

Part 1: The Industry's Best Practices and Solutions for Cannabis Waste Destruction

By Alissa Marrapodi

Cannabis continues to expand its reach, both in legislation and market size—cannabis is now legal in 33 states for medicinal and recreational use, and that number continues to grow. According to the *Marijuana Business Factbook 2020*, the U.S. cannabis industry is slated to increase 181%.¹ In 2019, the industry was valued at \$37.8 billion - \$46.2 billion, and by 2024, it is expected to increase to \$106.4 billion - \$130.2 billion.

However, because cannabis is considered a Schedule 1 drug under federal law, its remnants may be considered hazardous. So, what does that mean? It means, cannabis can't just be thrown in the trash. First, it must be determined whether it is hazardous or dangerous waste, which is determined by the Environmental Protection Agency (EPA) and at the state level.

According to the Oregon Medical Marijuana Program (OMMP): “The extraction process is considered an industrial process; making any waste generated an industrial waste. Generators of industrial waste must make their own determination whether their waste is a hazardous waste requiring special management and regulation. In most cases, cannabis extracts are not considered a hazardous waste.”

The Washington State Legislature said, “Wastes from the production and processing of marijuana plants must be evaluated against the state’s dangerous waste regulations (chapter 173-303 WAC) to determine if those wastes designate as dangerous waste.”

If determined hazardous, cannabis waste must be disposed of properly in accordance with federal, state and local laws and regulations. Non-hazardous waste must be shredded and disposed of according to state law. Some states, like California, have several state agencies that handle cannabis waste, each with their own rules.

Among the 33 states and the District of Columbia, “At least 13 states currently have laws and regulations that require cannabis waste to be shredded,” said Joseph Boyk, technical lead at High Yield Solutions Corp. Those states include: California, Colorado, Illinois, Massachusetts, Michigan, Minnesota, Montana, Nevada, New Jersey, New York, Ohio, Oregon, and Washington.

“[Cannabis waste is] often mixed 50/50 with other materials to make the plant waste unusable and unrecognizable,” Boyk said. “This prevents material that may still contain trace amounts of THC and other chemicals from being used or consumed by individuals.”

Although it varies state to state, in general, cannabis waste must meet three disposal requirements:

- Must be rendered unusable and unrecognizable.
- Must be incorporated with non-cannabis waste—the leftover mixture must be at least 50% non-marijuana waste.
- Must be disposed of as non-compostable waste (in a landfill), compostable waste, incinerated, or anaerobic digestion.

Therefore, cannabis waste is mixed and shredded with various materials, including cardboard, soil, wood chips, yard debris, etc. This gets tricky, however, because when a cultivator, processor, or testing laboratory needs to destroy their cannabis plant waste, a traditional shredder won’t do the trick—the instrument must be able to shred several types of materials.

“One of the challenges with processing cannabis plants is the wide range of plant sizes, growing mediums, and containers,” Boyk explained. “Not only are processors shredding the plant waste, they are often shredding all the materials associated with the growing process. Large plastic pots, Rockwool, coconut, pallets, cardboard, netting, and tubing are just a few of the items that shredders need to be able to handle.”

Compliance

So, what happens if a lab or cultivator isn’t compliant? Although this varies depending on the state, repercussions can range from fines to loss of their license. However, Boyk said many states require destruction equipment to be operational before the license process is finalized.

“The requirement to destroy cannabis waste is clearly defined in the 13 states that require it,” he said. “However, in the remaining states that allow cannabis production, the disposal process is much less clearly defined and often interpreted very differently among grow operations.”

Commercial Shredders

To help cultivators, processors, and laboratories stay compliant, companies, such as High Yield Solutions Corp., have designed robust, industrial destruction equipment to shred and grind cannabis waste. High Yield's Plant Muncher™ was engineered to grind cannabis plant waste, both wet and dry, stems and stalks, root balls, rockwool, failed clones, harvest waste, pots and containers with miscellaneous materials such as cardboard used to render the waste unusable and unrecognizable. Its customizable shredders and grinders not only simplify the destruction process, but they reduce waste to a size compliant with individual state regulations.

As the cannabis industry continues to expand, so does its regulations, and staying compliant is essential to running a successful grow house or lab. Discarding cannabis waste in accordance with state law is part of staying compliant, and companies such as High Yield are creating solutions to keep you compliant and efficient.

Alissa Marrapodi is the custom content writer for Cannabis Science and Technology.

Reference:

1. *Marijuana Business Factbook*, 2020. <https://mjbizdaily.com/chart-us-cannabis-industrys-economic-impact-could-hit-130-billion-by-2024/>