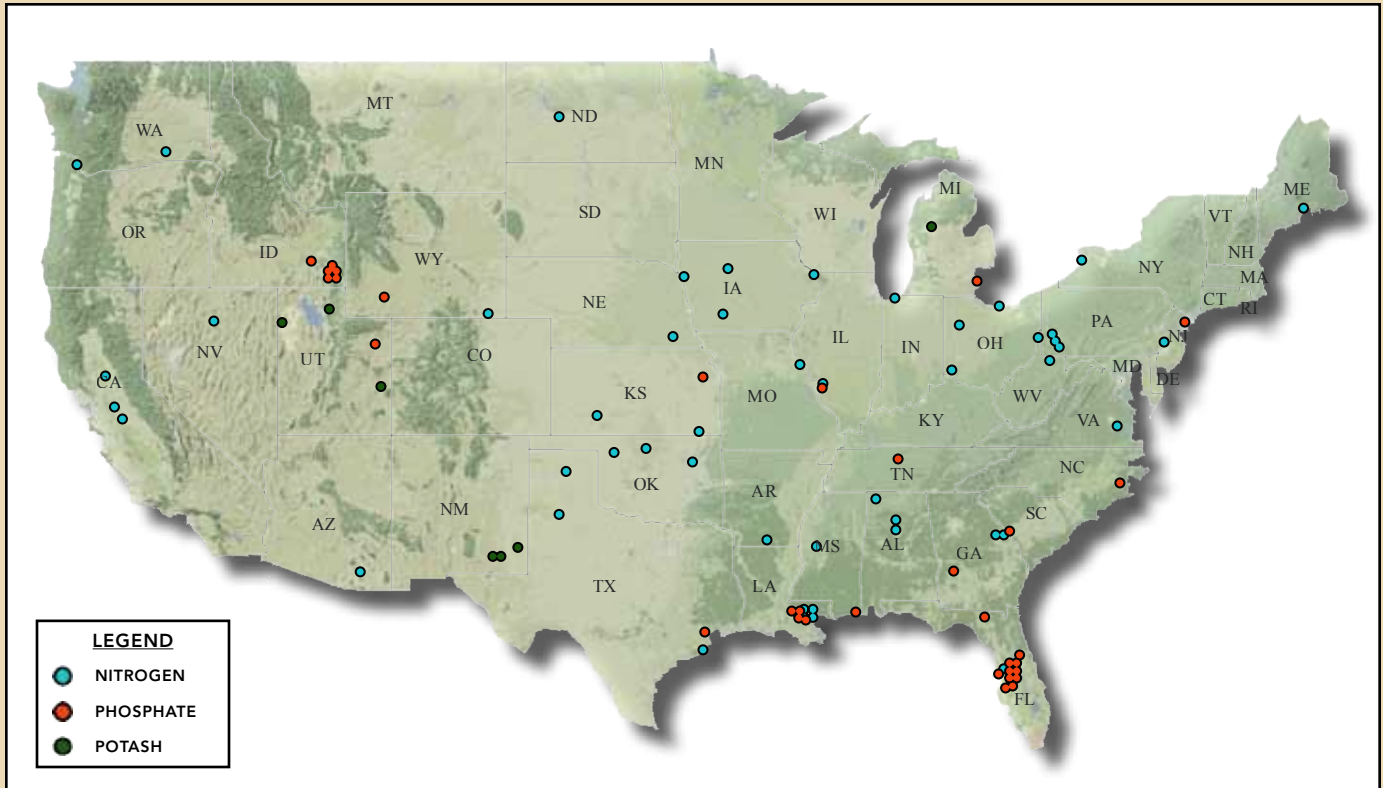




# U.S. FERTILIZER PRODUCTION AND MINING FACILITIES AT A GLANCE



## Operational U.S. Fertilizer Production Facilities - N, P & K



Fertilizer major crop nutrients are nitrogen, phosphorus and potash – all naturally occurring elements in the environment – which are “fed” to plants and crops for healthy and abundant food production. Crops need nutrients to grow and be productive – just like humans.

Fertilizers are resource-based products. Nitrogen fertilizer is produced by capturing nitrogen from the air using a complex chemical reaction. Nitrogen is currently produced in over 78 countries worldwide. The primary raw material for nitrogen production is natural gas, but nitrogen can also be produced from coal, fuel oil and naphtha.

The production of phosphate and potash fertilizers begins at the mine. The manufacture of phosphate requires phosphate rock and sulfur. Phosphate rock reserves have been identified in 32 countries world wide, but the economic extraction of the rock is limited to fewer countries, as the top three producing countries account for 68 percent of total world production while the top 12 account for 94 percent.

