Board of Directors Meeting Highlights Held on November 15, 2018 at 11:00 AM at the Dark Horse Winery Board Room



2019 Budget

The world changed in 2018 for the recycling industry. China caught the world by surprise when they banned materials and increased quality requirements sending ripples across the industry. Many programs are reconsidering which materials to accept, some have stopped recycling altogether while others have faced steeped increases to maintain their programs.

After maintaining recycling fees for three years, there will be an increase of 3.0% in 2019. The per share cost will rise to \$56.60. Co-collection and automated rates are based on the CPI rate of 2.2% as of September 2018. Commodity revenue for 2019 is based on current tonnages and the current prices. Prices have crashed this year as a result of oversupply worldwide. Grants are based on this year's award.

Expenses in most categories are projected to be in line with the projected cost of living increases. Energy prices are on the rise again, repairs and maintenance in the fleet area are climbing as equipment ages and reached its out of warranty life span. Recruitment costs will also have an impact as we are faced with the difficulty of replacing our aging skilled workforce without any real prospects.

	2018 Budget	2018 Projection	2019 Budget	\$ Diff.	%
Sales					
Commodity Revenue	1,650,000	1,780,000	1,417,000	-363,000	-20.4%
Grants	2,019,000	2,218,000	2,218,000	-	0.0%
Municipal Levy	3,778,000	3,700,000	3,754,000	54,000	1.5%
Co-Collection Revenue	3,124,000	3,252,000	3,419,000	167,000	5.1%
Containerized Services	1,170,000	1,230,000	1,268,000	38,000	3.1%
Other	441,000	510,000	499,000	-11,000	-2.2%
Total Sales	12,182,000	12,690,000	12,575,000	-115,000	-0.9%
Total Cost of Goods Sold	1,372,000	1,524,000	1,552,000	28,000	1.8%
Gross Profit	10,810,000	11,166,000	11,023,000	-143,000	-1.3%
Operating Expenses					
Total Administration Expenses	765,250	775,000	791,000	16,000	2.1%
Total Collection Expenses	5,017,000	5,378,000	5,603,000	225,000	4.2%
Total Processing Expenses	2,186,500	2,323,100	2,313,700	-9,400	-0.4%
Total Operating Expenses	7,968,750	8,476,100	8,707,700	231,600	2.7%
Operating Income	2,841,250	2,689,900	2,315,300	-374,600	-13.9%
Total Nonoperating Expense	2,632,000	2,523,000	2,490,000	-33,000	-1.3%
Net Change in Cash Position	209,250	166,900	-174,700	-341,600	-204%
Share Charge	\$54.94	\$54.94	\$56.60	\$1.66	3.0%

A Big Thank You to All

We would like to take the opportunity to thank all the municipal representatives over the last fours years for keeping the lines of communication open and contributing to our success despite difficult conditions at times.

We especially thank those who stepped up to serve on our Board of Directors. They have continued to steer the Association on a path to success that enhances the services available to its members and all the residents served in a fiscally responsible manner. Their term was a difficult one but their cooler heads prevailed and the right decisions were made at the right time.

Alas, it is time to turn the page and look ahead. As you are aware, each member municipality is required to appoint, by bylaw, a representative to the Association to ensure that lines of communications are open between your municipality and the directors and management of the Association. Appointment of a representative who must be an elected official should be made as soon as possible.

At the next General Meeting scheduled for Thursday January 24, 2019, a new Board of eight individuals will be elected by municipal representatives. Board members chosen to serve for the next four years will find the experience both interesting and challenging. Major decisions will have to be made to ensure that the Association meets the needs of its members, remains competitive, and continues to lead the way in waste reduction/resource management initiatives. If your appointed representative is up to the challenge and wishes to apply for a position on the Board of Directors, they are encouraged to contact us at 1-800-265-9799 extension 225 or email me at bluebox@bra.org.

Holiday Collection

This year Christmas and New Year are both on Tuesday. There will be no collection on Tuesday but those normally collected on that day will be collected on Saturday December 29th. All other collection days will proceed as normal as long as mother nature cooperates.



