

MEDICAL WASTE MANAGEMENT IN TEXAS

**TCEQ RULE REQUIREMENTS FOR CONDUCTING MEDICAL WASTE ACTIVITIES AND
MANAGING WASTE RELATED TO COVID-19**

KRISTEN A. HERNANDEZ

MUNICIPAL SOLID WASTE SECTION

2022 TCEQ ENVIRONMENTAL TRADE FAIR

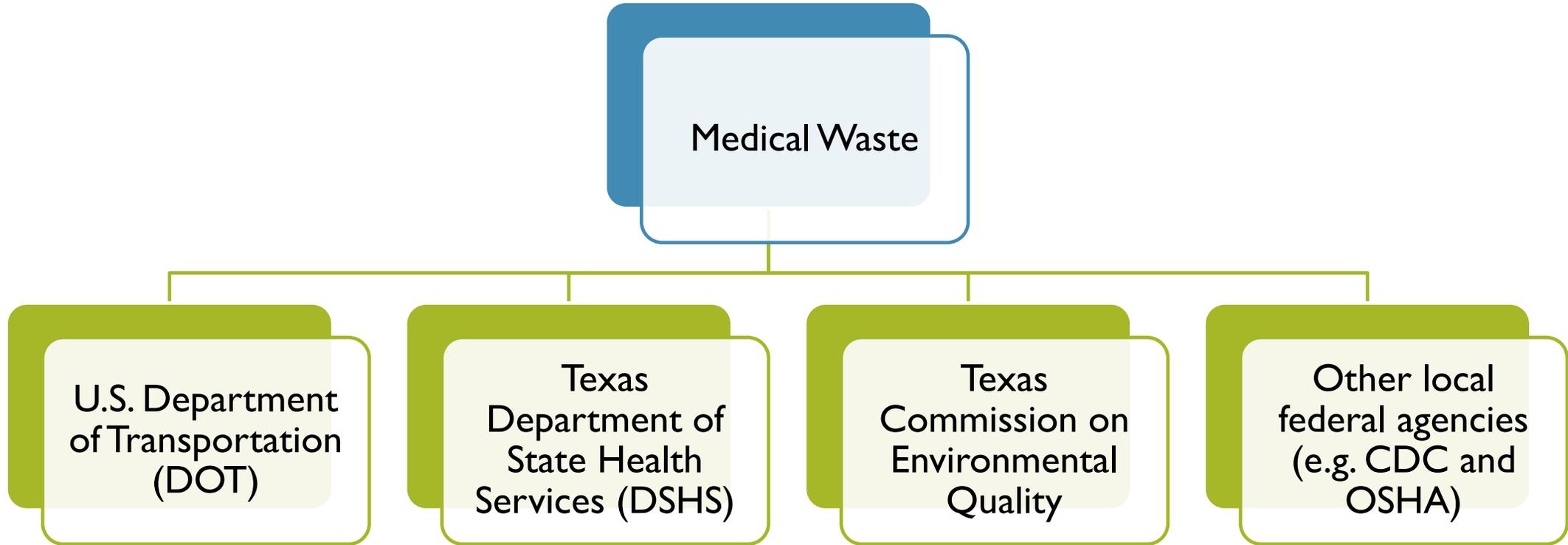


AGENDA

- Medical Waste and Regulators:
 - Definitions and Role of Regulatory Agencies
- Medical Waste Qualifications:
 - Handling, Treatment, and Disposal
 - Generators, Transporters, and Processors
 - Types of Authorizations
- Form Requirements and Processing
- Managing COVID-19 Related Waste



