



**Material containment  
and storm water protection:  
policies, procedures, and practices**

*This booklet looks at what Confer Plastics does and expects to protect the environment from accidental exposure to plastic resin.*

**Version: May 2021**

## Introduction

Plastics pollution is a critical environmental issue. The average person associates it with bottles, bags, and other single-use products sully parks and public spaces or filling waterways and oceans.

But, it is much more than that. If the consumer looks further upstream in the supply chain, they can see exposures potentially being created at resin producers, trucking hubs, railyards, and plastics processors if resin pellets, sometimes called “nurdles”, are released into the environment at points of delivery or transfer. Those pellets can also escape from within buildings if proper controls are not utilized.



Storm water flows – run-off from rain or melt or, in some cases, processes – can put those pellets into watersheds if they reach ditches, streams and sewers.

The key to preventing such exposures is to eliminate pellet loss. The goal is always zero lost pellets. But, accidents happen: A truck driver can have a ruptured line while filling a resin silo....a silo can overfill...a spill can happen within the facility adjacent to a door....and so much more.

It's the policies and infrastructure that are put into place that can prevent those incidents from exposing the environment to waste.

This booklet will summarize the procedures and investments that Confer Plastics has utilized to keep resin loss at bay to protect the Niagara River and its feeder streams.

## Silos: The point of delivery and the greatest risk



Confer has on site 6 material silos outside the building as well as multiple ports that feed material to smaller silos within the building. These silos inventory the pellets until they are used in manufacturing, at which time they are placed into material bins by augers or vacuum conveyance systems.

These silos or actions associated with them provide the greatest risk for environmental exposure. Therefore, these locations receive the greatest attention, in terms of eyes, efforts, and enforcement. Most rogue beads collected outdoors come from silo events.

There are three primary silo events: One, spills at time of delivery (which account for more than 95% of all incidents); two, spills that come from overfilling; and, three, spills that come from a broken infrastructure (such as a pipe).

Spills occur at delivery by two means. A feed tube from the tractor trailer (bulk truck) can come loose from either the silo's feed port or the truck's outlet. More likely, a few beads can spill from the truck's hose when it is disconnected from the silo feed port.

To mitigate these exposures, there are multiple things undertaken.

From a structural standpoint, the areas near the silos, and the driveways, are blacktopped. Previously, blacktop had been in intermittent sections, as much of the driveway and back roadway was gravel. In spring of 2021, Confer Plastics invested \$92,000 in full blacktopping of all areas around, near, and to the silos. The hard, flat surface of blacktopping (versus stones and gravel) allows for better clean-up if there is a spill in the vicinity.





Also, containment areas are found underneath all silo feeds tubes. These structures are walls that will catch and keep the beads within that pen. Any spilled beads within the pens can be collected by the driver or at daily clean-up.



If the silo overfills during the process of filling, pellets are blown-out through an evacuation port atop the silo. All silos are designed in this manner...and designed poorly. The evacuation port is basically a mouth at the top of the silo that sprays excess material anywhere and everywhere. From 40 feet up, this can create a significant situation as dozens, if not hundreds, of pounds material can be put out into the world if a truck driver is not on top of his or her game.

Overfills are rare at Confer Plastics. There may have been only 3 such occurrences in the 2000s.

Regardless, we developed a means to contain these events and overcome the silos design flaws: We installed PVC outlets on every silo that run from the evacuation port down to ground level where, if an overflow did occur, it would go to a specific and narrow spot – a garbage can that is always located underneath these ports.



Preventing and containing any silo spill takes more than just infrastructure – it also takes procedure, it takes people.

It all begins with the truck driver. Most bulk truck drivers who make deliveries here have experience delivering plastic and the environmental concerns that come with that. But, we cannot assume that they do and know (they may have delivered other bulks like foodstuff); that other plastics processors have stringent rules; or, that the driver is a stickler for details.

So, upon arrival, whichever Confer Plastics employee takes delivery provides to the truck driver a tri-fold laying out our expectations of the driver regarding spills and communications. The Confer employee will inspect the area around that silo prior to hook-up.

