

Agricultural Plastics Recycling in Alberta

Background/Whitepaper

Prepared by the Agricultural Plastics Recycling Group: The Recycling Council of Alberta (RCA), The Alberta Plastics Recycling Association (APRA), CleanFARMS Inc., the Alberta Association of Municipal Districts and Counties (AAMDC), the Provincial Agricultural Service Board Committee and Alberta Agriculture and Forestry.

Introduction: The Agricultural Plastics Recycling Group

In December 2016, a working group formed to advance the discussion and action on the topic of agricultural plastics recycling. The Agricultural Plastics Recycling Group consists of representatives from the following organizations who support agricultural plastics recycling in the Province of Alberta. The Recycling Council of Alberta (RCA), the Alberta Plastics Recycling Association (APRA), CleanFARMS Inc., the Alberta Association of Municipal Districts and Counties (AAMD&C), the Provincial Agricultural Service Board Committee and Alberta Agriculture and Forestry. With lack of direction from the provincial government on a policy for Extended Producer Responsibility for agricultural plastics, the group decided at its December meeting to start work to bring stakeholders together on the topic. From January to June 2017, the group has met with over half a dozen producer groups (representing dairy, beef and crop farmers among others) to update them on the topics and issues of ag plastics waste and recycling. The Agricultural Plastics Recycling Group decided at a meeting in June 2017 that its next step would be to host a half-day meeting with all interested stakeholders from the producer groups in August of 2017 to start work to draft a policy framework to present to the provincial government. This whitepaper serves as a summary and update on the key issues.

Managing Ag Plastics Waste

Agricultural plastics in the form of baler twine, bale wrap, silage wrap and feed bags of various sizes and materials are a problematic waste for farmers and agricultural businesses, and their use is continuing to increase. In 2013, CleanFARMS Inc., in partnership with Alberta Agriculture & Rural Development (ARD), initiated an [Alberta Agricultural Waste Characterization Study](#), to characterize and quantify significant sources of paper and plastic waste on Alberta farms. The study showed that the total agricultural film waste, including grain bags and silage plastic, is an estimated 3300 to 6400 tonnes per year in Alberta. At the same time, estimates for waste twine were 2000 to 6000 tonnes per year.

These volumes represent a significant waste of resources, as well as a logistical waste management challenge. Landfills may prohibit or limit the disposal of some agricultural plastics, in particular twine, because of the handling challenges it presents and potential damage to equipment. Burning on site is anecdotally thought to be the predominate means of disposal today, yet research shows that harmful compounds are released from burning plastic at low temperatures. Some, including dioxins and furans, accumulate in soil and bio-accumulate in fat as they move up the food chain.

To address this issue, in 2007, the Recycling Council of Alberta (RCA) established a working group with representatives from the Alberta Plastics Recycling Association (APRA), the plastic manufacturing sector, retailers, recycling project operators, Alberta Agriculture, Alberta Environment, and recyclers to look at options for agricultural plastic waste. This working group established a number of initiatives, including a series of pilot projects, to assess the viability of recycling agricultural plastics in this province. One of the conclusions of the group's work was the need for a provincial stewardship program to provide sustainability for agricultural plastics recycling.

Since that time, pockets of recycling have been established, and an increasing number of communities are interested in developing recycling programs. For example, Mountain View Regional Waste Management Commission has funded agricultural plastics recycling for a number of years, including the shipment of baled twine to Gopher Plastics in the United States. At the same time, a number of counties, including Rocky View, Yellowhead, and Wheatland are collecting film materials such as grain bags and silage plastic, for recycling into products like garbage bags. Agricultural plastics management practices have been researched by the Alberta Government in a number of studies including [Market-Based Solutions for Used Agricultural Plastics: Survey of Municipalities](#), [Market-Based Solutions for Used Agricultural Plastics Part 2: Survey of Municipal Waste Authorities](#), [Agricultural Plastics Recycling – Agricultural Producers Survey](#), [Agricultural Plastics Recycling – Municipal Waste Authorities Survey](#).

Other Provinces

In Saskatchewan, [The Agricultural Packaging Product Waste Stewardship Regulations](#), introduced after [agricultural waste stewardship research](#), has made it mandatory that every grain bag seller develop and fund a program to recycle grain bags. Sellers are presently working with CleanFARMS to develop a province-wide solution.

A series of [government-funded pilot programs](#) are available in Manitoba to recycle bale/silage wrap, twine and grain bags. Going forward, there is interest in taking an approach similar to Saskatchewan's.

It is the Agricultural Plastics Recycling Group's belief that it is best to take a Western Canadian approach which provides the best environmental and business outcomes. Efficiencies and harmonization among provincial programs are particularly important for agricultural plastics recycling because of its small budget and the importance of a level playing field to the agricultural industry.

Next Steps

The largest challenge remains the lack of a provincially-regulated stewardship program. This assertion has been supported by a number of organizations, including the recent resolution passed by Alberta's Agricultural Service Boards in 2016, that the Ministry of Environment and Parks and the Ministry of Agriculture and Forestry research, develop, and implement an agricultural plastics recycling program modelled after the pilot program in the Province of Saskatchewan.

Agricultural producers are a key stakeholder in this issue as the primary users of agricultural plastics, and those burdened with a lack of sustainable options for management of waste plastics. We are therefore asking producers to support the development of a draft regulation for a provincial stewardship program that would require manufacturers of agricultural plastics to participate in solutions for effective management of these waste materials.

How would a provincially-regulated stewardship program impact Alberta producers?

Accessibility to recycling programs would increase. Producers in all agricultural-intensive regions of the province would have access to recycling programs. This means the environmental benefits of a sustainable and well-resourced program would extend to all farmers. However, recycling comes at a cost. Alberta producers are likely to see some sort of Environmental Handling Fee applied to their purchases to fund the recycling program.