Driver Shortage Once Again Ranked as Trucking Industry's Top Concern

The American Transportation Research Institute, the trucking industry's not-for-profit research institute, today unveiled its Top Industry Issues report, which includes the list of the top ten critical issues facing the North American trucking industry. For the second year in a row, the driver shortage is the top-ranked issue.

The need to recruit qualified truck drivers is not a new issue for the industry. In fact, the Driver Shortage has been a top-three issue in 12 out of the 14 years that ATRI has conducted this survey. However, the driver shortage has held firm as the number one issue as strong freight demand and an aging workforce increase pressure on motor carriers to recruit and retain the best talent.

The Association is not immune to the driver shortage. We are looking for driver right now and have launched a training program for those interested in a career in trucking but in need of a commercial license. We love referrals if you know anyone interested.

The complete results of the annual survey, which generated more than 1,500 responses from motor carriers and commercial drivers, were released today at the 2018 American Trucking Associations' Management Conference and Exhibition in Austin, Texas. The ATRI Top Industry Issues report also includes prioritized strategies for addressing each issue.

The number two issue in this year's survey is the Hours-of-Service rules, driven in large part by the industry's call for increased flexibility in the rules, particularly the sleeper berth provision. Reflecting the industry's challenges in recruiting and retaining professional drivers, this year's number three issue is Driver Retention, up two spots from last year.

Industry concern over the ELD Mandate has abated some since the final rule went into effect last December, as evidenced by a drop in ranking from the number two issue in 2017 to the number four issue this year. The lack of available truck parking rounds out this year's top five but remains as the number two issue among commercial drivers.

Full Producer Responsibility for Waste Diversion Programs:

The transition of used tires, electronics, and household hazardous waste programs to Resource Recovery and Circular Economy Act, 2016 are underway while the Blue Box program remains in its current challenging state. Full producer responsibility fits with making polluters accountable and ensures businesses are responsible for the materials they put into the market. The costs are moved off the property taxpayer who has little ability to manage or influence any decisions on packaging. A recent Draft Discussion Paper on how to transition the Blue Box has been released by Municipal Resource Recovery & Research Collaborative (M3RC). [M3RC is composed of senior staff from AMO, City of Toronto, the Regional Public Works Commissioners of Ontario, and the Municipal Waste Association.]

Ministry of Labour Guideline Review Project Initiated

The Ministry of Labour has convened the first meeting of the advisory group assisting with the review and updating of the MOL 2004 Mobile Compacting Equipment Safety Guidelines for waste vehicles. The project will run for 5 months and OWMA is well represented by the following individuals: Rob Cook, OWMA; Colin Vidler, City of Hamilton; Dave West, GFL Environmental; Greg Parr, Joe Johnson Equipment and Francis Veilleux, Bluewater Recycling Association. Input is being coordinated through the OWMA Health & Safety committee and we will endeavour to keep members updated on guideline changes being contemplated.



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* You will be home every night and weekends with your family except for a couple of times of year when w

Cancelling Cap And Trade Will Result In \$3B In Lost Revenue: FAO

Financial watchdog says loss is greater than the sayings achieved by cutting program spending.

The cancellation of the cap-and-trade system will cost \$3 billion in lost revenue over the next four fiscal years, warning the decision would push the provincial budget further into the red.

Financial Accountability Officer Peter Weltman said the loss of revenue from cap and trade will be greater than the savings the government will achieve by cancelling spending associated with the program.

The new Progressive Conservative government revised the deficit to \$15 billion last month, up from \$11.7 billion predicted by the province's auditor general.

Weltman could not immediately say what the province's deficit would be after factoring in the loss of revenue from cap and trade, but added that his office would provide an update on Ontario's deficit later in the fall.

"The challenge doesn't change," he said. "The deficit number becomes bigger."

The FAO also estimated that in the long run, the cap-and-trade system would have cost Ontario families less than the federal carbon tax. The federal government has indicated it plans to return the money raised by the tax directly to residents in the provinces opposed to the plan.

Under cap and trade, the typical Ontario household would pay \$312 annually in additional costs by 2022, said the FAO, compared to \$648 under the federal system by the same year.

Premier Doug Ford campaigned on a pledge to cancel cap and trade during the spring election and has vowed to take Ottawa to court over its decision to impose a carbon tax.