The Confer employee also begins to fill out a “material delivery inspection report”. That paper will ultimately be stapled to every receiver, and copies will be provided to management – Confer and that of the trucking and resin firms – if there is an issue. The “material delivery inspection” report will list:

- Date and time of arrival and pre-inspection
- Material type and its manufacturer
- Trucking firm and driver
- Time stamp of post-inspection
- Space to list any issues associated with inspection or delivery
- Sign-off by Confer employee

To complete that form, the Confer Plastics employee must inspect the area once the trucker has restored his or her truck to normal (as in, hoses retracted).

The truck driver is supposed to pick-up after himself.

If the truck driver left material behind, a Confer employee will be assigned to clean-up any spills.

Significant incidents, or driver neglect, will be reported accordingly.

Designated Confer employees are trained on these practices on 2<sup>nd</sup> and 3<sup>rd</sup> shift as well in the event a material delivery is absolutely necessary after hours.

The third spill event mentioned concerned broken infrastructure. Broken pipes can occur over time (from vacuum pressure changing) or from destruction from a major storm. These pipes receive regular, daily inspections from ground level, with inspections by lift occurring quarterly.

## Protecting the water

Donner Creek, or more accurately, *a drainage ditch and marsh that used to be Donner Creek*, is immediately adjacent to the facility and part of Confer Plastics property. This wetland flows into the Niagara River by traveling under River Road and Gratwick Park, terminating in a culvert at the river shore.

In order to protect this small watershed and then the greater one, there are some further precautions taken beyond those previously listed and those coming.

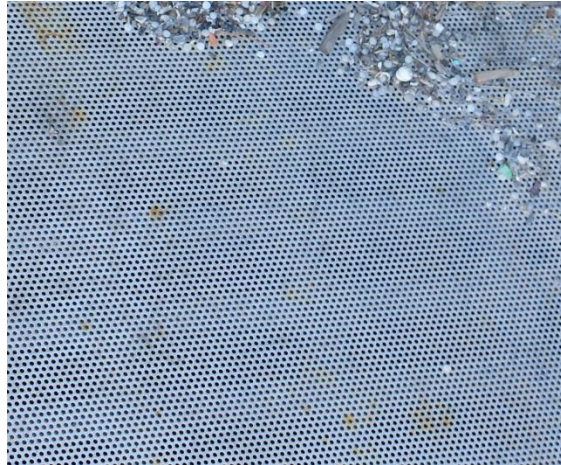
Berms have been built of earth and stone to prevent ground surface stormwater from taking pellets into Donner Creek.



*This berm next to the driveway and Donner Creek is 10" to 24" high*



All loading docks and the parking lot have stormwater drains that feed Donner Creek. Those drains are covered with small screens that collect pellets – and all other debris – to prevent their transmission to the creek.



*This photo demonstrates how effective a screen can be at catching waste*

The terminal ends of the pipes that come from those drainage systems are also covered with mesh to add a redundant level of protection/prevention.

The drain screens are cleaned daily of all debris (not only resin, but cigarette butts, sticks, whatever might accumulate) and the ends of the pipes are inspected regularly to see if any resin made it through the screens.

In early-summer of 2021, following the breeding season of Canada geese, mallards, and herons frequenting the Donner Creek marsh, a skirt will also be placed within it to one, verify that all measures are working, and, two, collect anything that may have sneaked past any measures. It is more of a verification tool than anything.

## Garbage collection

We have a small dumpster that is collected once per day, five days a week. This dumpster, which is kept outdoors, could see some loss of debris when filled and emptied.

The area adjacent to the dumpster is cleaned daily after dumping. There is also a wall, with a stone berm around it to prevent windblown and storm water-driven waste from escaping the area and making its way to Donner Creek (which, as mentioned is also protected by a berm).

