

# DRAFT Questionnaire for Unused Pharmaceuticals Disposal in the Health Services Industry

Facility ID: \_\_[Prepopulated]\_\_\_

### INTRODUCTION

The U.S. Environmental Protection Agency (EPA) is collecting data from hospitals and long term care facilities about unused pharmaceuticals disposal. This questionnaire solicits information from hospitals and long term care facilities. The technical data in Part A of this questionnaire will be used to obtain a national picture of unused pharmaceuticals management and disposal practices at hospitals and long term care facilities including: (1) the factors driving current disposal practices, (2) information on the amount and identities of unused pharmaceuticals currently disposed of via the drain or flushing, and (3) the alternatives to drain disposal and flushing. The financial and economic data collected in Part B of this questionnaire will be used to characterize the economic status of the industry and to estimate the possible economic impacts of disposal policies.

In addition, EPA requests information on alternative management options for unused pharmaceuticals and the costs associated with alternative management practices.

This questionnaire is being conducted under the authority of Section 308 of the Clean Water Act (Federal Water Pollution Control Act, 33 U.S.C. Section 1318). <u>All companies that receive this questionnaire</u> <u>must respond within 60 days</u> of receiving it. Failure to respond, late filing, or failure to comply with the instructions may result in criminal fines, civil penalties, and other sanctions, as provided by law.

### INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

### **DEFINITIONS**

EPA has provided definitions for key terms at the end of this questionnaire (see PART D). These terms are shown in *bold italics* as they are used throughout the questionnaire.

### **QUESTIONNAIRE OVERVIEW**

Please complete one copy of the questionnaire for your *facility* for calendar year 2007 or a recent calendar year. Please use Part C of the questionnaire if you have additional comments.

The questionnaire should be completed by the person(s) most knowledgeable about the information requested (e.g., Director of Nursing or Medical Director). Different people may complete different portions of the questionnaire as your facility deems appropriate.

**EPA** plans to use the data collected to determine the range of pharmaceutical management and *disposal* practices across the U.S. and to produce a nation-wide estimate of the amount of unused *pharmaceuticals* disposed to *wastewater*. As indicated in the questions, EPA is interested in collecting information for <u>calendar year 2007</u>. If information for 2007 is unavailable, then please provide available records from the most recent year with available data.

### FILLING OUT THE QUESTIONNAIRE

If you need further assistance while filling out this questionnaire, please contact Eastern Research Group, Inc. (ERG) via email at HealthServicesStudy@erg.com.

The questionnaire is divided into the following parts:

PART A: FACILITY INFORMATION;

PART B: FINANCIAL AND CLASSIFICATION INFORMATION:

PART C: COMMENTS; and PART D: DEFINITIONS.

Each section should be completed by the person(s) most knowledgeable about the information requested. The technical data collected from PART A will be used to evaluate an estimated amount of *unused pharmaceuticals disposed* and to review the related *disposal* practices. The financial data collected from PART B will be used to evaluate costs currently incurred by facilities to manage their *unused pharmaceuticals*.

Information collected in Part A and B is for calendar year 2007, unless otherwise specified.

Please use the following guidelines for filling out the questionnaire:

- Use black ink or type in the spaces provided.
- Mark responses for each question and do not leave blanks. Fill in the appropriate response(s) to each question unless instructed to skip the question. Check the boxes that apply to your answers. Answer the questions in sequence unless you are directed to SKIP. Do not leave any entry blank. If the answer is zero, enter "0" or "zero".
- Enter "N/A" if a question is not applicable to your *facility*. EPA prepared the questionnaire to be applicable to a variety of *facilities*; therefore, not all of the questions will apply to every *facility*. Please complete each relevant item in the questionnaire and enter "N/A" if a question is not applicable to your *facility*.

- **Include any clarifying attachments.** If additional pages are required to clarify a response, please place the associated question number, as well as your *facility* name (if applicable) in the top right corner of each attachment page. The following list contains examples of items that may be included as attachments to a response to this questionnaire:
  - Organization brochure, pamphlet, and/or general description;
  - Hard copy or electronic copy of *disposal* records; or
  - Pollution prevention or best management practices (BMPs) policies or data.
- If you are completing the questionnaire in hard copy, some pages of the questionnaire may need to be photocopied before you respond. Indicate how many copies of the page(s) you are submitting by completing the entry "Copy \_\_\_\_ of \_\_\_" in the top right corner, unless instructed otherwise.
- Indicate information that should be treated as confidential. You may claim as confidential all information included in the response to a question by checking the Confidential Business Information (CBI) box next to the question number. Note that you may be required to justify any claim of confidentiality at a later time. See the CONFIDENTIAL BUSINESS INFORMATION section on page v.
- Indicate atypical data in PART C COMMENTS. The information requested in the questionnaire is for calendar year 2007. Year-to-year operations are expected to change, but note in PART C if the information for 2007 is not representative of normal operations and why.
- **Data collection.** If you do not already maintain records for at least one month of disposal data, then record disposal data for one month in 2009 and indicate this in Part C Comments.
- Certification. After completion of this questionnaire, a responsible official or an authorized representative must sign the certification statement on page vi. The corporate official or designee responsible for directing or supervising the response to the questionnaire, must sign one of the Certification Statements on page vi to either (1) verify and validate the information provided, or (2) certify that the facility did <u>not</u> engage in *pharmaceutical* distribution during the 2007 calendar year.

