of urea is produced annually,³ though global production capacity is expected to increase. The largest increases in overall fertilizer capacity will come from urea. The largest producers of urea – China and India – are also the largest consumers of urea, which means only about a quarter of urea produced around the world is traded across border. Global trade of urea, which is about 50 million metric tons annually, is concentrated among the top few exporting countries, mostly found in the Black Sea and Middle Eastern regions.

³ [Fertilizer Industry Handbook](#).

Egypt is one of the world's largest producers and exporters of urea – it is consistently within the top five countries for both production and exports. Because Egypt does not engage in a significant amount of agricultural production outside of wheat, the majority of urea produced in the country is exported. In fact, from 2014 to 2016, the latest years for which data is readily available, Egypt exported an average of almost 55% of its urea production.

The Urea (Granular) FOB Egypt Futures contract is based on two aggregated assessments from price reporting agencies: Profercy and ICIS.

Urea Production/Imports:

The assessments used by Profercy and ICIS cover granular urea exported from Egypt.

As mentioned, Egypt is a key player in global urea. In addition to being a significant producer, Egypt exports one million metric tons of urea almost every year for the past decade. While the majority of that exported urea stays in the region, going to Mediterranean and European countries, some Egyptian urea makes its way to Brazil and the United States, two of the largest urea importers in the world.

Egyptian Urea Destinations (MT) 2018	
Turkey	907,312
France	583,717
Brazil	311,700
Italy	255,215
United Kingdom	205,702
Bulgaria	147,646
Greece	93,050
United States	90,671
WORLD	3,114,787

The following table aggregates all the Egyptian exports into one table over the last decade and a half.⁴

Egyptian Exports of Urea (MT)	
2002	69,290
2003	193,391
2004	3,395
2005	16,236
2006	187,322
2007	518,296
2008	1,068,115
2009	4,366,656
2010	3,939,888
2011	4,062,342
2012	2,604,535
2013	2,646,777
2014	1,816,341
2015	802,419
2016	2,370,863
2017	4,217,476
2018	3,114,787

⁴ Data through 2016 is from FAOSTAT, and 2017-2018 data is from ICIS.

While data is not available on a monthly basis, the Exchange contacted industry participants and analyzed available data to determine if any seasonality is present in this market. Exports out of Egypt tend to be highest in the later months of the year, but not to any great extent. In fact, data from the last two years suggest a very smooth pattern of exports through each month. The Exchange evaluates seasonality on the deliverable supply across all fertilizer futures contract expirations. To the extent that 25 percent of any contract month's future estimated deliverable supply falls below the current spot month limit, the Exchange will evaluate whether there is a need to adjust the spot-month position limit for that corresponding contract month.

When analyzing the prior three years of export data, the average annual urea exports out of Egypt amounted to 3,234,375 metric tons. Spreading that across all 12 months, the average monthly export quantity of urea out of Egypt is 269,531 metric tons.

The figures above represent overall urea imports, both prilled and granular. As the futures contract and underlying assessments only price granular urea, a trimming of the data is required to retrieve only granular urea exports to Egypt. Both price reporting agencies have experts that estimate over 90% of urea exported from Egypt is granular, while only a small segment is prilled. To that end, the Exchange reduced the average monthly exports from Egypt by 10%, to arrive at 242,578 metric tons of granular urea exported from Egypt each month.

Additionally, the Exchange excludes all urea under long term contract. Estimates from the price reporting agencies suggest that, at a maximum, 30% of urea exported from Egypt is under long term contract, and not considered part of underlying deliverable supply. Conservatively, applying a reduction of the 30% of urea under long term contract, the deliverable supply of granular Egyptian urea exports is 169,804 metric tons per month.

Analysis of Deliverable Supply:

The assessments from Profercy and ICIS are based on transactions, bids, and offers on Egyptian FOB prices. The assessment captures the value of exports from Egypt to all countries in the world, which is why granular urea exports were used to determine the amount of the underlying commodity.

