

"fedramp-test-2024-questions-lara_sutherland: jenkins-awards.practicegreenhealth.org - Create Sheets Pull Request for Probo-870"



Waste

Introduction

Practice Greenhealth recommends **comprehensive waste tracking** as a starting point for any healthcare institution looking to improve its environmental footprint. Understanding the breakdown of both cost and weight for different waste categories can be one of the easiest strategies to identify areas of opportunity and low-hanging fruit. Beyond waste data, understanding how waste can be prevented, or shifted from a more environmentally-intensive (and expensive) waste stream to a less environmentally intensive waste stream (e.g., from **regulated medical waste** into **recycling**) is key to truly reducing the facility's waste footprint.

Baseline Year: The facility's baseline year for waste is generally the **first year the facility actively started tracking complete waste data**. If this is your first year of waste tracking, select the most recent year from the dropdown.

NEW IN 2024: If you already have waste data in the platform for the baseline year selected, it will automatically sync below.

1.* Baseline Year:

2023

2.* Has the organization identified someone to oversee waste operations?

☒ Yes

☐ No

Contact Information

2.a*

Name of waste lead:

2.b*

Title of waste lead:

2.c*

Email of waste lead:

The waste data in this section requires **12 consecutive months of waste data**. While energy data must be tracked in a calendar year, waste data can utilize a fiscal year if necessary. We ask that you please use the **same 12 months consistently** each year you apply, so we can compare year-to-year totals effectively.

Solid Waste

Please indicate the facility's **Solid Waste** totals in Table A below. You are required to complete the **Current Year** column at a minimum.

New in 2024: If you already have waste data in the platform for baseline or previous year, it will sync automatically once you select a baseline year above. If this is your first year of tracking **solid waste** data, select the most recent year in the baseline year dropdown, and leave the previous year column blank. After you've filled out the current year column, the data from current year should then appear in the baseline year column as well (and will sync to the data archive).

If you are using a vendor that uses a **flat fee for integrated waste removal** (e.g., RMW and **solid waste** go out at the same price per lb), please enter your tonnage but **do not include your cost data** in Table A below, as it will skew the data set.

Non-Hazardous Pharmaceutical Waste data should be reported in the category in which it is being treated/disposed. If the facility is segregating and collecting Non-Hazardous Pharmaceutical Waste and **disposing of it as solid waste** (e.g., sent to a municipal waste incinerator via a waste hauler), please enter Non-Hazardous Pharmaceutical Waste data in **Table A. Solid Waste**. If Non-Hazardous Pharmaceutical Waste is **disposed of as regulated medical waste** (e.g., sent to an RMW incinerator via a waste hauler), please enter Non-Hazardous Pharmaceutical Waste data in **Table C. Regulated Medical Waste**. If Non-Hazardous Pharmaceutical Waste is commingled with **RCRA Hazardous Pharmaceutical Waste**,

***If your facility does NOT source-segregate Non-Hazardous Pharmaceutical Waste into separate containers for disposal with a licensed hauler, DO NOT enter any data for Non-Hazardous Pharmaceutical Waste into either Table A or C. Please leave the cells blank.

Table A. **Solid Waste**

(Please do not use commas or \$ signs.)

Solid Waste	TONS per Year Baseline	TONS per Year Previous	TONS per Year Current	Annual Costs Baseline	Annual Costs Previous	Annual Costs Current
Solid Waste	3.* <div></div>	4. <div></div>	5.* <div></div>	6. <div></div>	7. <div></div>	8.* <div></div>
Non-RCRA Pharmaceutical Waste (MSW)	9. <div></div>	10. <div></div>	11. <div></div>	12. <div></div>	13. <div></div>	14. <div></div>
Total Solid Waste	15. <div></div>	16. <div>0</div>	17. <div>0</div>	18. <div>0</div>	19. <div>0</div>	20. <div>0</div>

21.* How does your facility dispose of its regular (non-pharmaceutical) **solid waste**?

- ☐ Landfill
- ☐ Municipal Waste Incinerator
- ☐ Waste-to-Energy Incinerator
- ☐ Other

Recycling

22.* Does the facility recycle clinical/**medical plastics**?

- ☒ Yes
- ☐ No

22.a* Which clinical plastics are being recycled by the facility (select all that apply):

- ☐ Irrigation bottles
- ☐ Skin prep solution bottles
- ☐ Trays
- ☐ Overwraps
- ☐ Rigid inserts
- ☐ Blue wrap
- ☐ Tyvek
- ☐ Basins
- ☐ Urinals/Bedpans
- ☒ Other

22.a.a* Please describe any other plastic items being recycled:

Please indicate tonnage and cost for the selected items above in **Appendix A**.