### TIMEFRAME FOR COMPLETING QUESTIONNAIRE

The response to this questionnaire is due **60 days** after receipt.

If you wish to request an extension, you must do so **in writing** within 21 days of receipt of this questionnaire. Written requests may be e-mailed to **Meghan Hessenauer** care of Eastern Research Group, Inc. at HealthServicesStudy@erg.com or mailed to:

### **United States Postal Service**

Meghan Hessenauer USEPA Headquarters Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Mail Code: 4303T Washington, DC 20460

### One- or Two-Day Delivery (e.g., FedEx)

Meghan Hessenauer USEPA Headquarters Engineering and Analysis Division Room 6231 (Connecting Wing) 1301 Constitution Avenue, NW Washington, DC 20004

Extension requests will be evaluated on a case-by-case basis. Submittal of an extension request to EPA does <u>not</u> alter the due date of your questionnaire unless and until EPA agrees to the extension and establishes a new date.

### SUBMITTING THE QUESTIONNAIRE TO EPA

After completing the questionnaire and certifying the information that it contains, please use the enclosed mailing label to mail the completed questionnaire to:

U.S. Environmental Protection Agency Questionnaire for Health Services Industry c/o Eastern Research Group, Inc. 14555 Avion Parkway, Suite 200 Chantilly, VA 20151-1102

**EPA** recommends that *organizations* and *facilities* keep a copy of the completed questionnaire, including attachments. EPA will review the information submitted and may request your cooperation in answering follow-up questions, if necessary, to complete our analyses.

### CONFIDENTIAL BUSINESS INFORMATION

EPA provides you the opportunity to claim information as confidential. If no business confidentiality claim accompanies the information when it is received by EPA, EPA may make the information available to the public without further notice.

Regulations governing the confidentiality of business information are contained in the Code of Federal Regulations (CFR) at Title 40 Part 2, Subpart B. You may assert a business confidentiality claim covering part or all of the information you submit, other than effluent data and information or data that is otherwise publicly available, as described in 40 CFR 2.203(b):

"(b) Method and time of asserting business confidentiality claim. A business which is submitting information to EPA may assert a business confidentiality claim covering the information by placing on (or attaching to) the information, at the time it is submitted to EPA, a cover sheet, stamped or typed legend, or other suitable form of notice complying language such as 'trade secret,' 'proprietary,' or 'company confidential.' Allegedly confidential portions of otherwise nonconfidential documents should be clearly identified by the business, and may be submitted separately to facilitate identification and handling by EPA. If the business desires confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state."

You may claim as confidential all information included in the response to a question by checking the Confidential Business Information (CBI) box next to the question number. Note that you may be required to justify any claim of confidentiality at a later time. Note also that facility effluent data are not eligible for confidential treatment, pursuant to Section 308(b) of the *Clean Water Act*, and thus will be treated as nonconfidential even if the CBI box is checked. In addition, information that is publicly available should not be claimed confidential.

Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the *Clean Water Act*.

Information covered by a claim of confidentiality will be made available to EPA contractors to enable the contractors to perform the work required by their contracts with EPA. All EPA contracts provide that contractor employees use the information only for the purpose of performing the work required by their contracts and will not disclose any CBI to anyone other than EPA without prior written approval from each affected business or from EPA's legal office.

Facility Name:	
Facility ID:	
CERTIFICATION STATE	EMENT
The individual responsible for directing or supervising the preparaign the Certification Statement listed below. The certifying officior his/her authorized representative.	
Check Certification Statement #1 if the <i>hospital</i> or <i>long term ca</i> during the 2007 calendar year and the <i>hospital</i> or <i>long term ca</i> questionnaire.	
Check Certification Statement #2 if the <i>hospital</i> or <i>long term capharmaceuticals</i> during the 2007 calendar year.	are facility did not distribute
Sign the bottom of this Certification Statement page after checki	ing the appropriate certification statement.
☐ Certification Statement	#1
I certify under penalty of law that the attached questionnaire was supervision and that qualified personnel properly gathered and einformation submitted is, to the best of my knowledge and belief where we did not possess the requested information for question provided best estimates. We have to the best of our ability indicates confidential business information as defined under 40 CFR Part may be required at a later time to justify our claim in detail with ram aware that there are significant penalties for submitting false fines and imprisonment as explained in Section 308 of the Clear	evaluated the information submitted. The f, accurate and complete. In those cases ns applicable to our company, we ated what we believe to be company 2, Subpart B. We understand that we respect to each item claimed confidential. It information, including the possibility of
☐ Certification Statement	#2
I certify under penalty of law that this <b>facility</b> did not distribute <b>p</b> calendar year. I am aware that there are significant penalties for the possibility of fines and imprisonment as explained in Section	r submitting false information, including
Signature of Certifying Official	Date
Printed Name of Certifying Official	() Telephone Number of Certifying Official
Title of Certifying Official	
Facility Name	

Facility Name:	
Facility ID:	

# PART A: FACILITY INFORMATION

INSTRUCTIONS: Complete PART A of the questionnaire for operations at your *facility* in calendar year 2007.