Using the average of the last three years of available data, the deliverable supply of urea from Egypt is 3,234,375 tons (32,344 contract equivalents) annually, or 269,531 tons (2,700 contract equivalents) per month. When accounting for granular urea exports from Egypt not under long term contract from 2016-2018, the deliverable supply is 169,804 metric tons per month (1,698 contract equivalents). Using the spot-month speculative position limit formula of 25 percent of deliverable supply, the maximum deliverable supply for the Urea (Granular) FOB Egypt Futures contract supports position limits of 424 contracts ($1,698 \times 0.25$). However, the Exchange proposes spot month position limits of 400 contracts, which represents 23.5% of underlying deliverable supply.

Urea (Granular) CFR Brazil Futures

Market Overview:

Urea is a fertilizer that is commonly used in the agricultural industry. Urea is a combination of ammonia, carbon dioxide and oxygen, and is comprised of 46% nitrogen. Urea can be purchased in two forms: prilled or granulated. The CBOT futures contract, which is based on two assessments from price reporting agencies, includes only granular urea and excludes prilled urea.

Urea is one of the most commonly used nitrogen fertilizers, and is produced around the world. Currently, over 170 million metric tons of urea is produced annually,⁵ though global production capacity is expected to increase. The largest increases in overall fertilizer capacity will come from urea. The largest producers of urea – China and India – are also the largest consumers of urea, which means only about a quarter of urea produced around the world is traded across border. Global trade of urea, which is about 50 million metric tons annually, is concentrated among the top few exporting countries, mostly found in the Black Sea and Middle Eastern regions.

⁵ [Fertilizer Industry Handbook](#).

Brazil is one of the largest importers of urea globally. The agricultural sector in Brazil relies heavily on imported fertilizer – namely nitrogen products like urea – to continually increase yield in field crops. The other major importers of urea include India and the United States. Demand is expected to increase and supply is expected to stabilize in the next few years. It takes approximately four years to build out urea plants, so aside from those already known to be under construction (a few plants in Brazil and in Iran), global production and supply is not expected to grow significantly. However, as Brazil continues to plant large acreage for agricultural production, demand will continue to grow.

The Urea (Granular) CFR Brazil Futures contract is based on two aggregated assessments from price reporting agencies: Profercy and ICIS.

Urea Production/Imports:

The assessments used by Profercy and ICIS cover urea imported into Brazil.

On average, Brazil made up approximately 10% of global urea imports in 2016. As Brazil's agricultural growth has exploded, so has its need for fertilizer. Brazil imports from select number of suppliers, almost exclusively located in the Middle East/North Africa and the Black Sea.

<u>Brazil Urea Suppliers (MT) 2018</u>	
Algeria	1,056,986
Russia	961,117
Qatar	729,431
Nigeria	490,604
UAE	469,618
Egypt	389,220
Kuwait	375,287
Oman	339,212
Bahrain	215,998
Bolivia	168,793
WORLD	5,561,444

The following table aggregates all the suppliers to Brazil into one table and breaks down the imports on an annual basis over the decade and a half.⁶ It is clear that Brazil's consumption of urea has risen dramatically since the early 2000s, as planting area has moved into regions such as Mato Grosso and agricultural production has skyrocketed.

<u>Brazilian Imports of Urea (MT)</u>	
2002	1,069,803
2003	1,909,462
2004	1,751,441
2005	1,600,146
2006	1,603,476
2007	2,455,995
2008	2,112,694
2009	2,046,337
2010	2,510,214
2011	2,968,768
2012	2,917,353
2013	3,498,417

⁶ Data through 2016 is from FAOSTAT, and 2017-2018 data is from ICIS.

2014	4,401,399
2015	2,849,775
2016	3,958,012
2017	5,425,178
2018	5,561,444

While data is not available on a monthly basis, the Exchange contacted industry participants and analyzed available data to determine if any seasonality is present in this market. Imports into Brazil tend to be highest in the later months of the year, but not to any great extent. The months of April through August generally see a slight drop in imports, though not staggering. In fact, data from the last two years suggest a smooth pattern of exports through each month. The Exchange evaluates seasonality on the deliverable supply across all fertilizer futures contract expirations. To the extent that 25 percent of any contract month's future estimated deliverable supply falls below the current spot month limit, the Exchange will evaluate whether there is a need to adjust the spot-month position limit for that corresponding contract month.