The province has introduced legislation to repeal the system, which was introduced by the previous Liberal government and puts caps on the amount of pollution companies in certain industries can emit. If they exceed those limits, they must buy allowances at auction or from other companies that come in under their limits.

The Feds Pushing Ahead with a Carbon Tax

On October 23, 2018, the Government of Canada announced the next steps in its climate action plan and reaffirmed its commitment to apply a federal carbon pricing system (the "Federal Backstop") in Ontario, New Brunswick, Manitoba and Saskatchewan in 2019. In so doing, the federal government has doubled down on imposing carbon pricing across Canada. The media release noted:

"The Government of Canada worked with provinces and territories for two years, giving them the flexibility to design their own climate plans that included putting a price on carbon pollution. A price on pollution gives people the incentive to make cleaner choices and gives businesses incentives to find clean solutions. Alberta, British Columbia, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Prince Edward Island, Quebec and Yukon have stepped up and shown leadership, either by developing their own systems or choosing to adopt the federal pollution pricing system. Other provinces have not recognized the cost of pollution."

"The Prime Minister, Justin Trudeau, today announced that there will be a federal system in place in Ontario, New Brunswick, Manitoba, and Saskatchewan in 2019. This is the next step in the government's plan to protect the environment and grow the economy. Any direct proceeds collected will go directly back to people in these provinces. Households will receive a Climate Action Incentive, which will give most families more than they pay under the new system. Funds will also be given to the provinces' cities, schools, hospitals, businesses, and Indigenous communities to, for example, help them become more energy efficient and reduce emissions, helping Canadians save even more money, and improve our local economies."

Ontario has vowed to fight the federal carbon tax and is planning to release a new environmental plan that will address carbon and GHG in November.

Ontario Consulting on New Climate Change Plan

The Ministry of Environment, Conservation and Parks is consulting on Ontario residents' priorities for a new climate change action strategy. The deadline for this initial consultation is Friday, November 16th. This strategy will be released for focused consultations later this year to replace the previous climate plan that prioritized cap and trade revenue to invest in a low carbon economy.

For this consultation and to assist members now, AMO has prepared a general discussion paper, Municipal Governments in Ontario and Climate Action, to outline municipal climate change action needs and areas of concern. The paper also provides a framework for municipal governments to review and analyze the draft strategy when released later this year. AMO will review the draft strategy, as well, and advise members of any areas of municipal impact and concern that emerge.

We understand that the new plan will prioritize climate adaptation and resilience for residents and communities. It may also set new greenhouse gas (GHG) reductions targets and establish technological investment incentives. Depending on the scope and the policy objectives in the new strategy, it is expected that municipal governments could be impacted to some degree.

Natural Gas Truck Sales Down

Natural gas truck sales in the U.S. and Canada have declined 28% this year through August, according to a new report from ACT Research. They were up 13% in 2017.

"On a nominal basis, natural gas retail sales are down about 600 units for the first eight months of 2018

on a year-over-year basis," said Ken Vieth, senior partner and general manager at ACT Research. "Based on news released in the popular press, natural gas vehicle purchases continued to be dominated by refuse fleets, as well as transit and school bus operators."

Vieth added, "With the narrowed fuel price spread between diesel and natural gas, it really isn't surprising that sales of natural gas units softened. That said, it is important to remember that the conversion of a fleet from diesel to natural gas doesn't rest entirely on the savings of fuel. Natural gas offers more consistent fuel pricing and is one way fleets can meet more stringent environmental requirements, particularly where RNG is available."



Bill 47: Making Ontario Open for Business Act

The Minister of Labour announced that the government is proposing to repeal amendments made by the Fair Workplaces, Better Jobs Act, 2017 (Bill 148). If passed, changes would include:

- Keeping the minimum wage at \$14 on January 1, 2019 and establishing a 33-month pause in minimum wage increases with annual increases to the minimum wage, tied to inflation, to restart in 2020.
- Repealing the scheduling provisions that were to come into force on January 1, 2019, including the minimum of three hours' pay for being on-call if the employee is available to work but is not called in to work, or works less than three hours.
- Repealing the averaging public holiday pay formula prescribed by Bill 148, and return to the previous prorating public holiday pay formula.
- Removal of requirement for employers to provide equal pay to part-time and full-time employees.