Potash ore reserves have been identified in 21 countries world wide. Currently, the economic extraction of potash is limited to only 12 countries. Consequently, most countries have to rely on imports to meet demand. Potash is imported by 99 countries world wide as over 80 percent of world potash production is exported.

The United States is the largest importer of fertilizer in the world, with more than half our nitrogen and over 85 percent of our potash coming from international sources.



**NITROGEN (N)**  
is a primary building block for all organisms. It is essential to making proteins, helps keep plants green and is a critical component of soil structure.

COMES FROM THE AIR



**PHOSPHORUS (P)**  
is found in every living cell. Phosphorus is a component of DNA and it also plays vital roles in capturing light during photosynthesis, helping with seed germination, and helping plants use water efficiently. Plants also use phosphorus to help fight external stress and prevent disease.

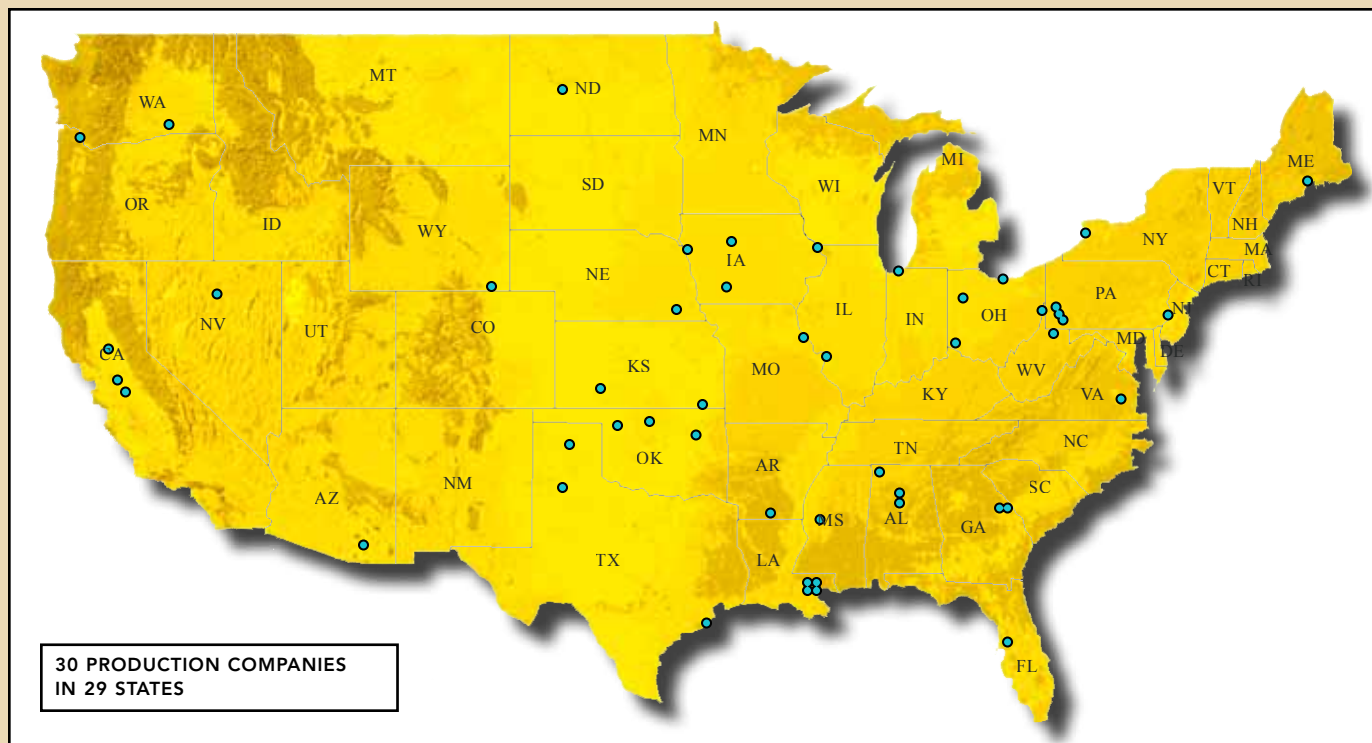
COMES FROM ANCIENT SEA LIFE



**POTASSIUM (K)**  
is essential to the workings of every living cell. It plays an important role in plants' water utilization and also helps regulate the rate of photosynthesis. Other aspects of plant health influenced by potassium include the growth of strong stalks, protection from extreme temperatures, and the ability to fight stress and pests such as weeds and insects.