23.* Does the facility recycle **precious metals** from clinical devices?

- ☒ Yes
- ☐ No

23.a* Please indicate which metals from which devices:

Please indicate tonnage and cost for the selected items above in **Appendix A**.

Recycling Profile

Please enter the facility's individual **Recycling** Totals for current year in **Appendix A**. The data will self-populate in the **Current Year** column in Table B.

New in 2024: If you already have waste data in the platform for baseline or previous year, it will sync automatically once you select a baseline year above. If this is your first year of tracking **recycling** data, select the most recent year in the baseline year dropdown, and leave the previous year column blank. After you've filled out the data in Appendix A, the data from current year will pull over to the Waste page and should then appear in the baseline year column as well. If you need to add/calculate data for baseline and previous year, you can enter baseline and previous year **recycling** tonnage and annual costs in the data archive: **Baseline Year archive** and **Previous Year archive**. (You may need to refresh the award application page to see the new archive data after entering it.) Do not enter zeros. A negative number in cost field denotes a revenue (or rebates from **recycling**). Reuse and **diversion** are not included in this table but are credited elsewhere in the application. Construction & Demolition (C&D) waste **recycling** is tracked in the **Green Building**, Table C.

PLEASE NOTE: The tonnage and costs for Current Year will be autopopulated from Appendix A (which is MANDATORY).

Table B. Recycling

Recycling Streams	TONS per Year Baseline	TONS per Year Previous	TONS per Year Current	Annual Costs Baseline	Annual Costs Previous	Annual Costs Current
Recycling (Current Year data will be entered from Appendix A)	24.* <input type="text"/>	25. <input type="text"/>	26.* <input type="text"/>	27. <input type="text"/>	28. <input type="text"/>	29. <input type="text"/>
Universal Waste (Current Year data will be entered from Appendix A)	30.* <input type="text"/>	31. <input type="text"/>	32.* <input type="text"/>	33. <input type="text"/>	34. <input type="text"/>	35. <input type="text"/>
Recycling Total	36. <input type="text"/>	37. <input type="text"/>	38. <input type="text"/>	39. <input type="text"/>	40. <input type="text"/>	41. <input type="text"/>

42. This is the value of total annual **recycling** costs that will be used in calculating total waste cost percentages in Table K at the bottom of this page. Costs will be used unchanged, but all revenue will be changed to zero.

Waste Reduction Activities

43.* Has the facility developed an equipment and supplies **donation** program (domestic or abroad) for materials, equipment and furniture that can no longer be used internally? The Catholic Health Association provides an excellent discussion and resources on **Medical Surplus Recovery**.

- ☒ Yes
☐ No

43.a* Please indicate which items are routinely donated:

- ☐ Unexpired/unopened consumable clinical supplies
☐ Expired/opened consumable clinical supplies
☐ Capital medical equipment
☐ Electronics
☐ Furniture
☐ Linens
☐ Other supplies

43.b* If tracked, please enter the tonnage of materials and equipment donated in 2023:

44.* Has the facility implemented a **paper reduction** program?

- ☒ Yes
☐ No

44.a* Please indicate which activities the institution has pursued to gain those reductions. Please select all that apply.

- ☐ Reduced network printers
☐ Made double-sided printing the default on printers/copiers
☐ Reduced number of automatically printed reports
☐ Implemented EMR/EHR system
☐ Created digital signage
☐ Increased electronic meetings
☐ Engaged supply chain around paper reduction
☒ Other

44.a.a* Please describe other paper reduction efforts:

45.* How many **cases of white copy paper** did the facility purchase in 2023?

46. This was the number of cases of **white copy paper** purchased in 2023:

47.* This is the facility's **Percent Reduction in Paper Use from Previous Year** (based on the number of cases of white copy paper purchased):

A positive number indicates a decrease in organizational paper use; a negative number indicates an increase in organizational paper use.

48.* Is the facility tracking a metric for **total waste diversion** from landfill or incineration?

- ☒ Yes
☐ No

A **diversion** metric would be an umbrella metric that could include multiple **diversion** mechanisms such as **recycling**, reprocessing, reuse, composting, anaerobic **digestion**, **solvent distillation** or other.

48.a* Please describe any overarching waste **diversion** metrics currently utilized by the facility:

Food Waste Solutions

More than one-third of food produced in the United States is never eaten, and yet 10.2 percent of U.S. households were food insecure at some time during 2021. When sent to the landfill, food waste decomposes and generates methane, a **greenhouse gas** more potent than carbon dioxide, Hospitals are in a unique position to reduce their climate impact and address food insecurity in their service areas by implementing Food Waste Solutions Join organizations across the country in the goal to reduce food waste by 50% by 2030!