When analyzing the prior three years of export data, the average annual imports of urea into Brazil amounted to 4,981,545 metric tons. Spreading that across all 12 months, the average monthly imports quantity of urea into Brazil is 415,129 metric tons.

These figures represent overall urea imports, both prilled and granular. As the futures contract and underlying assessments only price granular urea, a trimming of the data is required to retrieve only granular urea imports into Brazil. Both price reporting agencies have experts that estimate between 85% to 90% of urea imported into Brazil is granular, while only a small segment is prilled. To that end, the Exchange conservatively reduced the average monthly imports into Brazil by 15%, to arrive at 352,859 metric tons of granular urea imported into Brazil each month.

Additionally, the Exchange usually excludes urea under long term contract. Estimates from the price reporting agencies suggest that potentially half of the urea imported into Brazil is under long term contract. However, some of the urea under long term contract is still priced on an ongoing basis. The quantities and contract time frame between two parties is agreed upon, but the price of the urea is negotiated each month on a spot basis. Therefore, those negotiated spot prices may end up in the assessments of the price reporting agency and should be counted towards deliverable supply. The Exchange recommends that the monthly imports of urea into Brazil be cut by 50% to represent urea that is priced under long term contract. Applying a reduction of the 50% of urea priced under long term contract, the deliverable supply of granular Brazilian urea imports is 176,430 metric tons per month.

Analysis of Deliverable Supply:

The assessments from Profercy and ICIS are based on transactions, bids, and offers on CFR Brazil prices. The assessment captures the value of granular urea imports into Brazilian ports from all countries in the world, which is why granular urea imports were used to determine the amount of the underlying commodity.

Using the average of the last three years of available data, the deliverable supply of urea into Brazil is 4,981,545 tons (49,816 contract equivalents) annually, or 415,129 tons (4,151 contract equivalents) per month. When accounting for granular urea imports into Brazil not under long term contract from 2016-2018, the deliverable supply is 176,430 metric tons per month (1,764 contract equivalents). Using the spot-month speculative position limit formula of 25 percent of deliverable supply, the maximum deliverable supply for the Urea (Granular) CFR Brazil Futures contract supports position limits of 441 contracts (1,764*0.25). However, the Exchange proposes spot month position limits of 400 contracts, which represents 22.7% of underlying deliverable supply.

DAP FOB NOLA Futures

Market Overview:

Fertilizer is commonly used in the agricultural industry to support crop growth and development. There are three main categories of fertilizer: nitrogen (like urea), phosphorus, and potassium. Diammonium phosphate (DAP) is the world's

most widely used phosphorus fertilizer. DAP contains 46% phosphate and 18% nitrogen.⁷ DAP is made from phosphoric acid and ammonia and is relatively easy to handle, store, and transport.⁸ These qualities make it a commonly traded commodity in the fertilizer industry.

DAP is produced and consumed around the world. Currently, about 35 million metric tons of DAP is produced annually.⁹ DAP does not need to be applied every year, unlike a nitrogen fertilizer. It is mainly used to improve crop quality. The largest single market for phosphorous fertilizer is China, consuming 15 million metric tons annually, and the biggest regional market for phosphorous fertilizer is South America, which uses approximately 4.4 million metric tons of phosphorous fertilizer each year.¹⁰

The United States is both an importer and an exporter of DAP. From the period of 2014 through 2018, the US exported an average of 1.8 million metric tons of DAP, yet also imported an average of about 732,000 metric tons. The largest percentage of US DAP exports leave through East Coast ports – in 2018, East Coast ports accounted for 94% of all US DAP exports.¹¹ In general, those exports are destined for Brazil, Mexico, and India. However, most DAP imported into the United States comes into Gulf ports. This deliverable supply analysis will go into detail on those imports.

The DAP FOB NOLA Futures contract is based on two aggregated assessments from price reporting agencies: Profercy and ICIS.

DAP Imports:

The assessments used by Profercy and ICIS cover both imported and domestically produced DAP. However, data on US production of DAP in the Gulf region is sparse. Therefore, deliverable supply will focus solely on US DAP imports.