COMES FROM EVAPORATED OCEANS

## Operational U.S. Nitrogen Fertilizer Production Sites



### ALABAMA

- ◆ Drummond Co. Inc. - Tarrant
- ◆ El Dorado Chemical Co. - Cherokee
- ◆ Sloss Industries Corp. - Birmingham

### ARKANSAS

- ◆ El Dorado Chemical Co. - Eldorado

### ARIZONA

- ◆ Apache Nitrogen Products, Inc. - Benson, (2-Trains)

### CALIFORNIA

- ◆ Agrium U.S. Inc. - West Sacramento
- ◆ Simplot - Helm
- ◆ Simplot - Lathrop

### FLORIDA

- ◆ Trade Mark Nitrogen Corp. - Tampa

### GEORGIA

- ◆ DSM Chemicals North America, Inc. - Augusta
- ◆ PCS Nitrogen Fertilizer, L.P. - Augusta

### IOWA

- ◆ Green Valley Chemical Corp. - Creston
- ◆ Koch Nitrogen Co. - Fort Dodge

- ◆ CF Industries - Port Neal

### IDAHO

- ◆ Simplot - Pocatello

### ILLINOIS

- ◆ National Steel Company - Granite City
- ◆ Rentech Energy Midwest Corp. - East Dubuque

### INDIANA

- ◆ International Steel Group - Burns Harbor
- ◆ USX Corporation - Gary

### KANSAS

- ◆ CVR Energy, Inc. - Coffeyville
- ◆ Koch Nitrogen Co. - Dodge City

### LOUISIANA

- ◆ CF Industries - Donaldsonville (5-Trains)
- ◆ PCS Nitrogen Fertilizer, L.P. - Geismar
- ◆ The Mosaic Company - Faustina

### MAINE

- ◆ General Alum and Chemicals Corp. - Searsport

### MISSOURI

- ◆ Dyno Nobel, Inc. - Louisiana

### MISSISSIPPI

- ◆ CF Industries - Yazoo City

### NORTH DAKOTA

- ◆ Dakota Gasification Co. - Beulah

### NEBRASKA

- ◆ Koch Nitrogen Co. - Homestead (Beatrice)

### NEVADA

- ◆ Dyno Nobel, Inc. - Battle Mountain

### NEW YORK

- ◆ International Steel Group - Lackawanna

### OHIO

- ◆ Agrium U.S. Inc. - North Bend
- ◆ PCS Nitrogen Fertilizer, L.P. - Lima
- ◆ USX Corporation - Lorain

### OKLAHOMA

- ◆ Koch Nitrogen Co. - Enid
- ◆ CF Industries - Verdigris
- ◆ CF Industries - Woodward

### OREGON

- ◆ Dyno Nobel, Inc. - St. Helens

### PENNSYLVANIA

- ◆ Dyno Nobel, Inc. - Donora
- ◆ Koppers Industries - Monessen
- ◆ Shenango, Inc. - Pittsburgh
- ◆ USX Corporation - Fairless

### TEXAS

- ◆ Agrium U.S. Inc. - Borger
- ◆ BASF Corporation - Freeport
- ◆ Martin Resources - Plainview