OTA Weighs In On New Drive Clean Program

The Ontario Trucking Association (OTA) has given the province input on how its new Drive Clean program should look.

It also wants incentives given to fleets who adopt low-emissions equipment. The Ontario government recently announced the cancellation of the Drive Clean program for passenger vehicles, which will be replaced by an updated program that will focus on heavy vehicles.

OTA's suggestions include:

- The phasing-out the heavy-duty Drive Clean Program because of the overwhelming pass rates in the province;
- Opposing a lengthy on-board diagnostic (OBD) test, and focusing on more impactful issues such as compliance with engine tampering to improve air quality and reduce carbon emissions;
- The development of a cost-effective and focused inspection program dealing with emissions systems and speed limiter component tampering;
- The establishment of several working groups to explore, review and research procedures surrounding OBD testing; enforcement protocols, when a review of Motor Vehicle Inspection Station (MVIS) are triggered; and the various industry reasons for the use of delete kits to help shape future enforcement policies.

Chinese Plastics Company To Open Recycling Facility In Georgia

The China-based UPT Group Inc. says it has completed a deal to purchase a vacant building in Montezuma, Georgia, in Macon County. The company expects to undertake repairs at the site to convert it into a facility that will be able to process plastic scrap into pellets.

The 400,000-square-foot building, formerly a Southern Frozen Foods Fresh Plant, sits on about 18 acres of land.

"This deal is a cooperative effort between UPT Group Inc., Montezuma, and China's XTJ Plastic Recycling Inc.," says Gerald Beckum, executive director of the Development Authority of Macon County. "Locally, the county, the city of Montezuma and the Development Authority of Macon County have worked for the better part of two years to make this a reality." Beckum says the company expects to have the facility operational by the end of the year.

Song Lin, CEO of UPT Group, says the company plans to renovate the property and install equipment to wash, degrease, sanitize and pelletize recycled plastic. Water used in the plastic processing stages also will be recycled, causing minimal use of the city's sewage system, according to Lin.

Lin says the company will be recycling LDPE (low-density polyethylene) and HDPE (high-density polyethylene) plastic scrap from postindustrial, postconsumer and agricultural sources. Regarding agricultural plastic scrap, Lin says he recently met with a Florida supplier and saw as much as 15,000 tons of plastic in storage awaiting a home.

He estimates that when the company is running with its eight proposed lines, it will be able to pelletize about 2,000 tons of plastic scrap per month. The pelletized plastics will be shipped to China, where, according to Lin, it will be used by XTJ Plastic Recycling to manufacture plastic piping, among other products. The company will be shipping the pelletized plastics from the Port of Savannah in Georgia.

Lin says the quality of the reprocessing equipment being installed makes him confident the quality of the material produced at the plant will allow it to ship the pellets into China despite its tight standards on such materials.

Although scrap initially will be trucked in, Beckum says there is an idled CSX rail line on the property that could be reconnected. Whatever scrap materials UPT does not reprocess into pellets it will sell as scrap back onto the market, adds Beckum.

Malaysia Bans Import Of Plastic Waste

Malaysia has announced an immediate and permanent ban on the import of plastic waste. Also, the country will be phasing out the import of other types of plastic within three years, local media report.

The decision was made in a meeting between Malaysia's Ministry of Housing and Local Government and the Ministry of Energy, Science, Technology, Environment and Climate Change, the Ministry of Water, Land and Natural Resources and the Ministry of International Trade and Industry.

Prior to this, the Malaysian government had imposed a three-month freeze on issuing permits for the import of plastic waste.

Latin America And Caribbean Ready To Close The Door On Plastic Waste

Belize and Guatemala are the latest countries to join UN Environment's Clean Seas campaign to 'drastically reduce the consumption of single-use plastics and eradicate the use of microbeads'.

Jamaica will start implementing a ban on plastic bags, styrofoam and straws next year. Already on board are Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Granada, Guyana, Honduras, Panama, Peru, Saint Lucia and Uruguay.

Interestingly, Guatemala is using so-called "bio-fences" – made from recovered plastic debris – to collect plastic scrap from waterways. Honduras, the Dominican Republic and Panama have also adopted these plastic structures.