As stated, the US imports almost 1 million metric tons of DAP on an annual basis. The largest suppliers of DAP to the US include Morocco and Russia. China has also historically been a seller of DAP to the United States, though that trend has fallen in recent years. The following table aggregates all the suppliers to the US into one table and breaks down the imports on a monthly basis over the last three years¹².

DAP Urea Imports (Short Tons)					
	2015	2016	2017	2018	3-Year AVERAGE
January	36,173	38,338	197,495	110,185	115,339
February	61,888	38,186	42,987	140,474	73,882
March	109,404	183,847	125,897	177,196	162,313
April	154,733	57,421	67,870	128,560	84,617
May	1,368	18,207	6,022	3,789	9,339
June	2,579	37,608	15,044	60,533	37,728
July	2,747	63,054	55,302	35,721	51,359
August	30,091	66,452	65,865	135,825	89,381
September	134,685	38,087	198,113	121,650	119,283
October	55,888	50,522	71,324	166,776	96,207
November	11,253	13,419	39,316	29,768	27,501
December	59,652	40,296	1,728	128,895	56,973
TOTAL	660,461	645,436	886,963	1,239,371	923,924
AVERAGE	55,038	53,786	73,914	103,281	76,994

⁷ [Fertilizer Industry Handbook 2018.](#)

⁸ [Mosaic Crop Nutrition.](#)

⁹ [European Phosphate Fertilizer Alliance.](#)

¹⁰ [Fertilizer Industry Handbook 2018.](#)

¹¹ USDA, Foreign Agricultural Service, Global Agricultural Trade System (GATS).

¹² USDA, Foreign Agricultural Service, Global Agricultural Trade System (GATS).

Further, the U.S. Census Bureau provides monthly data broken down by import region, which is found in the table below. This includes all DAP imported into Gulf Districts, which include New Orleans, LA, Houston-Galveston, TX, Mobile, AL, Laredo, TX, St. Louis, MO, and Dallas-Ft. Worth, TX.

DAP Urea Imports (Gulf Districts) (Short Tons)					
	2015	2016	2017	2018	3-Year AVERAGE
January	34,345	36,114	194,360	106,840	112,438
February	61,153	37,167	32,187	138,200	69,185
March	70,416	177,946	122,211	163,319	154,492
April	153,764	56,035	66,190	124,263	82,163
May	985	15,460	298	877	5,545
June	680	35,904	11,771	58,223	35,300
July	877	61,298	53,878	34,760	49,979
August	25,153	65,972	63,333	134,317	87,874
September	132,488	37,574	197,055	119,138	117,922
October	55,048	48,383	66,788	166,087	93,753
November	8,346	12,662	37,004	17,046	22,237
December	55,977	39,362	132	128,031	55,842
TOTAL	599,233	623,878	845,207	1,191,102	886,729
AVERAGE	49,936	51,990	70,434	99,259	73,894

Specifically, the assessments underlying the DAP FOB NOLA Futures look at DAP imports into the New Orleans, LA (NOLA) port. The U.S. Census Bureau provides such data. The table below shows monthly DAP imports into NOLA for the last three years. It should be noted that DAP imports into NOLA has been increasing year over year. This has been true nearly every year since 2010.

DAP Urea Imports (New Orleans) (Short Tons)				
	2016	2017	2018	AVERAGE
January	35,210	193,651	106,420	111,760
February	36,537	32,011	137,679	68,742
March	177,293	121,705	163,054	154,017
April	55,085	66,124	120,950	80,720
May	15,416	20	0	5,145
June	35,681	11,091	44,169	30,314
July	60,780	52,189	34,340	49,103
August	65,316	63,074	134,209	87,533
September	36,065	196,657	118,323	117,015
October	47,237	66,329	165,570	93,045
November	12,125	36,224	16,598	21,649
December	38,773	0	127,279	55,351
TOTAL	615,518	839,074	1,168,593	874,395
AVERAGE	51,293	69,923	97,383	134,522

Imports of DAP are generally seasonal. The United States imports more DAP in the early spring for application planting season. March nearly always sees the largest monthly volumes of DAP into the US, though August through October often experiences a bump in import quantity. Specifically, May and June see the smallest amount of DAP imports throughout the year. The Exchange evaluates seasonality on the deliverable supply across all fertilizer futures contract

expirations. To the extent that 25 percent of any contract month's future estimated deliverable supply falls below the current spot month limit, the Exchange will evaluate whether there is a need to adjust the spot-month position limit for that corresponding contract month.