316.* Is the facility working to reduce food loss and waste (activities include source reduction, donation, and food **recycling**)?

- ☒ Yes
☐ No

316.a* Has the facility performed a food waste audit?

- ☒ Yes
☐ No

316.a.a If yes, identify what was revealed through this food waste audit. (Check all that apply)

- ☐ Specific types of food in your waste stream
☐ Quantities of food in your waste stream
☐ Causes for food in your waste stream
☐ Destination(s) for food in your waste stream

316.b* What strategies has the facility employed to reduce food waste? (Check all that apply)

- ☐ Source reduction
☐ Food donation
☐ Animal feed
☐ Anaerobic digestion
☐ Industrial uses (including cooking oil recycling)
☐ Composting
☒ Other

316.b.a* Please explain other strategies:

317.* Does the facility have a plan or strategy to minimize food waste and loss?

- ☐ Yes
☐ No

318. Does the facility have a food waste policy?

- ☐ Yes
- ☐ No

Please complete the table below with data for each of the strategies being implemented at the facility.

Table O - Surplus food (in tons) by destination

Destination of surplus food	Baseline	Previous	Current
Total tons of food donated	319. <div></div>	320. <div></div>	321. <div></div>
Total tons of food diverted to animal feed	322. <div></div>	323. <div></div>	324. <div></div>
Total tons of food sent for anaerobic digestion	325. <div></div>	326. <div></div>	327. <div></div>
Total tons cooking oil recycled	328. <div></div>	329. <div></div>	330.* <div></div>
Total tons sent for industrial uses (except cooking oil)	331. <div></div>	332. <div></div>	333. <div></div>
Total tons of food composted	334. <div></div>	335. <div></div>	336.* <div></div>
Total tons of food sent to landfill	337. <div></div>	338. <div></div>	339. <div></div>
Total tons of food sent to incinerator	340. <div></div>	341. <div></div>	342. <div></div>
Total tons of food sent to sewer (with or without pretreatment or grinding)	343. <div></div>	344. <div></div>	345. <div></div>

Refer to the table below for calculations of GHG emissions by food waste reduction strategy. Emission factors provided by ReFED

The total GHG emissions from food waste for baseline, previous and current years above contribute to **Scope 3** GHG emissions from Waste Generated in Operations. The emissions are automatically included in the totals in Table A3 (**Scope 3** GHG Emissions) on the Climate page.

Table P - Food waste MTCO2e by destination

Destination of surplus food	Baseline year MTCO2e	Previous year MTCO2e	Current year MTCO2e	% Reduction from baseline year	% Reduction from previous year
Donated food	346. <div>0</div>	347. <div>0</div>	348. <div>0</div>	349. <div>0</div>	350. <div>0</div>
Animal feed	351. <div>0</div>	352. <div>0</div>	353. <div>0</div>	354. <div>0</div>	355. <div>0</div>
Anaerobic digestion	356. <div>0</div>	357. <div>0</div>	358. <div>0</div>	359. <div>0</div>	360. <div>0</div>
Cooking Oil Recycling	361. <div>0</div>	362. <div>0</div>	363. <div>0</div>	364. <div>0</div>	365. <div>0</div>
Industrial uses	366. <div>0</div>	367. <div>0</div>	368. <div>0</div>	369. <div>0</div>	370. <div>0</div>

Composted	<u>371.</u> 0	<u>372.</u> 0	<u>373.</u> 0	<u>374.</u> 0	<u>375.</u> 0
Landfill	<u>376.</u> 0	<u>377.</u> 0	<u>378.</u> 0	<u>379.</u> 0	<u>380.</u> 0
Incinerator	<u>381.</u> 0	<u>382.</u> 0	<u>383.</u> 0	<u>384.</u> 0	<u>385.</u> 0
Sewer	<u>386.</u> 0	<u>387.</u> 0	<u>388.</u> 0	<u>389.</u> 0	<u>390.</u> 0
Total Calculated Emissions from Food Waste	<u>391.</u> 0	<u>392.</u> 0	<u>393.</u> 0	<u>394.</u> 0	<u>395.</u> 0

Regulated Medical Waste

Please indicate the facility's **Regulated Medical Waste (RMW)** totals in Table C below. You are required to complete the **Current Year** column at a minimum.

New in 2024: If you already have RMW data in the platform for baseline or previous year, it will sync automatically once you select a baseline year above. If this is your first year of tracking RMW data, select the most recent year in the baseline year dropdown, and leave the previous year column blank. After you've filled out the current year column, the data from current year should then appear in the baseline year column as well. If you cannot break out one of the waste types, please leave it blank and use the comments box to indicate which waste stream it is combined with; do not enter zero. If you are using a vendor that uses a **flat fee for integrated waste removal** (e.g., RMW and **solid waste** go out at the same price per lb), please enter your **tonnage**, but **DO NOT** include your cost data in **Table C** below, as it will skew the data set.