Back in 2016, Antigua and Barbuda were the first nations in Latin America and the Caribbean to ban plastic bags.

Long Island Single-Stream Recycling Program Shuts Down

Hudson Baylor Brookhaven plans to stop business temporarily because of market conditions.

Brookhaven, New York-based Hudson Baylor Brookhaven, also known as Green Stream Recycling, announced plans to temporarily suspend operations at its Long Island single-stream recycling facility indefinitely, according to a Hudson Baylor Brookhaven statement.

Initially, the company planned to suspend operations Oct. 22, but it has extended operations until Oct. 29, per the town of Brookhaven's request. According to the statement, the company needs to suspend operations "due to the mass of materials delivered to the facility no longer having any useful, physical or chemical properties."

"Essentially, it's market conditions," says Will Flower, a spokesperson for Green Stream Recycling. "And the other is an unfavorable agreement that needs to be reworked. So, the [current] contract was just not going to make Green Stream a viable entity."

According to the company, Green Stream Recycling was the first company on Long Island to introduce single-stream recycling in January 2014. However, the company adds that the recent state of recycling in 2018 has had a negative impact on Hudson Baylor Brookhaven as it has other recyclers across the U.S.

In addition, a company statement adds that "the lack of markets for recyclables is well beyond the control of the town of Brookhaven or Hudson Baylor Brookhaven. [The company] has attempted in good faith to coordinate a path forward that has the least detrimental impact to the town and its residents. Municipalities across the United States have been working throughout the past year to reshape recycling programs and reform existing agreements with recycling service providers to address the new market realities and are continuing to do so to this date."

With Hudson Baylor Brookhaven suspending operations, Flower says the town has a secondary bid going out to provide recycling services. Flower adds that the company hopes to relaunch Green Stream Recycling in the future.

Recycling Programs Debate: Mandatory vs. Voluntary

While many cities in the United States maintain active recycling programs, most of these programs are voluntary. Individuals and businesses often "opt out" of recycling and send materials to a landfill because they believe recycling costs more or requires too much time. Amid rapid recycling industry changes in the aftermath of China's ban on importation of U.S. recyclables, it can appear that recycling costs more than landfilling. But that view ignores the energy and raw materials savings generated by recycling.

On the other hand, U.S. cities such as San Diego, Honolulu, San Francisco, Seattle, and Pittsburgh have made recycling programs mandatory. Other cities have introduced mandatory programs for business locations, allowing individuals to choose whether or not to participate. Although recycling rates are higher in these cities, there is still much "wishful" recycling due to poor information. People toss unrecyclable materials in the recycling bin in hopes it can be processed. The resulting contamination presents all sorts of problems, ranging from increased recycling processing costs to rendering tons of otherwise recyclable materials worthless.

Unfortunately, consumer education about what can be recycled is often insufficient. Without standards and clear guidance, people fail to recycle effectively regardless of whether a city embraces voluntary or mandatory recycling.

Nine years ago, Earth911 reported about several cities that had pioneered mandatory recycling programs. Since then, more cities and even some states have set out mandatory programs. The city of Oakland, California, for example, started a mandatory recycling program for its largest businesses in 2012. The city expanded its mandatory program to include all businesses in 2014. Starting in 2016, Oakland required home and business recyclers to collect food scraps and compostable paper separately from recyclables and trash. Oakland also provides free organics carts to multi-family properties within their city. The city is considering zero waste plan proposals from a variety organizations.

Dallas and Austin took different experiences toward mandatory programs. In 2011, Dallas launched a 50-year solid waste plan to transform the city's waste management systems to achieve zero waste by 2060. The first progress checkpoint is approaching in 2019, when all apartment buildings within the city must be zero-waste compliant, but to date, Dallas had achieved less than 10 percent of the goal.

By 2020, Dallas aims to bring their recycling program collection rate to 40 percent. The city hopes to achieve 60 percent recycling rates in 2030 and 100 percent by 2040. However, public reception of these deadlines is shaky, because of worries over contamination and funding.