The Exchange excludes all DAP under long term contract. Estimates from the price reporting agencies suggest that DAP is usually imported into the US and priced on a spot basis. Therefore, the Exchange is not excluding any DAP NOLA imports into the deliverable supply analysis.

Analysis of Deliverable Supply:

The assessments from Profercy and ICIS are based on transactions, bids, and offers on FOB NOLA prices. The assessment captures the value of DAP imports into the US through the New Orleans, Louisiana from all countries in the world, which is why DAP imports into NOLA were used to determine the amount of the underlying commodity.

Using the average of the last three years of available data, the deliverable supply of DAP imported into NOLA is 874,395 tons (8,744 contract equivalents) annually, or 134,522 tons (1,345 contract equivalents) per month. This figure represents the average of 2016-2018 DAP imports into NOLA not under long term contract. Using the spot-month speculative position limit formula of 25 percent of deliverable supply, the maximum deliverable supply for the DAP FOB NOLA Futures contract supports position limits of 336 contracts (1,345*0.25). However, due to the seasonality of DAP imports into NOLA, there are a few summer months that have average import volumes below 134,522 tons which is, in part due to lower demand in these months once the crops have been planted in the US. To account for this difference, the Exchange recommends a spot month position limit well below 336 contracts. Ultimately, the Exchange recommends a spot month position limit of 200 contracts, and will continue to evaluate whether there is a need to adjust the spot-month position limit for any specific contract month.

MAP CFR Brazil Futures

Market Overview:

Fertilizer is commonly used in the agricultural industry to support crop growth and development. There are three main categories of fertilizer: nitrogen (like urea), phosphorus, and potassium. Monoammonium phosphate (MAP) is a commonly used phosphorus fertilizer. MAP contains 46% phosphate and 11% nitrogen.¹³ MAP is made from phosphoric acid and ammonia and dissolves easily in moist solutions like soil.¹⁴ These qualities, combined with its storability, make it a commonly traded commodity in the fertilizer industry.

MAP is produced and consumed around the world. Currently, about 25 million metric tons of DAP is produced annually.¹⁵ The largest producer and consumer of MAP is China, producing about 12 million metric tons per year and consuming almost 10 million metric tons. The largest import market for MAP is Brazil, as it produces less than the 5 million metric tons per year needed for agricultural production.¹⁶

The MAP CFR Brazil Futures contract is based on two aggregated assessments from price reporting agencies: Profercy and ICIS.

MAP Imports:

The assessments used by Profercy and ICIS cover MAP imported into Brazil.

On average, Brazil made up approximately 30% of global MAP imports in 2016.¹⁷ As Brazil's agricultural growth has exploded, so has its need for fertilizer. Brazil imports from select number of suppliers, mostly located in the Middle East/North Africa and the Black Sea, though some imports do originate from the United States and China as well.

¹³ [Fertilizer Industry Handbook 2018.](#)

¹⁴ [Mosaic Crop Nutrition.](#)

¹⁵ [European Phosphate Fertilizer Alliance.](#)

¹⁶ [Fertilizer Industry Handbook 2018.](#)

¹⁷ [Knoema World Data Atlas.](#)

Brazil MAP Suppliers (MT) 2018	
Morocco	898,619
Russia	799,297
Saudi Arabia	651,226
United States	587,528
China	260,118
WORLD	3,320,785

Brazilian imports of MAP have been growing over the last decade and a half, especially taking off after 2010.¹⁸ Though there has been some year over year declines, Brazilian imports of MAP have grown an average of 10% annually since 2010.

