



[Back to medical and pharmaceutical waste guidance](#)

Pharmaceutical Waste Frequently Asked Questions Regarding Pharmaceutical Waste

IMPORTANT NOTE

These FAQs are primarily directed towards healthcare facilities in Colorado. These FAQs do not specifically address small quantity or large quantity generator hazardous waste requirements (such as container management, training, contingency plans, etc) but rather address many of the questions generated due to complexities associated with the management of pharmaceutical waste in the healthcare setting.

TABLE OF CONTENTS

A. HAZARDOUS WASTE DETERMINATION	4
1. What are my responsibilities with respect to hazardous pharmaceutical waste?.....	4
2. How do I figure out what is a hazardous waste and what isn't?.....	5
3. Can I send a half-empty prescription home with a released patient, or must I dispose of it as hazardous waste?	5
4. If a patient arrives with medication from home and the doctor changes the prescription, can the leftover medication he/she brought into the facility be disposed of as household hazardous waste (flushed)?	6
B. CAN I SEND MEDICATIONS DOWN THE DRAIN OR IN THE REGULAR TRASH?	7
5. Can I dispose of my non hazardous or hazardous waste medications down the drain?.....	7
6. Can I mix my medication waste with kitty litter, vinegar, or some other additive, mix it and then place it in the regular trash for disposal?	7
7. How do I dispose of my non-RCRA hazardous pharmaceuticals?	7
8. The package insert on opioid (narcotic) patches clearly states that any un-used patches should be flushed. Is this correct?	8
9. Are IV fluids with no medication additives, such as lactated ringers, normal saline and dextrose, allowed to be disposed down the drain?	8
10. Can formalin/formaldehyde fixatives be disposed down the drain?	8
C. OTHER DISPOSAL QUESTIONS	10
11. Can't I just send my hazardous pharmaceutical waste back to my supplying pharmacy to deal with?	10
12. If a health care facility returns a medication that is on the P-List to the pharmacy for re-processing or re-distribution, is it a hazardous waste?.....	10
13. Can I send waste medications to a reverse distributor for credit?.....	10
14. What paperwork is acceptable to show that my hazardous waste was properly disposed since, as a CESQG, I do not have to use a hazardous waste manifest?.....	11
15. How can I ensure I am protected from liability once the hazardous waste leaves my facility?..	12
16. Can RCRA hazardous waste be sent for medical waste incineration such as the facility in North Dakota?	12
17. Can I use a mail back program for the disposal of hazardous waste pharmaceuticals given that I'm a CESQG? Assuming the end facility is authorized, is it ok to put that material in the mail and send it out of state (such as Texas or other state)?	13
18. How do I manage liquid hazardous waste such as a half vial of insulin?	13

19.	Do I need disposal documentation for my non hazardous waste streams?	13
D.	STORING RCRA HAZARDOUS WASTE ONSITE.....	15
20.	Is there a specific color or container type that I have to use to store my hazardous waste?	15
21.	How much and for how long can I store hazardous waste at my facility?.....	15
22.	Do I have to keep my non-hazardous pharmaceutical waste bins locked up or have them mounted on a wall?	16
23.	What is the time limit for returning expired pharmaceuticals to a reverse distributor?	16
24.	Do I empty liquid medications into my hazardous waste container and if yes, what about the accumulation of liquid at the bottom of the container - is that acceptable hazardous waste storage?	16
25.	What is “RCRA empty” and when does it apply?	17
26.	Can I mix my p-listed hazardous waste with my non p-listed hazardous waste for storage purposes?	17
E.	P-LISTED WASTE QUESTIONS	18
27.	Is the medicine pouch in which a warfarin pill is crushed a P-listed hazardous waste?	18
28.	Can I render P-listed or other hazardous waste unusable along with my controlled substances? If so, is this an acceptable manner for disposal?.....	18
29.	Do I count the weight of the original p-listed containers toward my generator status?.....	18
30.	What part of the original container of the p-listed waste must I include as a hazardous waste for proper disposal?	19
31.	Can empty prescription bottles that held Warfarin tablets be thrown in the regular trash?	19
F.	MISCELLANEOUS QUESTIONS	20
32.	Can I keep expired medication for training purposes?.....	20
33.	Are drugs containing alcohol, such as IV diazepam and lortab elixir, considered ignitable (D001) hazardous waste?.....	20
34.	Are products that utilize activated carbon or similar products considered acceptable treatment for my hazardous waste? Can I treat my hazardous waste in a pouch or container and put that bag into my regular trash?.....	20
35.	What about DEA controlled substances, are they subject to RCRA hazardous waste regulations?	