Cale	idai yeai 2007.						
A-1.	What is the name of your <i>facility</i> ?						
	Facility Name						
A-2.	What is physical address of your facility?						
	Facility Street Address						
	Facility City						
	State	Zip Code					
A-3.	What is mailing address of your facility?						
	Check here if mailing address is same as above.						
	Facility Mailing Address						
	Facility City						
	State	Zip Code					
A-4.	What is the name, title, telephone and fax numbe at your company for the information supplied in Pathat the Head Pharmacist, Director of Nursing or a	art A of this questionnaire? (Note: We suggest					
	Primary Contact Name	( <u>)</u> Telephone Number					
	Filliary Contact Name	relephone Number					
	Primary Contact Title	( <u>)</u> Fax Number					
	Street Address	Convenient time to call between:					
	City, State, Zip Code	Email					

		Facility Name:	
		Facility ID:	
	A-5.	What is the name, title, telephone and fax numbers, and <b>contact</b> at your company for the information supplied in	
		Secondary Contact Name	( ) Telephone Number
		Secondary Contact Title	( ) Fax Number
		Street Address	Convenient time to call between: am / pm and am / pm (Eastern Time)
		City, State, Zip Code	Email
CBI? ☐ Yes	A-6.	What type of facility do you operate? Check all that app	ly.
_ , , ,		<ul> <li>Long Term Care Facility (LTCF)</li> <li>□ Nursing Home</li> <li>□ Continuing Care Retirement Community</li> <li>□ Hospice</li> </ul>	<i>'</i>
		Hospital General Medical and Surgical Psychiatric and Substance Abuse Specialty (Other than Psychiatric) Other (specify)	
CBI? ☐ Yes	A-7.	How many beds are available at your facility?	
CBI? ☐ Yes	A-8.	What percentage of these beds are typically occupied or	n any given day?
CBI? ☐ Yes	A-9.	How many months did this facility accept patients or re	esidents in calendar year 2007?
<b>CBI?</b> □ Yes	A-10.	What type of pharmacy provided <i>pharmaceuticals</i> for <i>p</i> 2007? Check all that apply.	patients or residents of your facility in
		Facility has an on-site pharmacy   Retail pharmacy   Mail-order pharmacy   Long term care pharmacy   Other (specify)   Other (specify)   Other (specify)	

<b>CBI?</b> □ Yes						
		Where were <i>pharmace</i> applicable?	euticals stored at	your <i>facility</i> u	upon receipt from the ph	narmacy, if
	Med room Satellite pharmacy Automatic dispensing system (e.g., Pyxis®, Omnicell, Baxter) Other (specify) Other (specify) Other (specify) N/A medications are not stored at this facility.  Indicate in Table A-1 who is responsible for the pharmaceuticals during the transfer of pharmaceuticals from the pharmacy to the patient and from the patient to disposal.					
		Transfer Step	Pharmacist	Nurse	Patient or Resident	
	Who o pharm pharm	btains naceuticals from the				
	Who maintains  pharmaceuticals while they are stored at the facility?  Who has ownership of the pharmaceuticals while being stored in your facility?  Who collects unused pharmaceuticals from the patient or resident?					
			(Pharmacy)	(Facility)		
					N/A	
	pharm	naintains the <i>unused</i> naceuticals while they bred at the facility?			N/A	
	dispos of unu	s responsible for sal or offsite transfer used naceuticals?			N/A	
<b>CBI?</b> ☐ Yes	A-12.	What was the average your <i>facility</i> in 2007? E			per month to all <b>patien</b> t	<b>ts</b> or <b>residents</b> at
		Tablets or Capsules (E	xample: dose is o	ne tablet or ca	apsule).	
		Liquid (administered or	ally)			
		Liquid (administered by	/ IV/infusion)			
		Patches				

Topical creams or ointments

			Facility Name:				
			Facility ID:				
CBI? A-1 ☐ Yes		What was the average number of doses administered per month to all <b>patients</b> or <b>residents</b> at your <b>facility</b> that were unused or excess in 2007? Example: 1,000 tablets or X% of 300 IVs.					
	Т	ablets or 0	Capsules (Example: dose is one tablet or capsule).				
	L	iquid (adm	inistered orally)				
	L	iquid (adm	inistered by IV/infusion)				
	F	atches					
	Т	opical crea	ams or ointments				
CBI? A-1 ☐ Yes			come of the <i>pharmaceuticals</i> brought into your <i>facility</i> not used? Contact the approximate percentage for each reason.	heck all that apply			
			your facility, approximately 20% of the <i>unused pharmaceuticals</i> results f dications. Check the box by $\boxtimes$ Medication no longer prescribed or required				
		Pa	tient or resident no longer at facility and/or deceased	%			
		Alle	ergic and/or adverse reaction	%			
		Co	ntraindicated (drug interaction problem)	%			
		] Me	dication expired	%			
		] Me	dication no longer prescribed or required	%			
		Pat	tient or resident refused to continue treatment	%			
			cess dosage (e.g., medication available in 75 mL container patient was only prescribed 50 mL)	%			
		Sar	mples from drug companies	%			
		] Me	dication dropped/spilled	%			
		Oth	er (specify)	%			
		Oth	er (specify)	%			
		Oth	er (specify)	%			
			TOTAL =	100 %			