RMW Treated Onsite or Offsite:

Please include **all general RMW** in this number, including any RMW that is treated onsite and landfilled. If the facility normally combines treated RMW with its **solid waste**, please estimate weight or contact the Awards Technical Assistance for guidance at awards@practicegreenhealth or 888-378-2259.

RMW generation can be weighed over a period of time and extrapolated to a year.

Incinerated RMW

Please include any RMW that is incinerated, such as pathology waste, **trace chemotherapeutic waste**, or any waste that is segregated and removed by a licensed hauler for **medical waste incineration**. This category may be very small.

Sharps

Sharps waste is typically tracked as a separate waste stream by **regulated medical waste** haulers and should be entered in the Sharps category. If sharps are incinerated, they can be included in the **Incinerated RMW** category, but it should be noted in the comments field that the waste streams are combined. If the facility uses a reusable sharps container service, make sure the sharps disposal data does not include the **weight of the containers**.

Non-Hazardous Pharmaceutical Waste

Non-hazardous pharmaceutical waste does not meet the EPA or state agencies' definition of **hazardous waste** but may still be dangerous to human health and the environment. Many health care institutions choose to use a vendor to manage this waste stream as incinerate-only to protect health. This waste stream is typically managed in a blue or white pharmaceutical waste container.

This waste stream can be incinerated as **municipal solid waste** (if so, please track in **Table A**) or as **medical waste** (please track in **Table C**). Please do not enter non-hazardous pharmaceutical waste in both tables **or it will be double-counted!** All non-hazardous pharmaceutical waste data entered in either Table A or Table C will be **autopopulated in Table E. Pharmaceutical Waste** below.

*****If your facility does NOT source-segregate non-hazardous pharmaceuticals into separate containers for disposal with a licensed hauler, DO NOT enter any data for non-hazardous pharmaceutical waste into either Table A or C. Please leave the cells blank.**

Table C. Regulated Medical Waste

Regulated Medical Waste Stream	TONS per Year Baseline	TONS per Year Previous	TONS per Year Current	Annual Costs Baseline	Annual Costs Previous	Annual Costs Current
RMW (treated onsite or offsite)	<u>129.*</u> <input type="text"/>	<u>130.</u> <input type="text"/>	<u>131.*</u> <input type="text"/>	<u>132.</u> <input type="text"/>	<u>133.</u> <input type="text"/>	<u>134.*</u> <input type="text"/>
Sharps	<u>135.*</u> <input type="text"/>	<u>136.</u> <input type="text"/>	<u>137.*</u> <input type="text"/>	<u>138.</u> <input type="text"/>	<u>139.</u> <input type="text"/>	<u>140.</u> <input type="text"/>

Non-RCRA Pharmaceutical Waste	141. <input type="text"/>	142. <input type="text"/>	143. <input type="text"/>	144. <input type="text"/>	145. <input type="text"/>	146. <input type="text"/>
RMW total waste	147. <input type="text"/>	148. <input type="text"/>	149. <input type="text"/>	150. <input type="text"/>	151. <input type="text"/>	152. <input type="text"/>

RMW Waste Metrics Table

For pounds RMW per staffed bed per day, median value was 1.77; data generally ranged from 0.6 to 6.08.

For tons of RMW per OR, median value was 6.1; data generally ranged from 1.7 to 23.

For pounds RMW per patient day, median value was 2.90, values generally ranged from 0.9 to 12.

153.* Staffed Beds: <input type="text"/>	154.* Operating Rooms: <input type="text"/>	155.* Patient Days: <input type="text"/>
156. Pounds of RMW per Staffed Bed per Day <input type="text"/>	157. Tons of RMW per OR <input type="text"/>	158. Pounds of RMW per Patient Day <input type="text"/>

For hospitals and systems that use Adjusted Patient Day (APD), the median for **Pounds of RMW per Adjusted Patient Day** was 1.38 (values generally ranged from 0.54 to 4.0).

159.* Does the facility incinerate any portion of its **regulated medical waste** (RMW)?

- ☒ Yes
☐ No

159.a* Please indicate which medical waste streams are incinerated:(Please select all that apply)

- ☐ General RMW
☐ Pathological Waste
☐ Trace Chemotherapy Waste
☐ Sharps
☐ Non-Hazardous Pharmaceutical Waste
☐ Other

159.b Did you ensure that tonnage was tracked for incinerated waste in Table C. above?