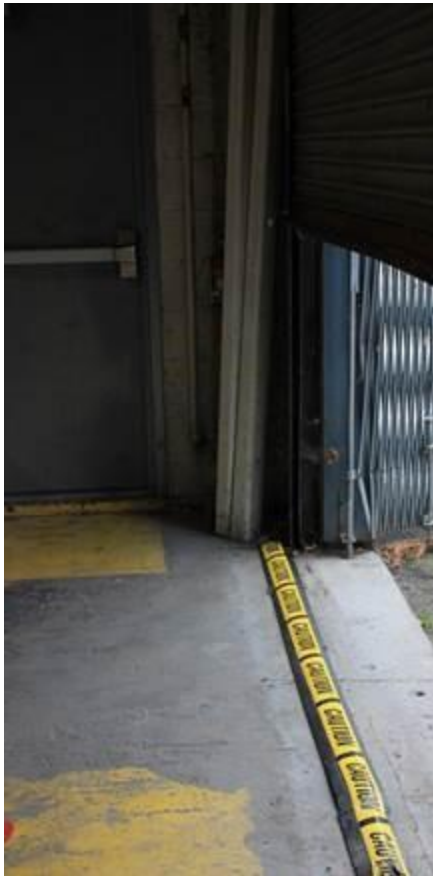


## Preventing the inside from getting out

Material spills, cutting waste, and trimmings are part of the manufacturing process. There's no way around it with extrusion blow molding.

But, precautions are taken to make sure that anything that happens in the factory stays in the factory.

They include but are not limited to:



At time of waste management, to prevent the wind from catching plastic fuzz that may have been created by processes of routing and cutting plastic parts, machines that create such fuzz have that waste put into large polybags before being tossed into the dumpster.

Bumpers or glorified dams are placed at overhead doors to prevent beads of material from escaping.

Material handlers and other towmotor operators blow off all towmotors, skids, and other items before taking them outside to eliminate the potential for pellets, regrind, or fuzz coming off of the machinery or what it's transporting. Company policy is also that raw material and regrind cannot be transported outside.

All cleaning by staff sees sweeping inward, not outward, so no beads are projected outdoors.

## Daily outdoors clean-up

To double-check all potential spills around the silos and to clean any spills by the dumpster, the grounds & environment steward cleans and maintains all areas where exposures might occur as well as the protective infrastructure in place such as screens, berms, material pens, and the like.

The steward is also empowered to audit and enforce related to tasks and behaviors that could cause materials to come out from within the building. He educates and corrects individuals, while ensuring polybags are available and all dumpsters are in proper working order.

The steward has been provided the necessary tools, including a high-powered, propane-driven vacuum cleaner to add in cleaning of spills.



Management audits and inspects on a regular basis all material containment activities and infrastructure and seeks continuous improvement or refinement.



## Epilogue: Confer and the environment

With the operational side of things having been addressed, we will close by looking at the culture of environment at Confer Plastics. The following narrative, over this and the next few pages, is from our website. It has been in place there -- and part of our philosophy shared with coworkers, customers, and the community -- since 2015 with slight revisions to content to reflect on additions:

Many manufacturers and consumers have recently taken it upon themselves to approach the free market in an environmentally-conscious manner. They have developed an awareness of how their business and buying decisions affect the world around, striving for conservation and sustainability.

This is a relatively new endeavor for most. Not Confer Plastics. We have a long history of supporting green practices.

### *Environmentalism is our culture*

Environmentalism starts at the top at Confer Plastics.

The company's co-founder and CEO, Doug Confer, is a steward of the land. He was raised on a farm in rural upstate New York where he gained an appreciation for the land and the plants and creatures that thrive upon it. It's an appreciation that he carries with him to this day: He still lives on that spread and, through the years, has developed it into a wildlife haven where he maintains woodlots and pastures. He has also built three large ponds which are frequented by all sorts of rare migrating birds.



*The view from the Confer's forest in Allegheny County, New York*

His son, Bob, has followed a similar path. He, too, has a keen interest in the environment. His first job was as the Nature Director at the Boy Scouts of America's Camp Dittmer. He has aided various programs in the mapping and tracking of birds, reptiles and amphibians in New York State and he has led many elementary school students on nature walks. For years, he wrote a weekly nature column called "Exploring the Niagara Frontier" — each week it highlighted a specific animal, plant, hiking trail or natural attraction found in Western New York. In recent years, he has maintained a very popular daily social media post (#Nature365) in which he shares a photo and facts about local plants and animals. Bob owns a track of wild forest in the Allegheny Mountains of New York that is carefully managed to support its own diverse and fragile ecosystem that includes orchids, boreal songbirds, bears, and salamanders.