A. HAZARDOUS WASTE DETERMINATION

1. What are my responsibilities with respect to hazardous pharmaceutical waste?

Hazardous waste generators are responsible for their waste from the moment it is generated until it is ultimately disposed. The number of regulatory requirements depends on how much RCRA hazardous waste (typically NOT biohazardous waste – this is very specific to RCRA hazardous waste) you generate on a per month basis. Any business that generates a solid (“solid” is a defined regulatory word and does not indicate “solid” versus “liquid” versus “gaseous”) waste must determine if that waste is a hazardous waste and follow Colorado hazardous waste management and disposal requirements. This is true for ANY business including the health care industry. Most health care facilities (long term care (LTC) facilities, pharmacies, many hospitals, ambulatory services, doctors offices, assisted living, vet clinics, etc.) are generating less than 100 kilograms (220 pounds) per month of hazardous waste and less than 1 kilogram (2.2 pounds) per month of acute hazardous waste or “P-listed wastes,” (typically including but not limited to warfarin (coumadin) and nicotine patches), you are a CESQG and subject to the least number of regulations. This level of hazardous waste generation is categorized under the Colorado Hazardous Waste regulations as “Conditionally Exempt Small Quantity Generators,” (“CESQGs”).

Pursuant to 6 CCR 1007-3, section 261.5

A CESQG must:

- Make hazardous waste determinations on all wastes generated;
- Track your monthly hazardous waste in terms of weights for p-listed hazardous waste and non p-listed hazardous waste.
- Ensure that all hazardous wastes are delivered to an off-site treatment, storage or disposal facility permitted to take hazardous waste.
- Maintain your facility in a manner that minimizes the possibility for a release of any hazardous waste from your facility;
- Fill out the required self-certification checklist when received from the Department.

Other generation categories (subject to additional regulatory requirements):

- Small Quantity Generator (SQG): generates between 100 and 1000 kilograms (220 to 2,200 lbs) of non-acute hazardous waste per month

(there are more requirements for these generators, see 6 CCR 1007-3, section 262.34(d))

- Large Quantity Generator (LQG): generates greater than 1000 (2,200 lbs) kilograms of non-acute hazardous waste and/or greater than 1 kilogram of acute hazardous waste per month (These generators are subject to the most requirements, see 6 CCR 1007-3, section 262.34).
- If you generate greater than 1 kilogram (2.2 pounds) per month of “p-listed” hazardous waste, you are considered a Large Quantity Generator. There is no “Small Quantity Generator” amount for “p-listed” hazardous waste. Remember, though, that your generator status depends on the amount of all hazardous waste generated at your facility.

2. How do I figure out what is a hazardous waste and what isn't?

- 1) The Department's website - <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance> - includes a document on identifying hazardous waste in the healthcare setting.
- 2) Ask your pharmacist(s) for assistance;
- 3) Ask your disposal company for assistance. A list of potential disposal companies serving Colorado is on our website.
- 4) Review the insert for that specific medication to find the active ingredients in the medication and compare that to RCRA p and u lists.
- 5) Review the SDS or equivalent to see if it identifies whether it's a RCRA hazardous waste when disposed (or not);
- 6) Contact the manufacturer (for instance, Pfizer has a website where you can type in the name of their medication and find out whether it is a hazardous waste on disposal or not) found at http://www1.pfizerpro.com/professional_resources/responsible_disposal
- 7) Regulations and regulatory guidance for health care facilities in Colorado is included here: <https://www.colorado.gov/pacific/cdphe/medicalwaste>