	Facility Name:
	Facility ID:
CBI? A-15. ☐ Yes	How did your <i>facility</i> determine how to <i>dispose</i> of <i>unused pharmaceuticals</i> that require special <i>disposal</i> (e.g., hazardous waste) in 2007? Check all that apply. <i>Note: If your facility has composed disposal guidelines, please attach a copy to this questionnaire and check the box here.</i>
	<ul> <li>Environmental management staff identifies special disposal requirements</li> <li>Trained nursing or other medical staff identifies special disposal requirements</li> <li>Pharmaceutical waste database (e.g., PharmE® Waste Wizard) identifies special disposal requirements</li> <li>Waste contractor identifies special disposal requirements</li> <li>Other (specify)</li> <li>Other (specify)</li> <li>Other (specify)</li> </ul>
CBI? A-16.  ☐ Yes	How did your <i>facility</i> communicate <i>disposal</i> practices for <i>unused pharmaceuticals</i> that require special <i>disposal</i> (e.g., hazardous waste) to its staff in 2007? Check all that apply.  Bar code system for pharmaceutical containers (e.g., EcoRex <sup>TM</sup> ) Labeling system for pharmaceutical containers Disposal method is displayed by automatic dispensing system (e.g., Pyxis®, Omnicell, Baxter) Training Posters, booklets, flyers Other (specify) Other (specify) Other (specify)
CBI? A-17.  ☐ Yes	What practices did your <i>facility</i> use in 2007 to collect and sort <i>unused pharmaceuticals</i> that require special <i>disposal</i> (e.g., hazardous waste)? Check all that apply.    Unused pharmaceuticals are collected and stored in a central area for sorting Unused pharmaceuticals are placed into separate bins for different types of <i>disposal</i> in satellite collection areas throughout the <i>facility</i>   Automated sorting and <i>disposal</i> of <i>unused pharmaceuticals</i> (e.g., EcoRex <sup>TM</sup> )   Unused pharmaceuticals are not sorted prior to <i>disposal</i>   Other (specify)   Other (specify)   Other (specify)   Other (specify)

Facility Name:	
Facility ID:	

**CBI?** ☐ Yes A-18.

Complete Table A-2, below, to indicate which practices your *facility* used in 2007 to manage *unused pharmaceuticals*. Provide the relative percentage of total *unused pharmaceutical* quantity (e.g., doses) that each management practice was used for each *pharmaceutical* category.

Table A-2. Practices your Facility used in 2007 to Manage Unused Pharmaceuticals

Table A-2. Flaction				<i>ical</i> Category		
Management Practice	Hazardous Pharmaceuticals ( <u>not</u> controlled substances)	Hazardous Pharmaceuticals (controlled substances)	Bulk Chemotherapy Waste	Trace Chemotherapy Waste	Non-Hazardous ( <u>not_controlled</u> substances)	Non-Hazardous (controlled substances)
<b>Disposal</b> via drain or toilet flushing						
<b>Disposal</b> via trash (regular dry or wet garbage)						
<b>Disposal</b> via medical waste (biohazard bag/sharps container)						
<b>Disposal</b> via hazardous waste						
<b>Disposal</b> via non- hazardous witnessed incineration						
Returned directly to onsite <i>facility</i> pharmacy						
<b>Returned</b> directly to offsite retail pharmacy						
Shipped to reverse distributor						
Other (specify):						
Other (specify):						
Other (specify):						
Total	100%	100%	100%	100%	100%	100%

	Facility Name:
	Facility ID:
<b>CBI?</b> A-19. ☐ Yes	Please comment on any <i>disposal</i> practices listed in Question A-18 that your <i>facility</i> does not use because they are unavailable or subject to restrictions.
	Example: Cannot use reverse distributor for hydrocodone because it is a DEA-controlled substance.

**CBI?** A-20. ☐ Yes

How much does it cost your *facility* each month to manage *unused pharmaceuticals*? Please provide the average monthly cost (in either dollars or hours as appropriate) for each method and the labor descriptions and percentages of the time spent on each method noted in Question A-18 in Table A-3. The average monthly cost in dollars should include disposal fees and/or contractor fees in addition to any *facility* costs.

Table A-3. Monthly Unused Pharmaceuticals Management

	Average Monthly Cost		Labor Allocation and Percent of Time Spent on Management Practice					Practice
Management Practice	Amount	Unit (hours or dollars)	Pharmacist	Nurse Practitioner/ Physician Assistant	Nurse (Any License)	Nurse's Aid	Other:	Total
<b>Disposal</b> via drain or toilet flushing			%	%	%	%	%	100%
<b>Disposal</b> via trash (regular dry or wet garbage)			%	%	%	%	%	100%
<b>Disposal</b> via medical waste (biohazard bag/sharps container)			%	%	%	%	%	100%
<b>Disposal</b> via hazardous waste			%	%	%	%	%	100%
<b>Disposal</b> via non- hazardous witnessed incineration			%	%	%	%	%	100%
Returned directly to onsite facility pharmacy			%	%	%	%	%	100%
Returned directly to offsite retail pharmacy			%	%	%	%	%	100%
Shipped to reverse distributor			%	%	%	%	%	100%
Other (specify):			%	%	%	%	%	100%
Other (specify):			%	%	%	%	%	100%
Other (specify):			%	%	%	%	%	100%

Facility Name	
Facility ID:	

**CBI?** ☐ Yes A-21.

Please attach a copy of your *facility's* records of the amounts of *unused pharmaceuticals disposed* and the *disposal* method for one representative month in 2007 or for another calendar year if 2007 records are not available. Please see Table A-4 for an example of the information that EPA is requesting; however, you may provide records in any available format. If your *facility* does not have these records available, please complete Table 1 in Attachment A for one month.

