

# Definitions and Additional Information

## Best Management Practices (BMP)

Commonly used BMPs that minimize nutrient runoff include: soil testing to optimize nutrient rate; controlled-release fertilizers or split applications to match nutrient availability with crop need; and vegetated buffer strips to keep nutrients where plants can use them, away from waterways.

## Carbon Capture and Storage

This entails capturing CO<sub>2</sub> at our production facilities where it is purified and transported to an oil field. It is then pumped under high pressure into the reservoir. The CO<sub>2</sub> mixes with the oil remaining in the reservoir, causing it to become more mobile. Producing wells pump the oil to the surface where the CO<sub>2</sub> is separated from the oil and re-injected underground.

## Natural Gas Use

About 60 percent of the natural gas required to produce nitrogen fertilizer is used to obtain the hydrogen required to produce ammonia. Emissions related to this process cannot be reduced given current economically viable technologies.

The remaining combustion natural gas can be managed to reduce CO<sub>2</sub> emissions by improving energy efficiency, and through other emission reduction opportunities. Government-sponsored studies estimate for the Canadian industry that a further three to five percent reduction in combustion emission intensity may be attainable. We have established an Emission Reduction and Energy Conservation project team to identify and evaluate opportunities at our production facilities.

## Donation Focus Areas

Each funding request must fall into at least one of the following four focus areas. These areas are: Youth & Education; Environment; Civic, Arts & Culture and Health & Wellness. We believe these four areas enrich our communities.

- Youth & Education: Agrium encourages and supports programs that help the next generation grow in mind, body and spirit. We believe that confident, capable and educated young people are better equipped to face the challenges of the future. Investing in programs that help youth reach their full potential will help safeguard the future of communities and our industry.
- Environment: At work and at play we all share the environment. Agrium works to minimize its negative impact on the environment and increase its positive impact. We create and fund environmental stewardship programs that engage youth and other stakeholders.
- Civic, Arts & Culture: Agrium helps to build stronger communities by supporting civic events, arts, and cultural activities. These activities contribute to personal growth and helps people lead more satisfying lives. Many of Agrium's offices and facilities are in rural communities where these programs are highly valued by the residents. As each community is different, the programs we support are unique to that region.
- Health & Wellness: Agrium partners with local communities to support health and wellness providers. We support services, programs, education, extension and materials. We help make life better for the less fortunate or disadvantaged.

### **Not-eligible causes**

Some causes are not eligible for contributions in accordance with Agrium's current guidelines:

- Organizations that allocate funds based on race, sex or religion.
- Organizations that have an administration fee in excess of 20 percent of contributions.
- Operating budgets for institutions, like schools or hospitals.
- Capital funding for major building projects.
- Organizations whose needs are already being met by existing Agrium funded activities.
- Organizations that receive more than 25 percent of their funds from United Way.
- Organizations that are profit based. Organizations must have a charitable status or are not-for-profit.
- Organizations must provide services in one or more of the four Agrium donation focus areas.

### **Reclamation**

Upon completion of mining activities, stockpiles and ponds may be re-contoured and/or re-vegetated in accordance with guidelines outlined in the mine closure plan. Re-vegetation can include seeding and planting with local species so the area can be returned to multiple uses such as grazing land for livestock or as a home to a variety of wildlife. Post-closure monitoring typically is required before reclamation is considered complete. Reclamation of other closed sites, including retail and production facilities, typically follows a similar process, making sure we decommission and remove equipment, and clean up any identified impacted areas

### **Tailings at Vanscoy Operations**

Tailings produced at our Vanscoy potash operations are a mixture of salt particles, clay and brine; they are waste products of the potash milling process. The tailings are pumped as a slurry to the tailings management area where the salt and clay solids settle. Some of the brine is reused in the mill. The remaining brine is pumped 1,675 meters below the surface into a geological formation that already contains natural brine. This is a zero liquid discharge facility, meaning no surface water from the tailings management area is released to adjacent surface waters.

### **Safety Tenets of Operation**

The Tenets of Operation are:

1. Perform hazard assessments and correct unsafe actions or conditions.
2. Verify energy isolations and use appropriate PPE.
3. Address abnormal conditions before proceeding.
4. Develop and use clear written procedures for all high risk, critical, or complex operations.
5. Report personal safety, process safety, environmental and near miss incidents immediately and implement corrective actions.
6. Operate equipment within design or environmental limits.
7. Operate with safety and environmental critical devices armed or follow the critical systems defeat process.
8. Involve people with expertise and first-hand knowledge in decisions that affect procedures and equipment.
9. Ensure process and maintenance information is current, accurate, and accessible.
10. Protect yourself, others and equipment from risk by understanding the situation before proceeding.