

Agricultural Plastics Recycling

Pilot programs in Peace River Regional District, British Columbia

Introduction

The following is an overview of the pilot program Cleanfarms is proposing to operate in the Peace River Regional District. Materials being considered for collection include grain bags, bale wrap, silage bags/covers, and twine.

Cleanfarms has received supporting funding from Agriculture and Agri-Food Canada (AAFC) through their Canadian Agricultural Strategic Priorities Program (CASPP) to launch a variety of new initiatives that will improve farmer access to agricultural plastics recycling programs. If approved, the Northern Interior projects would serve as the flagship pilots for BC under the CASPP initiatives.

About Cleanfarms

Cleanfarms is a not-for-profit industry stewardship organization that operates a number of industry-funded stewardship programs for items like pesticide containers, fertilizer containers, seed/pesticide bags, unwanted pesticides and old/expired animal health medications and grain bags (Saskatchewan only). Cleanfarms is also the operator for the grain bag and twine collection pilot in Alberta under the Alberta Ag-Plastic 'Recycle It!' program.

Project Goals

The purpose of the pilot project is to deliver and evaluate agricultural plastics collection programs in agricultural-intensive regions. Our overarching goal is to establish convenient and cost-effective collection programs for the benefit of farmers, the local region, and the environment.

This project aims to:

1. Quantify agricultural plastics used in the region (supported by a waste characterization study).
2. Set up ag plastic collections to:
 - a. Test different collection, consolidation, and transportation methods.
 - b. Evaluate factors that could improve these methods for PRRD.
 - c. Find program efficiencies between PRRD and surrounding regions.
3. Calculate the costs for a permanent program.

Pilot project overview

The pilot project will develop over a three-year period. During this time, PRRD staff and Cleanfarms will work together to develop and test different collection models to determine the most effective and cost-efficient way to best serve the farmers of the Peace River Regional District. Drawing on experience from other pilot projects, two main options for carrying out a collection program will be evaluated:

1. Collection using collection bags
 - Farmers will be able to obtain collection bags from participating sites free of charge
 - Using the bags to keep plastics separate, the participating farmers will bring the plastic (bale wrap, twine, silage bags) to the collection sites
 - A collection truck will collect the material when required
 - The plastic will be baled and sent for recycling.
2. Loose collection in roll-off bins
 - Farmers will be able to drop off properly segregated, loose material to predetermined collection locations where material will be collected in bins;
 - Bins will be picked up and consolidated for baling as necessary;
 - The plastic will be baled and sent for recycling.

Pilot programs allow us to collect and analyze data on each of the following:

- Collection site usage and accessibility
- Collection methods (i.e. Collection bags, grain bag rollers, compactors/presses)
- Quality and cleanliness of the collected material
- Traceability of material
- Transportation and collection logistics
- Collection periods and seasonality
- Communication needs
- Level of participation of the various stakeholders
- Requirements for plastics processing

Project benefits

This project offers the following benefits:

- Recycling keeps plastic materials, which have the potential to be incorporated into new products, out of municipal landfills.
- Recycling of twine and other ag plastics allows PEI farmers to demonstrate good environmental and stewardship practices on their farm.
- A number of sustainability strategies, such as the Canadian Roundtable for Sustainable Beef, have noted the need for ag plastics recycling. Ag plastics recycling is also a component of Environmental Farm Plans and other initiatives like the Dairy Farmers of Canada's ProAction environmental module.

Next steps

Cleanfarms is asking for 50% cost-sharing commitment to move forward with pilot projects in PRRD. Such a commitment will provide a good foundation to involve more farmers, collect more material, and find cost-efficiencies and economies of scale in program operations. Upon approval, we anticipate a start date in early 2021. A successful program model will allow for eventual replication and implementation in other BC regions that express interest.