This is a mindset that the Confers have applied to their business. They have instituted a consistent, concerted effort to minimize their environmental impact.

### *We operate clean facilities*

You'll notice upon arriving at our facilities — which are just a stone's throw away from the mighty Niagara River — that both of our tidy complexes are surrounded by woods and our headquarters is home to a marsh. These sites have become virtual refuges for animals of all sorts as they are the few woodlots in the city and residential areas in which we are located. It's not uncommon to see deer, coyotes, hawks, herons, and songbirds of all sorts at our factory, right in the city limits.

Those facilities are cleaner than what people typically might envision. When someone hears “manufacturing” they think smokestacks and billowing clouds of smoke. Not at Confer Plastics. We don't have smokestacks, nor do we put pollutants into the air. We have a clean and safe process that meets all state and federal emission standards.

### *We utilize clean energy*

Our operations are powered by clean energy. We don't have solar panels or windmills, but most of our power comes from the Niagara Power Project that uses the Niagara River to create hydroelectricity. It's among the cleanest energy sources in the US – no coal, no nuclear, no natural gas – just the power of Mother Nature herself. We have practices in place that minimize waste of that precious energy by conserving energy and investing in state-of-the-art capacitors and equipment.

### *We don't make products that go into landfills*

We do a lot to conserve materials. All of our plastic scrap is used in-house. It doesn't go to a landfill. We closely monitor the usage of this material (called “regrind”) to ensure that there is none left over. Any regrind that is left over is used on a few jobs that can consume all of it.

Unlike many products on the marketplace, all of our goods are manufactured with long-term UV additives which ensure they do not fade or become brittle because of the sun's rays. We don't want our products in a dump because of poor quality. We want them – and expect them – to last a lifetime.

The material used in our products is high density polyethylene and the compounds used to color them are free of heavy metals, ensuring their recyclability if you planned to dispose of your product...which we hope you don't.

Confer Plastics does not manufacture commodity or disposable items. We don't make any bottles or single use items. We manufacture only durable goods of the highest integrity. Disposables are so antithetical to who we are that many times we have had an informational booth set-up at Niagara University's Earth Day event, at which we discuss the woes of microbeads, plastic bags, and water bottles while educating students on what can be done to recycle or adjust personal and collective behaviors.

### *Our products benefit the environment*

Many of those products that we produce for our clients have a special relationship to the environment. We have manufactured the following custom items through the years...

- Various styles of plastic gourds that are used to house purple martins, birds that have evolved to become totally dependent on human assistance in their nesting behaviors
- A floating/suspended breakwater the environmental benefits of which far exceed a standard break wall as it allowed freshwater and sea life to move or migrate through it
- Floats that are used to suspend the nets that collect oceanic oil spills
- Compost tumblers
- Vessels that are used to hold compressed natural gas, allowing fleet vehicles to switch over from diesel
- Sonobuoys that are used to listen to and track whales and dolphins
- The kayaks we manufacture get families on the water to explore and experience wild space



### *Our charity encourages positive use of the environment*

Confer Plastics has a long history of giving to causes that support education and access to the outdoors:

- For years, we have run the Confer Plastics Classic golf tournament the proceeds of which are donated to the Boy Scouts of America. The typical earnings are \$15,000 per year. Most of the funds have been used to improve Camp Dittmer, which gives young scouts access to 200 acres of forest and 100 acres of a private lake
- In 2019, our \$10,000 community impact grant was invested in Gratwick Park in North Tonawanda. We encouraged the City of North Tonawanda to install a boat launch ticket kiosk, affording families from all over the chance to put their boats into the majestic Niagara River and enjoy its natural splendor
- In 2020, our \$10,000 community impact grant was donated to the Royalton-Hartland School District to invest in the school's updated playground and also its new nature space where, among other things, the students will use our gourds to raise and learn about purple martins



*The ribbon cutting at the Gatwick boat launch in 2019*

If you would like more information about these and other environmentally-friendly behaviors and practices utilized by Confer Plastics, please do not hesitate to contact us.

## **Contact**

If there are any questions or concerns about the policies or investments contained within this program, contact:

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