Brazilian Imports of MAP (MT)	
2002	1,356,989
2003	1,901,459
2004	2,157,746
2005	1,203,969
2006	1,121,212
2007	1,620,277
2008	1,053,958
2009	828,426
2010	1,142,536
2011	1,991,069
2012	1,764,860
2013	2,500,664
2014	3,004,766
2015	2,281,251
2016	2,714,211
2017	3,634,880
2018	3,320,785

While data is not available on a monthly basis, the Exchange contacted industry participants and analyzed available data to determine if any seasonality is present in this market. Imports into Brazil tend to be highest in the later months of the year, but not to any great extent. The months of April through August generally see a slight drop in imports, though not staggering. In fact, data from the last two years suggest a smooth pattern of exports through each month. The Exchange evaluates seasonality on the deliverable supply across all fertilizer futures contract expirations. To the extent that 25 percent of any contract month's future estimated deliverable supply falls below the current spot month limit, the Exchange will evaluate whether there is a need to adjust the spot-month position limit for that corresponding contract month.

When analyzing the prior three years of export data, the average annual imports of MAP into Brazil amounted to 3,223,292 metric tons. Spreading that across all 12 months, the average monthly imports quantity of urea into Brazil is 268,608 metric tons.

The Exchange excludes all MAP under long term contract. Two of the major importers account for roughly 70% of MAP import volume into Brazil, and much of that is on a contract basis. However, it is not possible to know what percent of that is on a contract basis. Additionally, guidance from the price reporting agency ICIS suggest that some of the fertilizer

¹⁸ Data through 2016 is from FAOSTAT, and 2017-2018 data is from ICIS.

under long term contract is still priced on an ongoing basis. The quantities and contract time frame between two parties is agreed upon, but the price of the product is negotiated each month on a spot basis. Therefore, those negotiated spot prices may end up in the assessments of the price reporting agency and should be counted towards deliverable supply. Therefore, the Exchange estimates that approximately 50% to 70% of the MAP entering Brazil is under long term contract and should be excluded from the deliverable supply estimate. Applying a reduction of 50%-70% of the MAP imports into Brazil suggests a deliverable supply between 80,582 metric tons and 134,304 metric tons per month.

Analysis of Deliverable Supply:

The assessments from Profercy and ICIS are based on transactions, bids, and offers on MAP CFR Brazil prices. The assessment captures the value of MAP imports into Brazil from all countries in the world, which is why MAP imports into Brazil were used to determine the amount of the underlying commodity.

Using the average of the last three years of available data, the deliverable supply of MAP imported into Brazil is 3,223,292 metric tons (32,233 contract equivalents) annually. The MAP available on a monthly basis not under long term contract is estimated to be between 80,582 metric tons (806 contract equivalents) and 134,304 metric tons (1,343 contract equivalents) per month. Using the spot-month speculative position limit formula of 25 percent of deliverable supply, the maximum deliverable supply for the MAP CFR Brazil Futures contract supports position limits of between 201 and 336 contracts (809*0.25 and 1,343*0.25). Conservatively, the Exchange proposes spot month position limits of 200 contracts.

Appendix H

**CBOT Rulebook
Chapter 5
("Trading Qualifications and Practices")**

Rule 588.H. – ("Globex Non-Reviewable Trading Ranges") Table

Instrument Name	Globex Symbol	Outright			Spreads	
		Globex Non-Reviewable Ranges (NRR)	NRR: Globex Format	NRR: Ticks	NRR: Globex Format	NRR: Minimum Outright Ticks
<u>Urea (Granular) FOB US Gulf Futures</u>	<u>UFV</u>	<u>\$2.00 per ton</u>	<u>200</u>	<u>8</u>	<u>125</u>	<u>5</u>
<u>Urea (Granular) FOB Egypt Futures</u>	<u>UFE</u>	<u>\$2.00 per metric ton</u>	<u>200</u>	<u>8</u>	<u>125</u>	<u>5</u>
<u>Urea (Granular) CFR Brazil Futures</u>	<u>UFB</u>	<u>\$2.00 per metric ton</u>	<u>200</u>	<u>8</u>	<u>125</u>	<u>5</u>
<u>DAP FOB NOLA Futures</u>	<u>DFN</u>	<u>\$2.00 per ton</u>	<u>200</u>	<u>8</u>	<u>125</u>	<u>5</u>
<u>MAP CFR Brazil Futures</u>	<u>MFC</u>	<u>\$2.00 per metric ton</u>	<u>200</u>	<u>8</u>	<u>125</u>	<u>5</u>