Table A-4. Example Records for Monthly Disposal of Unused Pharmaceuticals

	Table A-4. Example Records for monthly Disposar of Orlased Final Indicated							
Name of Pharmaceutical	Pharmaceutical Classification	Controlled Substance?	Hazardous Waste?	Chemotherapy Waste? (e.g., Yes - Trace, Yes - Bulk, No)	Estimated Number of <i>Unused</i> <i>Pharmaceuticals</i> <i>Disposed</i>	Unit of Measure (e.g., tablets, vials, capsules, patches, ounces, grams, mL)	Amount of Pharmaceutical Active Ingredient per Dose	Method of <i>Disposal</i>
Vicodin®	28:08.08 Opiate Agonists	Yes	No	No	200	tablets	750 mg	Down the Drain
Crestor	24:06.08 HMG-CoA Resuctase Inhibitors	No	No	No	500	tablets	10 mg	Trash
Plavix (clopidogrel)	20:12.18 Platelet- Aggregation Inhibitors	No	No	No	50	capsules	75 mg	Down the Drain
Alkeran (melphalan)	10:00.00 Antineoplastic Agents	No	Yes	Yes - Bulk	500	mL	5 mg/mL	Hazardous Waste

AHFS Classification – American Hospital Formulary Service Classifications can be found online at http://www.ashp.org/ahfs/index.cfm.

		Facility Name:
		Facility ID:
CBI? ☐ Yes	A-22.	With regards to flushing <i>unused pharmaceuticals</i> down a drain or toilet in 2007, check all that apply.
		No <i>Unused Pharmaceuticals</i> Flushed Down the Drain or Toilet Medicare Policy Medicaid Policy Drug Enforcement Administration (DEA) Policy (Controlled Substances Act) State or Local Policy <i>Organization</i> and/or <i>Facility</i> Guidelines Ease of <i>Disposal</i> Cost of <i>Disposal</i> Alternatives Staff Time Constraints Staff and <i>patient</i> or <i>resident</i> safety Other ( <i>specify</i> ) Other ( <i>specify</i> ) Other ( <i>specify</i> ) Other ( <i>specify</i> )
CBI? ☐ Yes	A-23.	If you checked "Medicare Policy", "Medicaid Policy", "DEA Policy", or "State or Local Policy" in Question A-22, please explain why these policies caused your <i>facility</i> to dispose of <i>unused pharmaceuticals</i> by flushing down the drain or toilet.  Medicare Policy:
		Medicaid Policy:
		DEA Policy:
		State or Local Policy (provide citation to regulation):
		Organization and/or Facility Guidelines:

			Facility Name:
			Facility ID:
CBI? ☐ Yes	A-24.		facility disposed of unused pharmaceuticals down a drain or toilet in 2007, please the destination of the wastewater from your facility.
			Wastewater is sent to a sewage treatment plant.
			Name of Company/Utility on your Sewer Bill (Example: City of Springfield Public Works)
			Our <i>facility</i> does not have a sewer bill because our facility is a <i>direct wastewater discharger</i> .
			Name of River, Lake, or <i>Surface Water</i>
			NPDES Permit Number
			Wastewater is sent to another destination:
			Explain:
			Septic System
		П	Unknown

		Facility Name:
		Facility ID:
CBI? ☐ Yes	A-25.	How often do you dispose of <i>unused pharmaceuticals</i> at your <i>facility</i> ?  Daily As Necessary (specify): Once/Week Once/Month Other (specify): Other (specify): Other (specify): Other (specify):
CBI? ☐ Yes	A-26.	What management practices or <i>pollution prevention</i> activities does your <i>facility</i> use to reduce the amount of <i>unused pharmaceuticals</i> at your <i>facility</i> ? Check all that apply and attach a copy of any literature, if available.
		<ul> <li>Use of an automatic dispensing system (e.g., Pyxis<sup>®</sup>, Omnicell, Baxter)</li> <li>Central collection system for companies with multiple facilities</li> <li>Render <i>controlled substances</i> inert by combining with solvent waste, such as chloroform, for <i>disposal</i> as hazardous waste with a licensed off-side hazardous waste provided</li> <li>Inventory analysis</li> <li>Stock rotation</li> <li>Order medication in smaller quantities to avoid excess (e.g., fewer tablets or doses)</li> <li>Order medication in smaller doses to avoid excess (e.g., 5 mg instead of 10 mg)</li> <li>Other (specify):</li> <li>Other (specify):</li> <li>Other (specify):</li> </ul>
CBI? ☐ Yes	A-27.	If your <i>facility</i> were prevented from <i>disposing</i> of <i>unused pharmaceuticals</i> down the drain or toilet, what alternative management method(s) would your <i>facility</i> likely use? Check all that apply.  Hire management company to organize and track <i>disposal</i> Work with local/state law enforcement and regulatory agencies for more flexible <i>controlled substances disposal</i> Increase and/or improve storage and sorting to have less frequent, more organized <i>disposal</i>
		☐ Change dispensing practices to minimize dose distribution   ☐ Other (specify):   ☐ Other (specify):   ☐ Other (specify):