Austin's Universal Recycling Ordinance, by contrast, made steady progress since its inception in 1999. A breakthrough in the program came with the advent of the city's embrace of single stream recycling. By this method, the consumer or business gathers all recyclables in a single bin; the items are then sorted by the hauler at a central location. After the single-bin model was put in place, acceptance of and adherence to the ordinance increased rapidly. Ease of recycling eliminated many complaints about the program.

Perhaps the most ambitious examples of government bodies pushing for greater sustainability are Connecticut and Vermont, two states that took mandatory recycling programs to the next level. Connecticut enacted mandatory recycling in 1989, when it introduced a list of nine items that were required to be recycled. Since then, the state has expanded the list of materials that must be recycled. Individual municipalities can add their own recycling requirements to this statewide mandate. Additionally, in 2010, the state implemented a requirement for large-scale food waste generators to compost waste. Connecticut kept its bottle deposit system in place as other states discontinued deposit programs.

In 2012, Vermont began a similar recycling program with its Universal Recycling Law, an effective ban on three major types of recyclable materials in landfills: "blue bin" recyclables, yard clippings, and food waste. A 2018 amendment to the law established a state-wide ban on food waste from landfills, effective in 2020. Vermont also made its bottle-deposit system more rigorous to reinforce recycling incentives.

ISRI Poll Shows Ways To Make Recycling Easier

The Institute of Scrap Recycling Industries (ISRI), Washington, has partnered with The Harris Poll to conduct a study among more than 2,000 Americans Sept. 17-19 to determine how brands and government can play a role to increase recycling rates.

According to the poll, about 66 percent of Americans agree that "if a product is not easy/convenient for me to recycle, I probably would not recycle it." The poll also provides insights into ways that brands and government officials can better drive recycling.

The majority of Americans (about 81 percent) would like to see manufacturers or retailers display a "recycling guide" label on products (similar to the Energy Guide label on appliances) that would detail the parts and percentage of the product that could be recycled and how to do so. Having this information more prominent may help Americans consider these aspects of their product when making a purchase, or it could also encourage recycling of the product or package when disposing of it.

Younger Americans (ages 18-34) are more likely to consider the products packaging than older Americans (ages 34 and older)—including whether the packaging can be recycled (17 percent of younger Americans versus 11 percent of older Americans), what the package is made of (16 percent of younger Americans versus 9 percent of older Americans) and whether the package is made from recycled materials (16 percent of younger Americans versus 8 percent of older Americans). This could be an important aspect for brands targeting the purchasing power of millennials.

The government can also set an example for Americans by prioritizing recyclable materials. According to the survey, about four in five Americans (80 percent) agree that governments at all levels should prioritize the use of recyclable products [or materials] when making purchasing decisions. Recycling is demand driven, so increasing the use of recyclable materials in manufacturing is critical to the success of recycling. This is also an important takeaway for brands participating in the government procurement process.

The survey also found that 86 percent of U.S. adults agree recycling collection sites need to be more readily accessible to consumers. Additionally, the study looked at Americans' attitudes toward curbside collection programs.

Toronto The First City In Canada To Join Global Circular Economy Network

Toronto is the first city in Canada to join the Circular Economy 100 (CE100) network, created by the Ellen MacArthur Foundation. The CE100 brings together corporations, municipalities and other orders of government, academic institutions and innovators to realize their circular economy ambitions and projects faster through collaboration, capacity building, networking and sharing research and insights.

The circular economy focuses on reducing waste and getting the most out of products and resources. It moves away from the traditional take-make-and-dispose approach to a circular approach that maximizes the life of products and resources through reuse, recycling, repurposing and repair. It also aims to recover resources from products at the end of their life.

As part of the Long Term Waste Management Strategy, approved by Council in 2016, the City is working towards a goal of zero waste and developing a strategy and policy framework to make Toronto the first municipality in Ontario with a circular economy. Membership in the CE100 network will assist the City in developing a circular economy roadmap and in moving toward its goal. With its membership in the CE100, Toronto now joins leading governments transitioning toward a circular economy, including Brussels, Denmark, London and Phoenix, as well as global enterprises.

To drive innovation and the growth of a circular economy in Toronto, the City has established a Unit for Research, Innovation & a Circular Economy and a Circular Economy Working Group. The Unit is involved in research and planning, as well as incorporating circular economy principles into new programs, policies, procurement and processes.

