GROWING TOMORROW'S FOOD™

SAFER PHOSPHATE

PHOSPHATE ORIGINS

Phosphate rock may come from:

- **Sedimentary deposits** (North Africa, the Middle East and the United States).
  - Represents 85% of the world's deposits
  - Very likely to contain large amounts of impurities, such as heavy metals, including cadmium and uranium
- **Igneous deposits** (Brazil, Canada, Finland, Russia and South Africa)
  - Represents 15% of the world's deposits
  - Generally, contain little or no contaminants

DRAFT STANDARD

Europe and America are net importers of phosphate.

- Towards the end of 2018, the European institutions agreed to limit the amount of cadmium in fertilizers to 60 mg/kg (coming into force 3 years after the final agreement). In addition, a low cadmium label may be applied to fertilizers containing less than 20 mg/kg.

In Canada and the United States, the issue of phosphate safety has not yet been addressed by the governments.

- We believe that the Canadian government, in order to protect its population, should legislate to minimize the presence of cadmium and radioactive elements in fertilizers and phosphoric acid products.

www.saferphosphates.com

ARIANNE PHOSPHATE'S PRODUCT

The Arianne Phosphate deposit is of igneous origin.

- Arianne will produce a very high-quality concentrate, **containing very low contaminants**.
  - Cadmium and radioactive elements near or below the detection limit
- 3 million tonnes of phosphate concentrate will be produced per year, for 26 years.
- The use of hydropower has been optimized to limit the production of greenhouse gases:
  - The product will be dried in **the world's largest all-electric dryer of this type**.
- The concentration process has been perfected to eliminate the use of acids and starch and to reduce the use of caustic soda in order to **minimize the impact on the environment**.

www.arianne-inc.com/en