3. Can I send a half-empty prescription home with a released patient, or must I dispose of it as hazardous waste?

You may send the patient home with his/her partially used medications. If that patient is still taking the medication it is not classified as a waste and does not fall under the requirements of the hazardous waste regulations. Once the patient is home, any medication waste would be exempt from the hazardous waste

regulations as “household hazardous waste.” If medications are not sent home with the patient, then the facility assumes the responsibility of those medications and it becomes a business waste subject to proper disposal requirements.

For protection of the environment, it would be best to counsel out-going patients of the best methods to properly dispose of any waste medications they may have once they are no longer using it at home. Flushing medications down the toilet or disposing of liquids into the regular trash can create environmental problems. However, there are no statewide or federal hazardous waste regulations governing the disposal of household hazardous wastes.

Additional information regarding household pharmaceutical waste management can be found on our website here:

<https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-households>

Additional information regarding Colorado’s household medication take-back program can be found here: <https://www.colorado.gov/pacific/cdphe/colorado-medication-take-back-program>

4. If a patient arrives with medication from home and the doctor changes the prescription, can the leftover medication he/she brought into the facility be disposed of as household hazardous waste (flushed)?

No. Once a medication is brought to the health care facility and the health care facility’s staff take over control of the medication, it becomes part of the waste stream generated by the facility and must be treated just like any other business waste regardless of whether it’s a RCRA hazardous waste or a non hazardous waste.

B. CAN I SEND MEDICATIONS DOWN THE DRAIN OR IN THE REGULAR TRASH?

5. Can I dispose of my non hazardous or hazardous waste medications down the drain?

NO. No medication waste may be flushed down the toilet or put down the drain. Unused medication waste must be stored and disposed in accordance with either the Colorado solid waste regulations or Colorado’s hazardous waste regulations. Additional details with discussion is included in a Department memorandum titled “Pharmaceutical disposal down the drain or into the regular trash” located on our website found at <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance>

6. Can I mix my medication waste with kitty litter, vinegar, or some other additive, mix it and then place it in the regular trash for disposal?

NO. This has been a common practice in the healthcare setting. However it is not consistent with Colorado’s solid or hazardous waste regulations and is considered illegal disposal. Facilities that manage their waste medications in this manner are performing illegal disposal and can be subject to formal enforcement action including financial penalties. **Any business that generates a medication waste (or any waste) must determine if that waste is a hazardous waste and follow hazardous waste management and disposal requirements. If it’s not a RCRA hazardous waste then the facility must follow Colorado’s solid waste regulations for disposal.** Additional details with discussion and regulatory citations is included in a Department memorandum titled “Pharmaceutical disposal down the drain or into the regular trash” located on our website found at <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance>

7. How do I dispose of my non-RCRA hazardous pharmaceuticals?

Non RCRA hazardous waste pharmaceuticals (such as Tylenol) are not a RCRA hazardous waste and therefore do not require hazardous waste disposal. However, pharmaceuticals that are not a RCRA waste **cannot go down the drain or go to a regular landfill.** One common option is to utilize your hazardous waste disposal contractor for the proper disposal of your non hazardous waste pharmaceuticals.

Contact your hazardous waste disposal contractor for more information. A basic list of disposal contractors can be found on our website:

<https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance>

Additional details with discussion is included in a Department memorandum titled “Pharmaceutical disposal down the drain or into the regular trash” located on our website at <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance>

8. The package insert on opioid (narcotic) patches clearly states that any un-used patches should be flushed. Is this correct?