### UTAH

- ◆ Orica USA, Inc. - Geneva

### VIRGINIA

- ◆ Honeywell International Inc. - Hopewell

### WASHINGTON

- ◆ Agrium U.S. Inc. - Kennewick

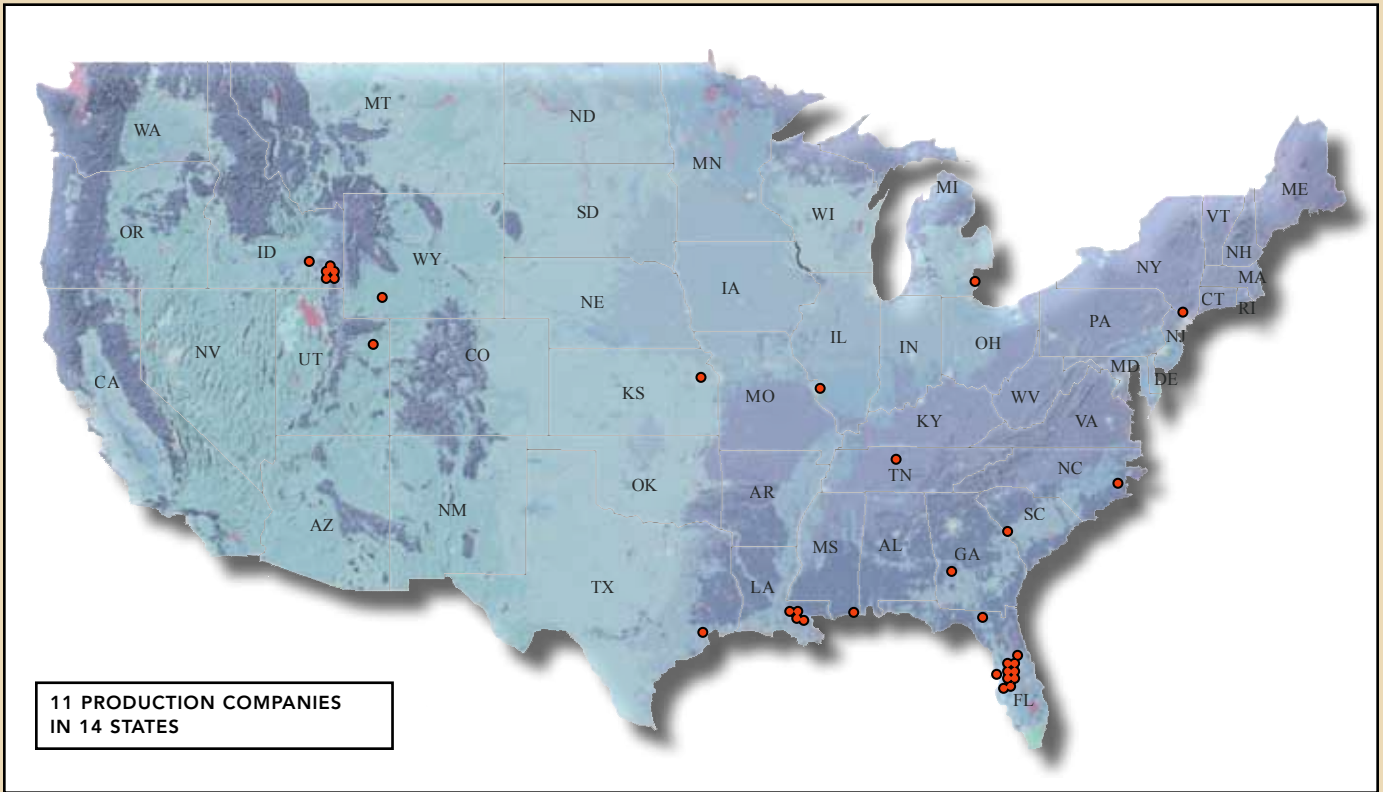
### WEST VIRGINIA

- ◆ Sharon Steel Corp. - Fairmount
- ◆ Mountain State Carbon LLC - Follansbee

### WYOMING

- ◆ Dyno Nobel, Inc. - Cheyenne

## Operational U.S. *Phosphatic* Fertilizer Production Sites



### FLORIDA

- ◆ CF Industries - Plant City
- ◆ CF Industries - South Pasture Mine
- ◆ PCS Phosphate Company, Inc. - White Springs
- ◆ The Mosaic Company - Bartow
- ◆ The Mosaic Company - Four Corners
- ◆ The Mosaic Company - Hooker's Prairie
- ◆ The Mosaic Company - Hopewell
- ◆ The Mosaic Company - New Wales
- ◆ The Mosaic Company - South Fort Meade
- ◆ The Mosaic Company - Tampa
- ◆ The Mosaic Company - Wingate Creek

### GEORGIA

- ◆ Agrium U.S. Inc. - Americus
- ◆ Monsanto Company - Augusta

### IDAHO

- ◆ Agrium U.S. Inc. - Conda
- ◆ Agrium U.S. Inc. - Dry Valley
- ◆ Simplot - Caribou County

- ◆ Simplot - Pocatello
- ◆ Monsanto Company - Henry
- ◆ Monsanto, Inc. - Soda Springs

### KANSAS

- ◆ FMC Corporation - Lawrence

### LOUISIANA

- ◆ Innophos - Geismar
- ◆ PCS Nitrogen Fertilizer, L.P. - Geismar
- ◆ The Mosaic Company - Faustina
- ◆ The Mosaic Company - Uncle Sam