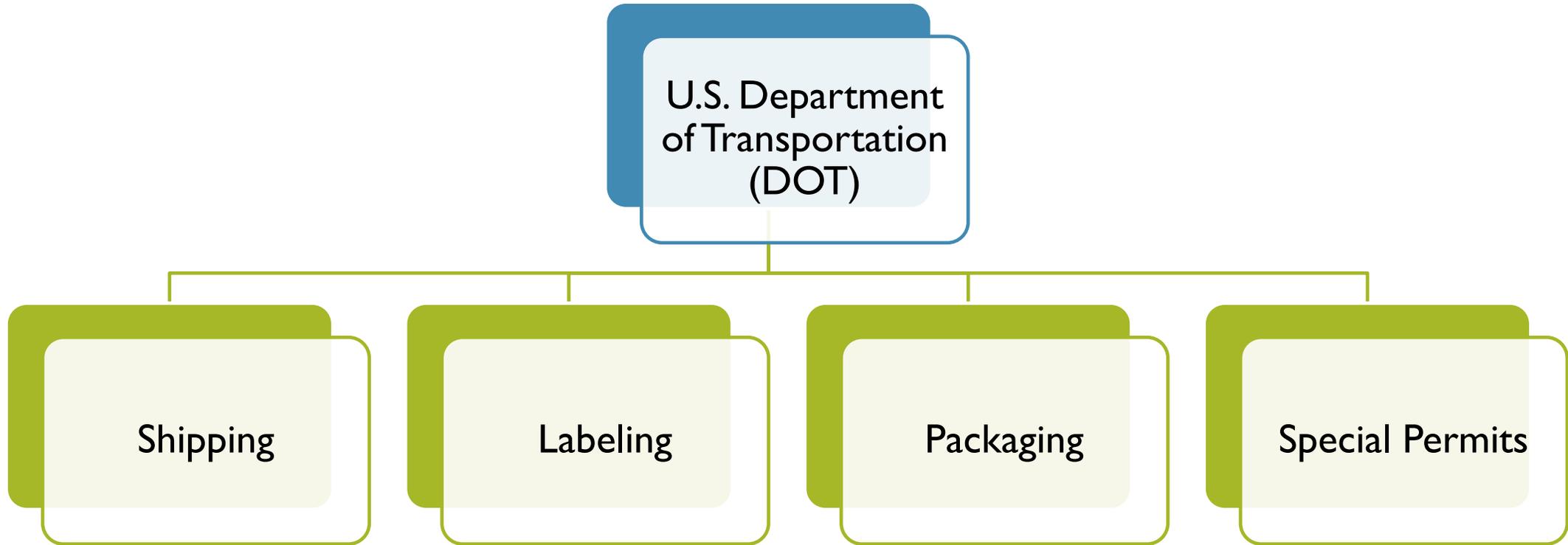
WHAT IS MEDICAL WASTE? WHO REGULATES IT?



DEFINITIONS: U.S. DOT



- Title 49, Code of Federal Regulations, Part 173, Subsection 173.134 [[49 CFR 173.134\(a\)\(5\)](#)]
- Regulated medical waste or clinical waste or (bio) medical waste:
 - A waste or reusable material derived from the medical treatment of an animal or human, which includes diagnosis and immunization, or from biomedical research, which includes the production and testing or biological products.