The packaging on many controlled substances (and other medications) may indicate that flushing down the toilet is the proper method of disposal, and while this may render the drug “non retrievable” for DEA purposes, in Colorado this practice constitutes illegal disposal. This is true whether it’s a RCRA hazardous waste or a non RCRA hazardous waste. No medication waste may be flushed down the toilet or put down the drain. Unused medication waste must be stored and disposed in accordance with either the Colorado solid waste regulations or hazardous waste regulations depending on the substance.

9. Are IV fluids with no medication additives, such as lactated ringers, normal saline and dextrose, allowed to be disposed down the drain?

Yes, although no pharmaceuticals can be put down the drain, sugar or salt water fluids with no medication are typically fine to discharge to the POTW (sanitary sewer which includes toilets, sinks, etc). For any other solution that does not contain medication, it is best to check with your POTW (local water treatment works facility – the facility that receives your sewer waste) to ensure that what you are proposing to discharge is something that they can accept.

10. Can formalin/formaldehyde fixatives be disposed down the drain?

Unused formaldehyde is listed in 6 CCR 1007-3, section 261.33(f) as a U122 hazardous waste when disposed and cannot be disposed down the drain. If it is used, a hazardous waste determination must be made to determine if the material exhibits any characteristic (like ignitibility because of its flashpoint) or is otherwise listed based upon its concentration or other ingredients. If it does not meet any other characteristic or is not otherwise listed, it is considered a solid waste and the

hazardous waste regulations do not apply. However, before disposing to the sanitary sewer, you should always check with your POTW (local water treatment facility that accepts your sewer water) to ensure that any material you are considering disposing of down the drain is something they can accept.

C. OTHER DISPOSAL QUESTIONS

11.Can't I just send my hazardous pharmaceutical waste back to my supplying pharmacy to deal with?

It is important to remember that it is the generator of the hazardous waste who bears the responsibility to comply with Colorado's hazardous waste laws, including the responsibility to ensure that their hazardous waste is properly disposed. When pharmaceuticals are deemed no longer useable at a health care facility, they become waste and some are hazardous waste. The facility is the generator. As a CESQG you may send hazardous pharmaceutical waste back to the pharmacy if they are willing to take on the responsibility for disposal, but ultimately the facility bears the liability for the waste and you must ensure that the waste was properly disposed. Simply sending your hazardous pharmaceutical waste back to the pharmacy does not relieve you of your responsibility. You must be able to show what the pharmacy did with your hazardous waste. In many cases, pharmacies are only willing to accept back medications that are able to be put back into their inventory or donated for use, in other words - not waste. An SQG or LQG must ship their hazardous waste on manifest. Therefore, an SQG or LQG cannot send their waste anywhere other than a permitted hazardous waste transporter to a facility permitted and authorized to accept that type of waste for proper management and disposal.

12.If a health care facility returns a medication that is on the P-List to the pharmacy for re-processing or re-distribution, is it a hazardous waste?

No. If a medication is returned to a pharmacy for re-use (ie. It can be put back into inventory and administered to another patient) then it was never a waste and would not be subject to the hazardous waste regulations. However, once a medication is deemed no longer useable, it is a waste and if it is a hazardous waste, it is subject to the hazardous waste rules.

13.Can I send waste medications to a reverse distributor for credit?

Colorado views any medication which is no longer able to be used (dispensed) first as a solid waste (the term "solid waste" is a regulatory term and not an indication of "solid" versus "liquid" versus "gaseous"). Medications sent to a reverse distributor are typically sent for disposal after processing the credit. As a result, Colorado views that material as a waste at the point of generation – the healthcare facility. However, if the manufacturer will put the medication back into inventory

or use the medication for some other purpose, e.g. quality control testing, then it is not considered a waste and need not be managed pursuant to hazardous waste regulations.