- ☐ Yes
☐ No

160.* Does the facility disinfect/treat its RMW using **onsite technology**?

- ☒ Yes
☐ No

Please do not include fluid management systems that empty to the sanitary sewer in this question.

160.a* Which of the following **technologies** does the facility use to treat RMW onsite? (Select one).

- ☐ Autoclave
☐ Rotoclave
☐ Chemical disinfection
☐ Incineration
☐ Other

Please do not count autoclave(s) used by Sterile Processing or by Laboratory for pre-treatment of microbiological waste. Only report primary onsite treatment method for RMW.

160.b* If the facility treats its RMW onsite, this treated waste is disposed to:

- ☐ Landfill
☐ Municipal waste incineration
☐ Waste-to-energy incineration
☒ Other

160.b.a* Please describe how treated waste is disposed of:

160.c* How does the facility **track its RMW volume or weight** if it treats RMW onsite?

- ☐ The waste is weighed manually.
☐ The equipment weighs the material and the facility tracks this weight.
☐ It is estimated and tracked.
☐ The treated RMW is considered part of solid waste volume.
☐ The facility does not track this weight.
☒ Other

160.c.a* Please describe other method to track waste:

160.d* Does the facility track the cost of treating RMW in-house?

- ☒ Yes
☐ No

160.d.a* The facility includes these costs of treating RMW in-house

- ☐ Power/utilities
☐ Water/sewer
☐ Staff time
☒ Other

160.d.a.a* Please describe tracking of costs of treating RMW in-house:

RMW Reduction/Minimization Strategies

161.* Has the facility **eliminated** the standard use of red bag waste (RMW) containers **in regular patient rooms**?

- ☐ Yes
☐ No

162.* Has the facility implemented a **Reusable Sharps Container** program?

162.a* How many **tons of plastic** were diverted from the landfill (or other disposal) as a result of the reusable sharps container program?

*Note: the tonnage should **only** be the tonnage of reused sharps containers and should not include sharps weight in that total.

162.b* What are the cost-savings (actual or estimated) from diverting reusable sharps containers from the landfill?

163.* Has your facility implemented a **medical device reprocessing** program with an FDA-approved third party reprocessor?

- ☐ Yes
☐ No

A successful medical reprocessing program includes many patient care areas as well as the **operating room**. To simplify the application process, Practice Greenhealth is collecting all data pertaining to **medical device reprocessing** on the **Greening the OR section** of the Partner for Change application. Please enter all data pertaining to your facility's reprocessing collection and purchasing program - inside and outside the **operating room** - on that page.

Pharmaceutical Waste

Non-Hazardous Pharmaceutical Waste

Segregating non-hazardous pharmaceutical waste for incineration is currently considered a best management approach (and is required in some states). For facilities using a pharmaceutical waste vendor (not Reverse Distribution), this may be a white or blue container--not to be confused with the container for trace chemotherapy. **Non-Hazardous Pharmaceutical Waste** data is entered in **Table A** (if disposed of through municipal waste incineration) or **Table C** (if disposed of through RMW incineration). Data from Tables A or C will autopopulate **Table E. Pharmaceutical Waste** below. Pharmacy, Environmental Services, EH&S or your pharmaceutical waste vendor are good resources to identify the pharmaceutical waste tonnage.

If the hospital is NOT source segregating non-hazardous pharmaceuticals into a separate container, do not report a number in either Table A or Table C.

RCRA-Regulated Hazardous Pharmaceutical Waste

RCRA hazardous pharmaceutical waste is comprised of waste that is either listed as hazardous or meets the characteristics of **hazardous waste** in **EPA's Resource Conservation and Recovery Act (RCRA)** or via state agency. This waste stream should not be confused with red bag or "biohazardous" waste. For facilities using a pharmaceutical waste vendor (not Reverse Distribution), this may be a blue or black container.

Please enter the facility's **RCRA Hazardous Pharmaceutical Waste** totals in tons in Table E below. Entering RCRA Hazardous Pharmaceutical Waste data in this table will auto-populate Table G. Hazardous Waste below. Please also see the **NIOSH List of Hazardous Drugs in Healthcare Settings**.

You are required to complete the **Current Year** column at a minimum.

New in 2024: If you already have pharmaceutical waste data in the platform for baseline or previous year, it will sync automatically once you select a baseline year above. If this is your first year of tracking pharmaceutical waste data, select the most recent year in the baseline year dropdown, and leave the previous year column blank. After you've filled out the current year column, the data from current year should then appear in the baseline year column as well. If the facility does not segregate or track a particular waste type, leave that space blank and identify any combined waste streams in the comments box. Do not enter zero. Enter data in tons. Pounds can be easily converted to tons by dividing poundage by 2000.