	Facility Name:
	Facility ID:
<b>CBI?</b> A-28. ☐ Yes	What is the basis of your policy regarding <i>unused pharmaceutical disposal</i> ? Check all that apply.
	Hazardous waste (RCRA) requirements State requirements Waste minimization H2E or other green organization Cost reduction Drug Enforcement Agency (DEA) Medicare and/or Medicaid compliance OSHA compliance Other (specify): Other (specify): Other (specify):
A-29.	For the purpose of training staff in proper <i>pharmaceutical disposal</i> , what is best type of material the Environmental Protection Agency (EPA) can provide you (i.e., brochure, CD/DVD)? Check all that apply.  CD DVD Internet downloads of written material Web-based training Hard Copy Outreach meetings Other (specify): Other (specify): Other (specify):

				Facility I	Name:		
				Facility I	D:		
		PART B:		NCIAL AND CLA ACILITY AND OR		ON INFORMATION ON	N
CBI? ☐ Yes	B-1.	How many employ	ees (full-	and part-time) work	at this <i>facility</i> ?	>	
		Full time (35+ hou	s/week)		_full-time emp	loyees	
		Part time (<35 hou	rs/week)		_ part-time emp	oloyees	
<b>CBI?</b> □ Yes	B-2.	What were the 200 zeros are already i			or this <i>facility</i>	? (Round to nearest the	housand; the
				Facility Rev	enues		
		2005		2006		2007	
		\$,,	0 0 0	\$,	, <u>0 0 0</u>	\$,	, <u>0 0 0</u>
<b>CBI?</b> □ Yes	B-3.	What were the 200 thousand; the zero				<b>acility</b> ? (Round to nea	arest
		2005		2006		2007	
		\$,,	0 0 0	\$,	, <u>0 0 0</u>	\$,	, <u>0 0 0</u>
CBI? □ Yes	B-4.	St Ind	nt ederal ate dian Nation ommunity se popula 50, Mo ofit (inclu	on / (County, City, Town tion served by this fa ,000 or fewer ore than 50,000 uding religious)			

STOP

If the facility belongs to a government entity, you have completed the questionnaire.

THANK YOU FOR YOUR TIME AND PARTICIPATION

If the *facility* belongs to a NOT-FOR-PROFIT or a FOR-PROFIT entity, continue with Question B-5.

		Facility Name:
		Facility ID:
CBI? ☐ Yes	B-5.	What is the name of the <i>organization</i> that owns this <i>facility</i> ?
		Organization Name
CBI? ☐ Yes	B-6.	What is the physical address of the <i>organization</i> that owns this <i>facility</i> ?
		Organization Street Address
		<b>Organization</b> City
		State Zip Code
<b>CBI?</b> □ Yes	B-7.	What is the mailing address of the <i>organization</i> that owns this <i>facility</i> ?
☐ 1es		Check here if mailing address is same as above.
		Organization Mailing Address
		<b>Organization</b> City
		State Zip Code
CBI? ☐ Yes	B-8.	What is your organization's ownership?
		☐ Publicly traded ☐ Privately owned
CBI? ☐ Yes	B-9.	How many health services <i>facilities</i> are owned by this <i>organization</i> ?
CBI? ☐ Yes	B-10.	How many employees (full- and part-time) work at this <i>organization</i> ?
		Full time (35+ hours/week) full-time employees
		Part time (<35 hours/week) part-time employees
CBI? ☐ Yes	B-11.	What were the 2005, 2006, and 2007 revenues for this <i>organization</i> ? (Round to nearest thousand; the zeros are already in the table.)
		Organization Revenues
		2005 2006 2007
		\$, <u>, 0 0 0</u> \$, <u>0 0 0</u> \$, <u>0 0 0</u>

Facility Name:	
Facility ID:	

CBI? B-12. What were the 2005, 2006, and 2007 operating costs for this *organization*? (Round to nearest thousand; the zeros are already in the table.)

# **Organization Operating Costs**

2005	2006	2007
\$, <u>_</u> , <u>0</u> 000	\$, <u>_</u> , <u>_</u> , <u>0</u> 000	\$,, <u>0</u> _0

You have completed the questionnaire. THANK YOU FOR YOUR TIME AND PARTICIPATION

		Conv	of	
Facility ID:				
Facility Name:				

## PART C: COMMENTS

Year-to-year operations are expected to change, but note in this table if 2007 information is not representative of normal operations and why. Cross reference your comments by question number and indicate the confidential status of your comment by checking ⊠ the box in the column titled "CBI" (Confidential Business Information). If you are completing a hard copy data request and you need additional rows, make copies of this page.

Question Number	CBI?	Comment
	Yes	
	☐ Yes	
	☐ Yes	
	☐ Yes	
	Yes	
	Yes	
	Yes	
	☐ Yes	
	☐ Yes	
	☐ Yes	
	Yes	
	Yes	

# PART D: DEFINITIONS

The terms identified below are identified in the text of this data request in bold and italic font.

**Best Management Practices (BMPs)** – BMPs include methods to prevent toxic and hazardous pollutants from reaching rivers, lakes and other surface water and sewage treatment plants. For example, BMPs for this industry could include, but are not limited to, practices to reduce the amount of **pharmaceuticals** generated that are not used or alternatives to **disposal** of **unused pharmaceuticals**. Example BMPs include dispensing **pharmaceuticals** as unit doses and using a **reverse distributor** for managing returns of **unused pharmaceuticals**.

**Clean Water Act (CWA)** – Federal legislation enacted by Congress to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (Federal Water Pollution Control Act of 1972, as amended, 33 U.S.C. 1251 et seq.).