Recycling Mystery: Garden Hoses

As winter approaches, it's time for many homeowners to put away the garden hose to protect it from winter weather. But if you're noticing holes or leaks, you might be wondering, "What do I do with the old hose?" Unfortunately, the options for recycling are basically non-existent, because of both the hose material and its shape. Most hoses are made of polyvinyl chloride (PVC) or polyurethane (PU), also known as #3 and #7 plastics for those familiar with the plastic resin ID codes. These are two of the most difficult plastic resins to recycle.

If you purchased a more expensive hose, it's likely made of synthetic rubber, the material used to make tires and machinery belts. While there's a great market (and demand) for tire recycling, most of the options for consumers to recycle them would be retail stores and household hazardous waste (HHW) programs, which would be unlikely to accept your hose.

Even the most accepting curbside recycling programs wouldn't want your hose due to its shape. It will easily jam the machinery at the material recovery facility (MRF), just like plastic bags do. So, without a realistic recycling option, your next best hope is to keep your hose out of a landfill. Here are a few suggestions:

- Conduct some DIY hose repair to fix any leaks.
- Donate it to a second-hand store like Goodwill, which can make minor repairs and resell the hose (call first to verify acceptance).
- Turn your hose into a holiday decoration.
- Using a utility knife, cut off the ends of the hose, which are typically made of metal, like brass; you can then recycle these metal pieces at a scrap metal recycling facility.

With limited eco-friendly disposal options, extending the life of your hose is extra important. The first thing to consider is paying a little extra for a rubber hose when buying a new one. Rubber hoses are often made of recycled material, so even though you might have a tough time recycling, at least the hose had a previous life.

Rubber hoses are also more resistant to kinks and holes, and hoses made of PVC have been found to contain lead and phthalates (think twice before letting kids drink from the hose). Just like artificial Christmas trees made of PVC, taking the less expensive option may expose your house to lead.

The Authority Has Released Its Proposed 2019 Fees For Tires

The table below provides a summary of the changes.

Registrant	2018 Fees	2019 Fees
Producer- 0-999 tires supplied	\$75 flat fee	\$75 flat fee
Producer- 1000+ tires supplied	\$0.14/tire supplied	\$0.14/tire supplied
Service providers (collectors, haulers, retreaders, processors)	No fee	No fee
Producer responsibility organization	\$5000 flat fee plus Registry license fees	\$7500 flat fee (\$5000 registration fee + Registry license fee)

Cannabis Waste Management

Composting is recognized as a viable waste management procedure with the overall waste management focus being to render the material "unrecognizable and unusable".

From a waste management perspective – there are 3 main "locations" where cannabis waste could be created (And by cannabis waste, we essentially mean any of the plant materials that are not directly related to the actual use of cannabis):

- i. During production
- ii. At point-of-sale (including Returns-from-Retail)
- iii. At the "household" where cannabis could also be grown

Generally most of the material that would be directed for waste management treatment would be Stalks & Roots which do not have the same potency available in the leaves/flowers/buds.

According to Australia's National Cannabis Prevention and Information Centre(NCPIC), it is the buds (flowers) of the female cannabis plant that the highest concentration of THC (Tetrahydrocannabinol), followed by the leaves. The stalks and seeds have "much lower THC levels". The UN states that leaves can contain ten times less THC than the buds, and the stalks one hundred times less THC (Source: Wikipedia)

The THC content of various cannabis plant parts are as follows:

10-12% in pistillate flowers

1-2% in leaves

0.1-0.3% in stalks

< 0.03% in the roots.

Source: UNODC Annual Drug Report, 2014

In certain states in the US, their regulations also state "the allowable method to render marijuana plant waste unusable is by grinding and incorporating the marijuana plant waste with other ground materials so the resulting mixture is at least fifty percent non-marijuana waste by volume".

TRACKABILITY is an intense focus in existing regulations (in US). For instance, in California, the regulations state:

If cannabis goods are being destroyed or disposed of, the licensee shall record in the track and trace system the following additional information:

- (A) The name of the employee performing the destruction or disposal.
- (B) The reason for destruction or disposal.
- (C) The name of the entity being used to collect and process cannabis waste