Table E. Pharmaceutical Waste

Pharmaceutical Waste Stream	TONS per Year Baseline	TONS per Year Previous	TONS per Year Current	Annual Costs Baseline	Annual Costs Previous	Annual Costs Current
RCRA-Hazardous Pharmaceutical Waste	164.* <div></div>	165. <div></div>	166.* <div></div>	167. <div></div>	168. <div></div>	169. <div></div>
Non-RCRA Pharmaceutical Waste (MSW)	170.* <div></div>	171. <div>0</div>	172.* <div>0</div>	173. <div></div>	174. <div>0</div>	175.* <div>0</div>
Non-RCRA Pharmaceutical Waste (RMW)	176.* <div></div>	177. <div>0</div>	178.* <div>0</div>	179. <div></div>	180. <div>0</div>	181.* <div>0</div>
Total Pharmaceutical Waste	182. <div></div>	183. <div>0</div>	184. <div>0</div>	185. <div>0</div>	186. <div>0</div>	187. <div>0</div>

Table F. Pharmaceutical Waste Metrics (These numbers are only a rough guideline)

Total Pounds of Pharmaceutical Waste per Patient Day	Total Pounds of Pharmaceutical Waste per Adjusted Patient Day	Total Pounds of Pharmaceutical Waste per Staffed Bed/Day
188. <div>(The median value was 0.24 pounds per patient day; values generally ranged from 0.01 to 0.95)</div> <div>0</div>	189. <div>(The median value was 0.14 pounds/APD; values generally ranged from 0.01 to 0.50)</div> <div>0</div>	190. <div>(The median value was 0.15 pounds per bed per day; values generally ranged from 0.01 to 0.62)</div> <div>0</div>

191. Does the facility segregate Non-Hazardous Pharmaceutical Waste into a separate waste stream for hauling?

- ☒ Yes
- ☐ No

191.a Did the facility ensure the data for Non-Hazardous Pharmaceutical Waste was added above in Table A or Table C (depending on the type of incineration used for disposal)?

- ☐ Yes
- ☐ No

Note:Data should only be entered in one table or the other--NOT both.

192.* If the facility has **not provided data for Non-Hazardous Pharmaceutical Waste**, how is the facility is currently handling waste pharmaceuticals that are not regulated as **Hazardous Waste** (such as antidepressants, statins, antibiotics, etc.): Please select all that apply.

- ☐ We treat all pharmaceutical waste as RCRA-hazardous to better protect human health and the environment
- ☐ Pharmaceutical waste is being disposed of in red bags or sharps containers
- ☐ Pharmaceutical waste is going down the drain
- ☐ Pharmaceutical waste is going into clear trash bags (solid waste)
- ☒ Other
- ☐ I don't know
- ☐ We already provided data for Non-Hazardous Pharmaceutical Waste in the tables above.

192.a* Please explain other methods for disposing of Non-Hazardous Pharmaceutical Waste:

193.* Please indicate if the facility taken any measures to **reduce the generation** of pharmaceutical waste in the past year:

- ☐ Staff education
- ☐ Inventory management
- ☐ Implemented a samples policy
- ☐ Monitored dating and utilized stock rotation for emergency syringes
- ☐ Prescription review
- ☐ Primed and flushed chemotherapy IV lines with saline solution
- ☐ Replaced prepackaged unit dose liquids with patient-specific oral syringes
- ☒ Other

193.a* Please describe other measures taken to reduce pharmaceutical waste:

194.* Does the facility utilize a reverse distributor for potentially creditable (unused, surplus or expired) **RCRA**-hazardous prescription pharmaceuticals?

- ☒ Yes
- ☐ No

194.a* Did the facility ensure that potentially creditable **RCRA**-hazardous prescription pharmaceuticals sent for reverse distribution are included and accounted for in your hospital's pharmaceutical waste totals?

- ☐ Yes
- ☐ No
- ☐ We did not know this was a requirement

Per the EPA's 2019 **Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine:Final Rule**, prescription pharmaceuticals sent to reverse distributors are considered waste at the healthcare facility and must be accounted for in waste totals.

195.* What **mechanism(s)** is the facility currently using for the management and **disposal of controlled substance waste** (e.g., not including outdated inventory of **controlled substances**)? Select all that apply.