**Controlled Substances** – **Pharmaceuticals** and certain other chemicals, both narcotic and non-narcotic, whose possession and use are regulated within "schedules" under the Controlled Substances Act. <sup>1</sup>

**Direct Wastewater Discharge** – The discernible, confined, and discrete conveyance of pollutants to United States **surface waters** such as rivers, lakes, and oceans. See 40 CFR 122.2. If you discharge directly, you have an NPDES permit (see below).

**Discharge** – The conveyance of **wastewater** to: (1) United States **surface waters** such as rivers, lakes, and oceans, or (2) a publicly owned, privately owned, federally owned, combined, or other treatment works (i.e., municipal wastewater treatment plant).

**Disposal** – Intentional placement of **unused pharmaceuticals** as waste into drain or toilet or into municipal, medical, or hazardous waste for permanent treatment or disposition.

Facility – Facilities include hospitals and long term care facilities.

**Hospital** – An institution that provides medical, surgical, or psychiatric care and treatment for the sick or the injured.

**Long Term Care Facility** – A **facility** that provides rehabilitative, restorative, and/or ongoing skilled nursing care to **patients** or **residents** in need of assistance with activities of daily living. Long-term care **facilities** include nursing homes, rehabilitation **facilities**, inpatient behavioral health **facilities**, and long-term chronic care **hospitals**.

**Non-Discharge** – Intentional placement of unused pharmaceuticals into municipal, medical, or hazardous waste for permanent treatment or disposal.

**Non-Disposal** – Return of **unused pharmaceuticals** to a **pharmacy**, take back program, **reverse distributor**, **pharmaceutical** manufacturer or donation site.

**NPDES Permit** – Permits issued under the National Pollutant Discharge Elimination System (NPDES) program authorized by Sections 307, 318, 402, and 405 of the **Clean Water Act** that apply to facilities that **discharge wastewater** directly to United States **surface waters**.

**Organization** – An organization that operates one or more **hospitals** or **long term care facilities**. Organizations may include government-owned, religiously affiliated, nonprofit, and for-profit organizations.

**Patient** – Any person receiving medical, surgical, or psychiatric care or treatment at a **hospital**.

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<sup>&</sup>lt;sup>1</sup> See http://www.usdoj.gov/dea/pubs/csa.html for information on the Controlled Substances Act.

**Pharmaceuticals** – Any chemical or biological substance, synthetic or non-synthetic, that when taken by the **facility patient** or **resident** will cure or reduce the symptoms of an illness or ongoing medical condition. Additionally, this definition refers to substances taken by the **facility patient** or **resident** for preventive medicine. This includes over the counter medication, as well as those prescribed by a physician. Table 1 of Attachment B includes a list of the **pharmaceuticals** most frequently prescribed according to http://www.rxlist.com/. The definition of **pharmaceuticals** includes, but is not limited to, the **pharmaceuticals** listed in Table 1 of Attachment B.

**Pharmaceutical Delivery Devices** – Any device (e.g., tablet, intravenous bag) used to provide effective dosing of pharmaceuticals.

**Pharmacy** – Any unit or organization dispensing pharmaceuticals, whether located within the facility or outside of the facility.

**Pollution Prevention** – The use of materials, processes, or practices that reduce or eliminate the creation of **pollutants** or wastes. It includes practices that reduce the use of hazardous and nonhazardous materials, energy, water, or other resources, as well as those practices that protect natural resources through conservation or more efficient use. For example, **pollution prevention** for this industry could include but is not limited to reducing the amount of **unused pharmaceuticals** generated at **hospitals** or **long term care facilities**.

**Publicly Owned Treatment Works (POTW)** – Any state or municipality-owned sewage treatment plant that is used to recycle, reclaim, or treat liquid municipal sewage and/or liquid industrial wastes (e.g., municipal wastewater treatment plant).

**Resident** – Any person receiving rehabilitative, restorative, and/or ongoing skilled nursing care at a **long** term care facility.

**Reverse Distributor** – A company engaged primarily in the business of accepting outdated/expired **pharmaceuticals** from pharmacies and drug wholesalers for the primary purpose of returning them to the manufacturer for credit.

**Surface Waters** – Waters of the United States including, but not limited to, oceans and all interstate and intrastate lakes, rivers, streams, creeks, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds.

**Unused Pharmaceuticals** – Any **pharmaceutical** purchased or prescribed for a patient or resident that is not taken by or administered to the patient or resident. These **pharmaceuticals** may be returned to the pharmacy, taken back by a **reverse distributor**, **pharmaceutical** manufacturer, or an organization accepting donations (**non-disposal**). Alternatively, **pharmaceuticals** may be intentionally placed into a drain or toilet at the facility or into the facility's municipal trash, medical waste, or hazardous waste (**disposal**). This definition does not include any **pharmaceutical** ingredients or metabolites excreted or washed from patient or residents.

**Wastewater** – Water that is generated from any source at a **hospital** or **long term care facility** that includes, but not limited to, restrooms, cafeterias, showers, domestic activities, and any healthcare activity.