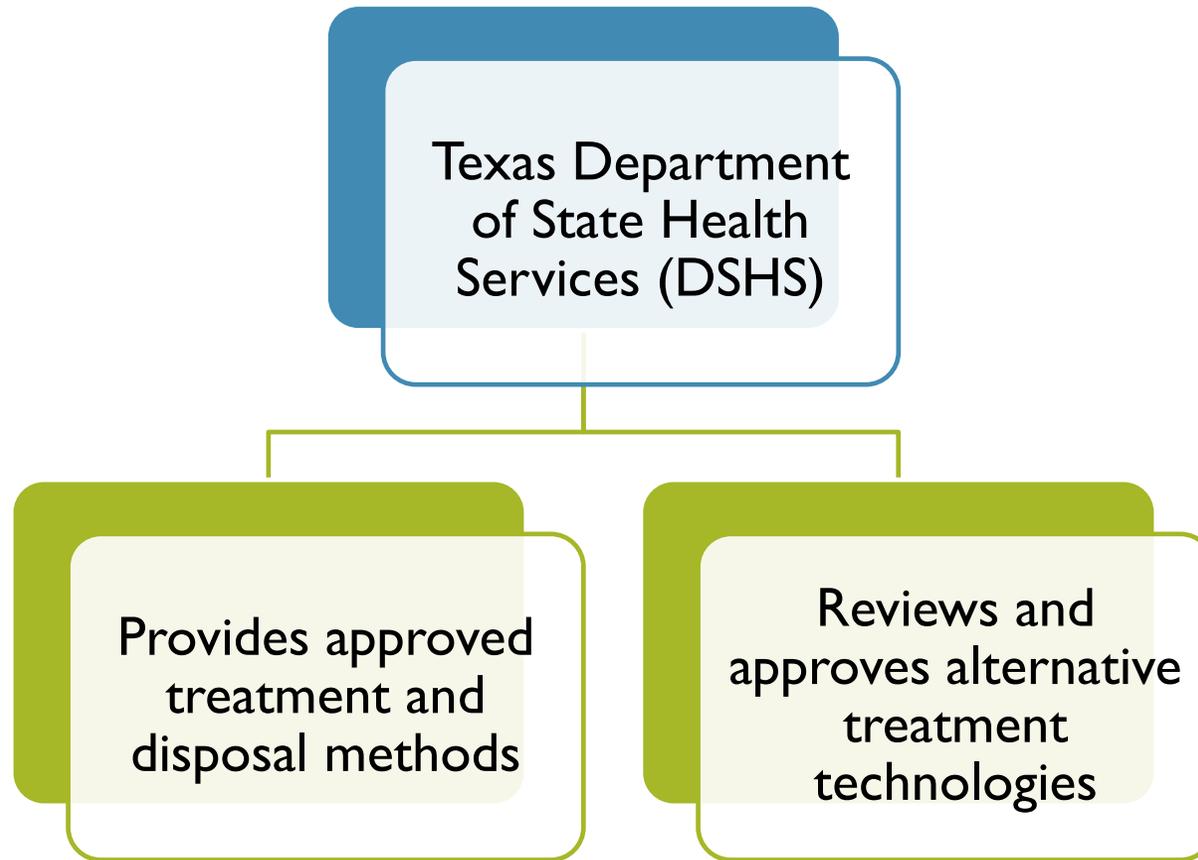
DEFINITIONS: DSHS



TEXAS
Health and Human
Services

**Texas Department of State
Health Services**

- Title 25, Texas Administrative Code, Section 1.134
[\[25 TAC 1.134\]](#)
- Special waste from health care-related facilities generated by the following facilities, including but not limited to:
 - (5) clinics, including but not limited to medical, dental, veterinary
 - (6) clinical, diagnostic, pathological or biomedical research laboratories
 - (7) educational institution health centers
 - (8) educational institution research laboratories
 - (15) hospitals
 - (19) occupational health clinics and clinical laboratories
 - (20) pharmacies
 - (21) pharmaceutical manufacturing plants and research laboratories



DEFINITIONS:TCEQ



- Title 30, Texas Administrative Code, Subsection 326.3(23)
[[30 TAC 326.3\(23\)](#)]
- Medical waste includes treated and untreated special waste from health care-related facilities consisting of:
 - animal waste
 - bulk blood, bulk human and body fluids
 - microbiological waste
 - pathological waste
 - sharps