- ☐ Cactus Smart Sink System (Stryker)
- ☐ CSRX Controlled Substance Disposal Service (Stericycle)
- ☐ RX Destroyer
- ☐ Hazardous waste pharmaceutical container
- ☐ Wasting to drain
- ☒ Other sequestration mechanism

Please note: DEA refers to **controlled substances** (CS) that have been dispensed to a patient, but not entirely administered, as "pharmaceutical wastage." This CS waste must be managed in a way that does not allow the drugs to be diverted before incineration/combustion that renders them non-retrievable. DEA has different management guidelines for **controlled substances** that are considered outdated inventory--these must be sent to a DEA-registered reverse distributor. EPA discourages sewerage of any pharmaceuticals but prohibits sewerage of any **hazardous waste** pharmaceuticals--including those that are **controlled substances**. Learn more in the **10 Step Blueprint for Managing Pharmaceuticals in US Healthcare Facilities**.

Practice Greenhealth does not support or recommend any particular vendor solution for controlled substance waste management and disposal.

195.a* Please describe other method of sequestration for **controlled substances**:

Hazardous Waste

Please enter the facility's **RCRA Hazardous Waste** total in tons in Table G below. If you entered **RCRA Hazardous Pharmaceutical waste** in Table E above, this data will automatically populate in Table G below.

You are required to complete the **Current Year** column at a minimum.

New in 2024: If you already have **RCRA hazardous waste** data in the platform for baseline or previous year, it will sync automatically once you select a baseline year above. If this is your first year of tracking **RCRA hazardous waste** data, select the most recent year in the baseline year dropdown, and leave the previous year column blank. After you've filled out the current year column, the data from current year should then appear in the baseline year column as well. Do not enter zero. Enter data in tons. If your **hazardous waste** is in gallons or a mix of gallons and pounds, please convert to tons. It is most accurate to convert gallons to tons using the specific gravity of the waste liquid. However, if this is unavailable, convert gallons to tons using a general conversion factor of 8.35 lbs=1 gallon (e.g., there are approximately 8.35 pounds in a gallon of liquid). Pounds can be easily converted to tons by dividing poundage by 2000.

All health care facilities generate some amount of **hazardous waste**-this number should never be zero.

RCRA-Regulated Hazardous Waste

Please note that your facility's **hazardous waste** tonnage **should not be zero**.

Hazardous waste includes waste solvents, lab fixatives and stains, spill clean-up residue, lab packs, refrigerants, or any "listed" or "characteristic waste" per **RCRA** regulations. Check with your Laboratory Manager, Pharmacy Director, Safety Director, Hazardous Materials Coordinator, **hazardous waste** hauler, Accounts Payable, or review waste removal manifests to identify **hazardous waste** removal documentation that will provide you with the data needed for this section. **Examples of hazardous waste** from the clinical laboratory can be found at: **Clinical Laboratory Waste**

Table G. Hazardous Waste Table

Hazardous Waste Stream	TONS per Year Baseline	TONS per Year Previous	TONS per Year Current	Annual Costs Baseline	Annual Costs Previous	Annual Costs Current
RCRA-Regulated Hazardous Waste	<u>196.*</u> <input type="text"/>	<u>197.</u> <input type="text"/>	<u>198.*</u> <input type="text"/>	<u>199.</u> <input type="text"/>	<u>200.</u> <input type="text"/>	<u>201.*</u> <input type="text"/>
RCRA-Regulated Pharmaceutical Waste	<u>202.</u> <input type="text"/>	<u>203.</u> 0 <input type="text"/>	<u>204.</u> 0 <input type="text"/>	<u>205.</u> <input type="text"/>	<u>206.</u> 0 <input type="text"/>	<u>207.</u> 0 <input type="text"/>
Total Hazardous Waste	<u>208.</u> <input type="text"/>	<u>209.</u> 0 <input type="text"/>	<u>210.</u> 0 <input type="text"/>	<u>211.</u> 0 <input type="text"/>	<u>212.</u> 0 <input type="text"/>	<u>213.</u> 0 <input type="text"/>

Hazardous Waste Minimization Activities

214.* Does the facility contract for, or perform internally, a **hazardous chemical/material assessment** by hospital department and update at least annually?

- ☒ Yes
☐ No

214.a* Please attach hazardous chemical/material assessment:

215.* Has the facility established a contract with a **certified electronics recycling vendor** that is **certified to e-Stewards** (or subcontractors that use **e-Stewards** certified vendors) for legal and environmentally responsible electronics (or e-waste) management and **recycling**?

Yes

Please enter tonnage and cost for **electronics recycling** in **Appendix A**

216.* How does the facility handle its fluorescent lamps?

Other

216.a* Please describe process to handle fluorescent lamps:

Important Note: The act of crushing fluorescent lamps releases mercury vapor into the atmosphere and is not recommended by the EPA or Practice Greenhealth. Crushed lamps must be removed as **hazardous waste** by a licensed **hazardous waste** hauler and cannot be counted toward **recycling** or **Universal Waste** totals. Learn more at **EPA's Mercury Lamp Drum Top Crusher Study (2006)**.