A CESQG may send hazardous waste pharmaceuticals to a reverse distributor for credit because CESQGs do not need to ship hazardous waste on a manifest or use a permitted hazardous waste transporter. Documentation from the manufacturer or reverse distributor supporting this will be required to prove the medication is to be put to further use and not simply disposed. In addition, if the reverse distributor indicates that the medication will be disposed of, CESQGs must ensure proper disposal and must receive written confirmation regarding the final disposal location of your hazardous waste.

SQGs and LQGs may only send hazardous waste pharmaceuticals off-site with a hazardous waste manifest using a registered hazardous waste transporter to a permitted hazardous waste treatment, storage or disposal facility. These requirements along with storage time limits prohibit SQGs and LQGs from sending hazardous waste pharmaceuticals to a reverse distributor since most reverse distributors are not registered hazardous waste transporters or permitted hazardous waste treatment, storage, or disposal facilities.

14. What paperwork is acceptable to show that my hazardous waste was properly disposed since, as a CESQG, I do not have to use a hazardous waste manifest?

The best answer is to use a hazardous waste manifest even though Colorado's hazardous waste regulations do not require its usage for CESQGs. It is the best tracking tool available and includes all necessary information to ensure proper disposal.

However, there are several ways that this requirement could be met. The Department is looking for any paperwork that will establish that your hazardous waste was delivered to a permitted hazardous waste treatment, storage or disposal facility ("TSDF").

For example:

- Your contract with your vendor picking up your hazardous waste should discuss how and where hazardous waste is being handled and disposed;

- Copies of your drug destruction log in conjunction with your inventory list of hazardous wastes generated at the facility will establish what hazardous waste pharmaceuticals were in a particular shipment;
- Copies of your invoices from the vendor picking up your hazardous waste pharmaceuticals;

Any certificates of destruction received from TSDFs or other receipts which would establish that your hazardous waste was received at a TSDF.

15. How can I ensure I am protected from liability once the hazardous waste leaves my facility?

Hazardous waste generators are responsible for their waste from the moment it is generated until it is ultimately disposed. A CESQG is required to ensure that their hazardous waste is delivered to a permitted hazardous waste treatment, storage or disposal facility. Although there is no requirement that a CESQG use a hazardous waste manifest to ship hazardous medication waste, this would be the best method to ensure that your hazardous medication waste was properly disposed since permitted hazardous waste treatment, storage and disposal facilities are required to send signed copies of hazardous waste manifests back to the generator.

16. Can RCRA hazardous waste be sent for medical waste incineration such as the facility in North Dakota?

You should not assume that medical waste incinerators can take RCRA hazardous waste. Different incinerators serve different functions depending on permitting. Most medical incinerators are not permitted to receive RCRA hazardous waste including the medical incinerator in North Dakota. Check with your medical waste incinerator contact and ask them if their facility is permitted to treat, store or dispose of RCRA hazardous waste. In addition, be aware that using the term hazardous can be confused with biohazardous waste. As a result, occasionally facilities will be under the belief that they can dispose of their RCRA hazardous waste with their biohazardous waste due to the use of the word “hazardous.” Be advised that if you place your RCRA hazardous waste into the typical red bin consisting of biohazardous waste you will be cited for illegal disposal with possible financial penalties. Biohazardous waste is treated for biological agents and then sent to a typical landfill. This is not an appropriate avenue for RCRA hazardous waste constituents or for non hazardous pharmaceuticals unless permitted for those waste streams.

17. Can I use a mail back program for the disposal of hazardous waste pharmaceuticals given that I'm a CESQG? Assuming the end facility is authorized, is it ok to put that material in the mail and send it out of state (such as Texas or other state)?

At this time it is not clear whether mail carriers will accept hazardous waste pharmaceuticals for delivery to another destination. As a CESQG, you do not have to ship using a manifest nor do you have to use an authorized hazardous waste transporter (although it's highly recommended). Therefore, within RCRA regulations CESQGs could mail their pharmaceuticals to a hazardous waste disposal facility in another state. However, be advised that other regulations may apply including the Department of Transportation (DOT) as well as policies put in place by the various mail shippers (such as USPS, UPS, FedEx, etc). If a disposal contractor can prove compliance with DOT and any other relevant agency relating to the shipping of waste pharmaceuticals (including hazardous waste) through the mail, then this may be a viable option for CESQGs. SQGs and LQGs must ship their hazardous waste on a hazardous waste manifest and therefore cannot utilize the mail to ship their hazardous waste to a facility for proper disposal.