### **ATTACHMENT A**

Table 1. Example Records for Monthly Disposal of Unused Pharmaceuticals

	Table I. Ex	kampic itee	oras for in	onthly <i>Disp</i>	0341 01 0110	iseu Priarri	accuticais	
Name of Pharmaceutical	Pharmaceutical Classification (Include AHFS Classification if Known)	Controlled Substance? (Y/N)	Hazardous Waste? (Y/N)	Chemotherapy Waste? (e.g., Yes - Trace, Yes - Bulk, No)	Estimated Number of Unused Pharmaceutical Doses Disposed	Unit of Measure (e.g., tablets, vials, capsules, patches, ounces, grams, mL)	Amount of Pharmaceutical Active Ingredient per Dose	Method of <i>Disposal</i>

AHFS Classification – American Hospital Formulary Service Classifications can be found online at http://www.ashp.org/ahfs/index.cfm.

# **ATTACHMENT B**

**Table 1. Classifications and Names of Common Pharmaceuticals** 

Pharmaceutical Classification		Names of Common Pharmaceuticals (Active
Number	Name	Ingredient)
04:00	Antihistamine Drugs	Allegra (fexofenadine HCI) Benadryl (diphenhydramine HCI) Claritin (Loratadine) Dimetapp (bromoheniramine maleate, phenylephrine HCI)
08:00	Anti-Infective Agents	Ceclor (cefaclor) Cipro (ciprofloxacin HCI) Diflucan (fluconazole) Doxycycline Lamisil (terbinafine HCI) Novoamoxin (amoxicillin) Novo-ampicillin (ampicillin) Tetracycline Valtrex (valacyclovir HCI) Zithromax (axithromycin)
10:00	Antineoplastic Agents	Alkeran (melphalan) Casodex (bicalutamide) Eligard (luprolide acetate) Tamofen (tamoxifen citrate)
12:00	Autonomic Drugs	Advair (salmeterol xinafoate, fluticasone propionate) Aricept (donepezil) Cyclobenzaprine (cyclobenzaprine HCI) Epinephrine Nicoderm (nicotine - patch) Nicorette (nicotine - gum) Prostigmin (neostigmine bromide) Requip (ropinirole HCI) Spiriva (tiotripium bromide monohydrate)
20:00	Blood Formation, Coagulation, and Thrombosis	Ferrous fumarate Fragmin (dalteparin sodium) Plavix (clopidogrel bisulfate)
24:00	Cardiovascular Drugs	Crestor (rosuvastatin calcium) Diovan (valsartan) Lipitor (atorvastatin calcium) Norvasc (amlodipine) Prinivil (lisinopril) Viagra (sildenafil) Vytorin (ezetimibe/ simvastatin) Zetia

**Table 1. Classifications and Names of Common Pharmaceuticals** 

Pharmaceutical Classification		Names of Common Pharmaceuticals (Active
Number	Name	Ingredient)
28:00	Central Nervous System Agents	Advil (ibuprofen) Asprin (acetylsalicylic acid) Celebrex (celecoxib) Codeine (codeine phosphate) Effexor XR (venlafaxine) Imitrex (sumatriptan hemisulfate) Klonopin (clonazepam) Neuleptil (pericyazine) Oxycotin (oxycodone HCl) Paxil (paroxetine HCl) Risperdal (risperidone) Ritalin (methyphenidate HCl) Serax (oazepam) Tylenol (acetaminophen) Valium (diazepam) Wellbutrin SR (bupropion HCl) Xanax (alprazolam) Zoloft (sertraline) Zyprexa (olanzapine)
36:00	Diagnostic Agents	One Touch (glucose oxidase, peroxidase) Thyrogen (thryotropin alfa)
40:00	Electrolytic, Caloric, and Water Balance	OS-Cal (calcium carbonate) Pedialyte (electrolyte and dextrose) Sodium bicarbonate
48:00	Respiratory Tract Agents	Nalcrom (sodium cromoglycate) Singulair (montelukast)
52:00	Eye, Ear, Nose, and Throat (EENT) Preparations	Artificial Tears (polyvinyl alcohol) Atropine (atropine sulfate) Flonase (fluticasone propionate) Livostin (levocabastine HCl) Nasonex (mometasone furoate) Polysporin (bacitracin zinc, polymyxin B sulfate)
56:00	Gastrointestinal Drugs	Dulcolax (bisacodyl) Lactaid (lactase) Pepto Bismol (bismuth subsalicylate) Previcid (lansoprazole) Protoloc (pantoprazole) Zantac (ranitidine HCI)
60:00	Gold Compounds	Ridaura (auranofin)
64:00	Heavy Metal Antagonists	Cuprimine (penicillamine)
68:00	Hormones and Synthetic Substitutes	Cortisone (cortisone acetate) Novorapid (insulin aspart) Prednisone Premarin (conjugated estrogens) Thyroid

**Table 1. Classifications and Names of Common Pharmaceuticals** 

Pharmaceutical Classification		Names of Common Pharmaceuticals (Active
Number	Name	Ingredient)
84:00	Skin and Mucous Membrane Agents	Accutane (isotretinoin) Bactin (bactiracin) Differin (adapalene) Hydrogen Peroxide Lyderm (fluocinonide) Retin A (tretinoin) Tinactin (tolnaftate) Zovirax (acyclovir)
86:00	Smooth Muscle Relaxants	Detrol LA (tolterodine) Phyllocontin (aminophylline)
88:00	Vitamins	Ascorbic Acid Folic Acid Niacin Vitamin A Vitamin D (cholecalciferol) Vitamin E
92:00	Miscellaneous Therapeutic Agents	Actonel (risedronate sodium) Avodart (dutasteride) Botox (botulinum toxin type A) Enebrel (etanercept) Fosamax (alendronate sodium) Humira (adalimumab)