217.* Does the facility recycle batteries?

- ☒ Yes
☐ No

217.a* Please indicate which of the following types of batteries you recycle:

- ☐ Ni-Cd
☐ Lead-acid
☐ Lithium ion
☐ Alkaline
☐ Mercuric oxide
☐ Ni-MH
☐ Other

Please indicate tonnage and cost for the selected batteries in **Appendix A**.

218. Does your facility have an onsite laboratory?

- ☒ Yes
☐ No

218.a* Has your facility done any work to green its laboratory?

- ☒ Yes
☐ No

218.a.a Please describe green laboratory work in 2023:

Please only describe green laboratory work if completed in 2023--unless this is the first year your facility has filled out an award application.

218.b* Does the facility recycle, reprocess or distill solvents, alcohols or other chemicals from the lab (such as xylene, alcohols or formalin)?

- ☒ Yes
☐ No

Please enter solvent distillation data in Table H. In this table, please enter savings as a positive number. If you do not have one of the numbers, leave it blank, do not enter zero.

Table H. Solvent Distillation

Solvent	Gallons distilled annually	Annual savings from avoided virgin solvent purchase	Annual savings from reduced disposal costs
Xylene	218.b.a* <div></div>	218.b.b* <div></div>	218.b.c* <div></div>
Alcohols	218.b.d* <div></div>	218.b.e* <div></div>	218.b.f* <div></div>
Formalin	218.b.g* <div></div>	218.b.h* <div></div>	218.b.i* <div></div>
Other	218.b.j* <div></div>	218.b.k* <div></div>	218.b.l* <div></div>
Total gallons and costs	218.b.m <div>0</div>	218.b.n <div>0</div>	218.b.o <div>0</div>

Please indicate gallons of solvent reprocessed and cost in Appendix A.

Waste Summary

The following tonnages and costs have been automatically calculated based on the information that was provided in Tables A, B,C, and G. If the numbers do not look accurate, check the tonnage and costs entered in those Tables.

Table I. Total Waste Tonnage and Cost (comprised of Solid Waste, Recycling, RMW and Hazardous Waste)

	Total Tonnage (Baseline)	Total Tonnage (Previous)	Total Tonnage (Current)	Total Cost (Baseline)	Total Cost (Previous)	Total Cost (Current)
Total Waste	219. <div></div>	220. <div>0</div>	221. <div>0</div>	222. <div>0</div>	223. <div>0</div>	224. <div>0</div>

Table J. Total Waste Metrics

Based on the information above, the facility's total pounds of waste per patient day is: 225. (The median value was 46.0 pounds per patient day; values generally ranged from 20 to 160) <div>0</div>	Based on the information above, the facility's total pounds of waste per adjusted patient day is: 226. (The median value was 21.6 pounds per APD; values generally ranged from 10 to 50) <div>0</div>	Based on the information above, the facility's total tons of waste per OR is: 227. (The median was 84.2 tons per OR; values generally ranged from 30 to 300.) <div>0</div>
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Table K. Total Waste Percentages

	% Waste (Baseline)	% Waste (Previous)	% Waste (Current)	% Cost (Baseline)	% Cost (Previous)	% Cost (Current)
Solid Waste [from Table A]	228. <input type="text"/>	229. <input type="text"/>	230. <input type="text"/>	231. <input type="text"/>	232. <input type="text"/>	233. <input type="text"/>
Recycling [from Table B]	234. <input type="text"/>	235. <input type="text"/>	236. <input type="text"/>	237. <input type="text"/>	238. <input type="text"/>	239. <input type="text"/>
RMW [from Table C]	240. <input type="text"/>	241. <input type="text"/>	242. <input type="text"/>	243. <input type="text"/>	244. <input type="text"/>	245. <input type="text"/>
Hazardous Waste [from Table G]	246. <input type="text"/>	247. <input type="text"/>	248. <input type="text"/>	249. <input type="text"/>	250. <input type="text"/>	251. <input type="text"/>

Other Waste Program Successes

Please use the space below to describe your **most successful and/or innovative waste minimization, reduction, recycling, medical waste or hazardous waste management program(s)** in 2023. Practice Greenhealth not only scores these questions but also uses them to **identify great case studies** to share with the sector. Environmental benefit and cost-savings data appreciated. Please use complete sentences.

252.* Waste Success 1:
253.* Please attach any additional documentation (optional) for Waste Success 1:**254.*** Waste Success 2:
255.* Please attach any additional documentation (optional) for Waste Success 2:**256.*** Additional documentation (optional):

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