18. How do I manage liquid hazardous waste such as a half vial of insulin?

Waste insulin is typically a RCRA hazardous waste due to the presence of cresol above 200 mg/L (regulatory threshold for cresol to be considered a hazardous waste when disposed) which is referred to in this case as a characteristic for toxicity RCRA hazardous waste for cresol. If all of the insulin has been extracted and used for its intended purpose (i.e. administered to the patient), then the residual amount in the bottle/vial/syringe is not significant and the container is considered "RCRA empty" and can be recycled (glass) or disposed as a sharps waste or sent to the regular trash. If there is insulin remaining in the bottle/vial/syringe that can still be extracted under normal use, that amount of insulin is considered a RCRA hazardous waste. At that point the insulin can be discharged onto a paper towel (and into a plastic baggie if necessary) and placed inside the hazardous waste container for proper disposal or simply place the entire bottle in the hazardous waste bin.

19. Do I need disposal documentation for my non hazardous waste streams?
No. Non hazardous waste is not regulated by RCRA or subject to any other RCRA regulations. However, non hazardous waste is regulated by Colorado's solid waste regulations and it is considered illegal disposal as a business to send your waste

medications to a municipal landfill that is not permitted to accept that type of waste.

D. STORING RCRA HAZARDOUS WASTE ONSITE

20. Is there a specific color or container type that I have to use to store my hazardous waste?

For CESQG there are no specific container management requirements in Colorado's hazardous waste regulations. SQGs and LQGs do have container management requirements in the hazardous waste regulations. A facility that generates hazardous waste will typically work with the disposal contractor they have selected to determine which containers to use for the storage of hazardous waste materials. It's recommended that you pick a color that does not match colors utilized in your facility for other waste types. Typically, the color black for hazardous waste containers has been adopted; but again, it's not required. Best management practices for container management for CESQGs include proper label (call it what it is); keeping the container closed except when adding or removing waste; keep the container under control (lock or behind a locked door) and in good condition. These best management practices for CESQGs are just some of the requirements for SQGs and LQGs.

21. How much and for how long can I store hazardous waste at my facility?

This will also depend on your generator status, but assuming you are a CESQG the following amounts and timeframes apply:

- You may store up to 1000 kilograms (2,200 lbs) of non-acute hazardous waste on-site at any one time for any length of time.
- If you accumulate more than 1000 kilograms of non-acute hazardous waste on-site you are subject to all of the requirements for SQGs, including a limit of 180 days for storage (or 270 days if the waste must be transported over 200 miles).
- You may store up to 1 kilogram (2.2 lbs) of acute hazardous waste on-site at any one time for any length of time. Once you exceed 2.2 pounds on a monthly basis OR at any one time you are considered a large quantity generator (LQG) subject to all LQG requirements in RCRA.

22. Do I have to keep my non-hazardous pharmaceutical waste bins locked up or have them mounted on a wall?

Locking or mounting pharmaceutical waste bins is not a specific regulatory requirement, however all waste pharmaceuticals must be stored in containers that are in good condition and must be secured to prevent unauthorized access (this could mean access to a storage room or closet is limited). However, there may be other regulatory requirements outside of RCRA regulations for locking or securing individual medication waste bins, such as DEA controlled substance regulations or Health Facilities requirements. Within RCRA regulations, SQGs and LQGs of hazardous waste do have specific container requirements but these requirements do not apply to CESQGs and are considered best management practices (BMPs) for CESQGs including container labeling, keeping the container closed except when adding or removing waste, dating, and storage/volume limitations. However, to repeat - these are BMPs for CESQGs.