### MICHIGAN

- ◆ Monsanto Company - Trenton

### MISSOURI

- ◆ Monsanto Company - Carondelet

### MISSISSIPPI

- ◆ Mississippi Phosphates - Pascagoula

### NORTH CAROLINA

- ◆ PCS Phosphate Company, Inc. - Aurora

### NEW YORK

- ◆ FMC Corporation - Carteret

### TENNESSEE

- ◆ Bain Capital - Nashville

### TEXAS

- ◆ Agrifos Fertilizer Inc. - Pasadena

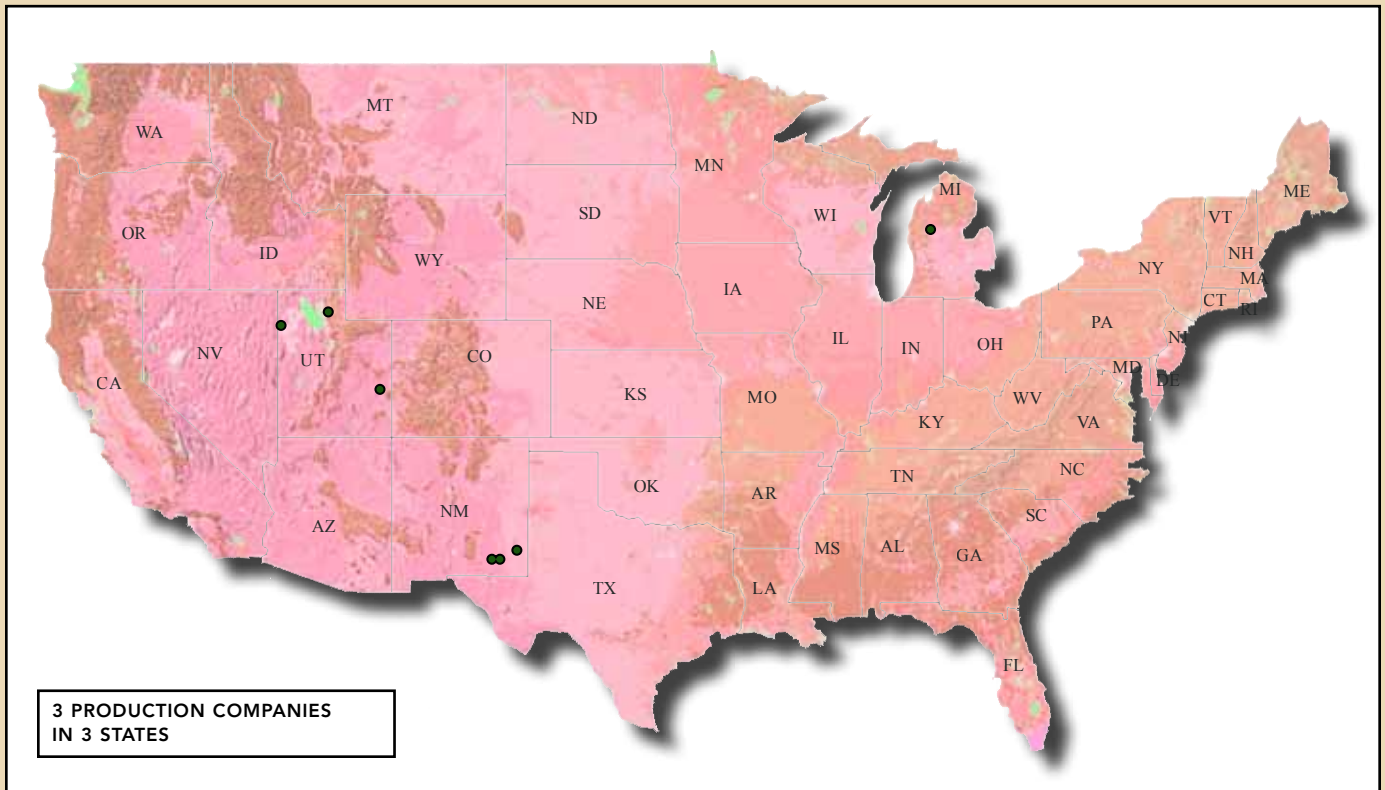
### UTAH

- ◆ Simplot - Vernal

### WYOMING

- ◆ Simplot - Rock Springs

## Operational U.S. *Potash* Fertilizer Production Sites



### MICHIGAN

- ◆ The Mosaic Company - Hersey

### NEW MEXICO

- ◆ Intrepid Mining, LLC - Carlsbad
- ◆ Intrepid Mining, LLC - Lea County
- ◆ The Mosaic Company - Carlsbad

### UTAH

- ◆ Great Salt Lake Minerals Corp. - Ogden
- ◆ Intrepid Mining, LLC - Moab
- ◆ Intrepid Mining, LLC - Wendover



KEY MESSAGES ABOUT FERTILIZER

1. Fertilizers are drawn from nature – they are not man-made.
2. Farmers are not adding fertilizers to the ground. They are replacing nutrients that are lost at each harvest.
3. The world has no choice but to use fertilizers. Without them, more than two billion people would starve.
4. By helping to conserve land, fertilizers safeguard recreational land and wildlife habitats.
5. Farmers care about the environment as much as anyone.



The Fertilizer Institute

Nourish, Replenish, Grow

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