23. What is the time limit for returning expired pharmaceuticals to a reverse distributor?

A CESQG does not have any time limits regarding storage of hazardous waste as long as the facility doesn't exceed specific weight thresholds. However, there are on-site quantity limitations above which you are subject to the storage time limits of a small quantity generator or large quantity generator. If you store greater than 1 kilogram (2.2 pounds) of P-listed hazardous waste you are subject to all of the requirements for LQGs, including a 90 day storage limit. If you accumulate greater than 1000 kilograms (2,200 pounds) of non P-listed hazardous waste, you are subject to all requirements for a SQG, including a 180-day storage limit (or 270 days if the waste must be transported more than 200 miles).

24. Do I empty liquid medications into my hazardous waste container and if yes, what about the accumulation of liquid at the bottom of the container - is that acceptable hazardous waste storage?

Placing liquids into the bottom of a hazardous waste container can create a situation where odors and good container management become problematic. Therefore, it's recommended that any liquids be absorbed by paper towels, or, if there's enough volume to warrant it, simply add some absorbent material (such as kitty litter) and place that material in a baggie or other container inside the hazardous waste container.

25. What is “RCRA empty” and when does it apply?

Original containers or packaging that held p-listed waste must be collected and disposed of as a p-listed hazardous waste. RCRA empty does NOT apply to p-listed original containers. For non p-listed hazardous waste (such as insulin), once you’ve emptied the container that held the medication and no more can be extracted/removed using typical procedures to remove that material, it’s considered RCRA empty and that container can then be recycled or placed into the regular trash. RCRA empty does NOT apply to p-listed waste original containers.

26. Can I mix my p-listed hazardous waste with my non p-listed hazardous waste for storage purposes?

While storing waste at your facility prior to pickup by your disposal contractor, you need to track the monthly weight of your p-listed material as well as your monthly rate for non p-listed hazardous waste. If you mix your waste then it’s ALL considered p-listed waste since it will be difficult to impossible to separate the waste during an inspection to verify weights. As a result, you should separate the storage of your p and non p-listed waste for tracking purposes. When your disposal contractor comes to pick up your hazardous waste it’s likely they will combine that waste for transportation. However, while that material is stored at your facility, keep it separated for weight tracking purposes. This can be done through the use of containers, or, you can also place your p-listed waste into a container (or bag) and place that container (or bag) within a larger hazardous waste container – it’s still separated for tracking purposes!

E. P-LISTED WASTE QUESTIONS

27. Is the medicine pouch in which a warfarin pill is crushed a P-listed hazardous waste?

No, the pouch is not the original container and is therefore not a hazardous waste. Pouches that are used to crush medications in the process of dispensing medication are not required to be managed as hazardous waste. It is only the original packaging or a container in which the unused P-listed medication is stored that must be managed as a hazardous waste.

28. Can I render P-listed or other hazardous waste unusable along with my controlled substances? If so, is this an acceptable manner for disposal?

As a CESQG, you can certainly render the p-Listed waste unusable along with your other controlled substances, but since you've mixed the two together (p-listed and controlled substances) it all must be counted for weight tracking purposes and disposed of as a p-listed hazardous waste. This may cause you to exceed the 2.2 pound threshold and move your facility into the large quantity generator status within RCRA subject to LQG requirements.

29. Do I count the weight of the original p-listed containers toward my generator status?

No. Do NOT count the weight of the container of a p-listed waste, but you do manage that container as a p-listed hazardous waste for proper disposal. What is counted is the residual material inside the container, which was previously required and documented found at <https://www.colorado.gov/pacific/cdphe/medical-and-pharmaceutical-waste-guidance> under the PDF titled "Interpretation P Waste Containers". Within the document, it's suggested to estimate the residual amount for tracking purposes. However, due to the low amounts observed during inspections, facilities are no longer required to estimate the residual amount included on or within the packaging. Simply count the weight of the medication on your monthly tracking sheet and capture the packaging for proper hazardous waste disposal. It is not required to calculate the weight of residual amounts on or within the containers for tracking purposes.

30. What part of the original container of the p-listed waste must I include as a hazardous waste for proper disposal?

Only the part that came into contact with the medication. In the case of glass bottles, it would include the entire glass bottle. In the case of dispensing cards, only the part of the card that held the p-listed waste. The remaining part of the card (and box, inserts, or other material) that did not come into contact with the medication can be recycled or disposed into the regular trash as appropriate. See question #29 for additional information.

31. Can empty prescription bottles that held Warfarin tablets be thrown in the regular trash?

No, original packaging and containers used to store unused P-listed medication must be managed as hazardous waste. However, as the packaging itself is not the hazardous waste, blister packs, bottles etc. need not be counted toward your monthly generation rate. It is only the residue in the packaging that needs to be counted. Colorado only requires that the p-listed packaging that came into contact with the p-listed waste be managed and disposed of as hazardous waste but is not counted toward your generation rates. See question #29 for additional information.

F. MISCELLANEOUS QUESTIONS

32. Can I keep expired medication for training purposes?

Yes, you may keep any medication for training purposes and this material is not subject to the hazardous waste regulations until you decide to discard it, at which time the material becomes a solid waste and must be evaluated to determine if it is a hazardous waste and then managed accordingly.

33. Are drugs containing alcohol, such as IV diazepam and lortab elixir, considered ignitable (D001) hazardous waste?

The definition in 6 CCR 1007-3, section 261.21(a)(1) for ignitable hazardous waste contains an exclusion for aqueous solutions containing less than 24% alcohol by volume. The important analysis for these solutions is to make sure they are “aqueous solutions,” which is defined as greater than 50% water by weight, and contain less than 24% alcohol by volume. If these two criteria are met, the solution is not considered a D001 hazardous waste. However, it is important to also make sure that the solution does not contain anything else that would render it a hazardous waste, such as another listing or characteristic.

34. Are products that utilize activated carbon or similar products considered acceptable treatment for my hazardous waste? Can I treat my hazardous waste in a pouch or container and put that bag into my regular trash?

No, regardless of what the label might indicate **Colorado has not approved any particular product** for the treatment of pharmaceuticals that would allow that material to be placed into the regular trash and sent to a municipal landfill. If a facility and their pharmacist determine that a product can render a controlled substance non retrievable, then that controlled substance is no longer considered a DEA regulated substance and drops out of the DEA regulations as a controlled substance. At that point you have a solid waste and need to determine if it is a hazardous waste. If it is a RCRA hazardous waste, place the former controlled substance in the RCRA hazardous waste bin for disposal. If it's not a RCRA hazardous waste then you can place the waste in the non RCRA hazardous waste bin.

35. What about DEA controlled substances, are they subject to RCRA hazardous waste regulations?

Maybe.

The DEA recently clarified how controlled substances are to be handled. From the DEA:

“Existing DEA regulations do not specify a standard to which controlled substances must be destroyed. With this final rule, the DEA is implementing a standard of destruction—nonretrievable—for registrants that destroy controlled substances, and procedures for the destruction of controlled substances. 21 CFR 1300.05 (“nonretrievable”), 1317.90, and 1317.95. The DEA is not requiring a particular method of destruction, so long as the desired result is achieved. This standard is intended to allow public and private entities to develop a variety of destruction methods that are secure, convenient, and responsible, consistent with preventing the diversion of such substances. Destruction of controlled substances must also meet all other applicable Federal, State, tribal, and local laws and regulations. Once a controlled substance is rendered “nonretrievable,” it is no longer subject to the requirements of the DEA regulations.”

As stated, once the controlled substance is rendered non retrievable by the facility and the pharmacist, it is no longer a controlled substance. At that point proper disposal can then be determined and performed like any other waste.