Texas
Commission
on
Environmental
Quality

Collection

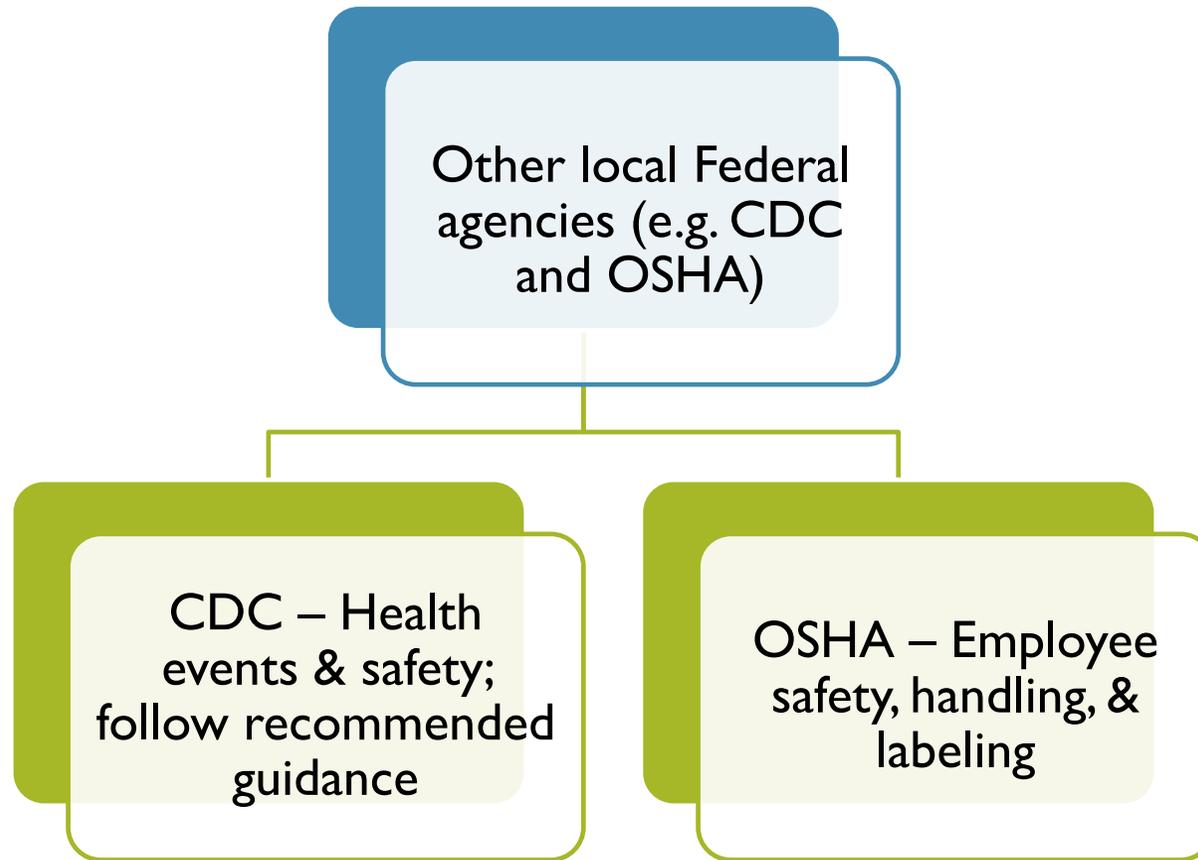
Transportation

Treatment

Storage

Disposal

Air Permits

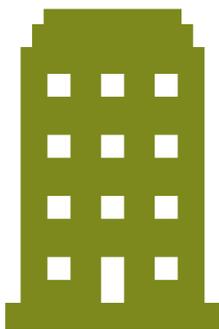


WHAT IS NOT DEFINED AS MEDICAL WASTE?



- Artificial, nonhuman materials removed from a patient and requested by the patient, including, but not limited to, orthopedic devices and breast implants.
- Medical waste produced on a farm or ranch [[30 TAC 326.3\(23\)](#)]

WHAT IS NOT DEFINED AS A HEALTH CARE-RELATED FACILITY?



- Health care-related facilities do not include:
 - single or multi-family dwellings, and
 - hotels, motels, or other establishments that provide lodging and related services for the public.
- [[30 TAC 326.3\(23\)\(A-B\)](#)]



HOW IS MEDICAL WASTE: HANDLED, TREATED, AND DISPOSED?

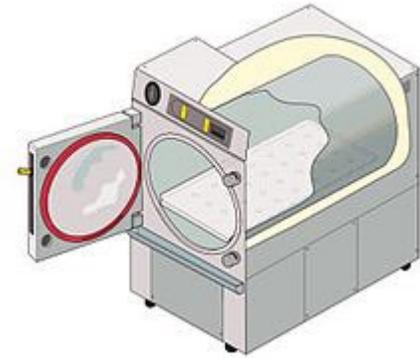
MEDICAL WASTE HANDLING

Packaging, Labeling, and Shipping

- Generator places medical waste in a sealed rigid, impervious to moisture, and leak resistant container, of sufficient strength to prevent tearing and bursting.
- Generator maintain manifests of shipments of untreated medical waste for 3 years following date of shipment.
- Mark container in English and Spanish with international symbol for biohazardous material.
- Affix to each container a label that contains at the minimum the name and address of the generator, and the date of shipment.

MEDICAL WASTE TREATMENT

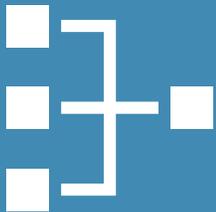
- Approved Treatment Methods Include:
 - autoclaving (i.e., steam disinfection)
 - moist heat disinfection
 - chlorine disinfection
 - chemical disinfection
 - incineration
 - encapsulation in a matrix



MEDICAL WASTE DISPOSAL

- Treated medical waste may often be managed as routine municipal solid waste (MSW) and disposed of in a MSW landfill.





WHAT ARE YOU?

-GENERATOR

-TRANSPORTER

-PROCESSOR

GENERATORS

- Generator: any person, by site or location, that produces medical waste to be shipped to any other person or whose act or process produces a medical waste, or first causes it to become regulated. [[30 TAC 326.3\(14\)](#)]
- Medical waste generators are classified as:
 - Small Quantity Generators (SQG) - produces 50 pounds or less per month of medical waste
 - Large Quantity Generators (LQG) - produces more than 50 pounds per month of medical waste



TRANSPORTERS

Transporters

- Transports untreated medical waste and are NOT the generator of the waste.



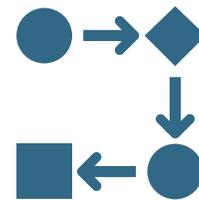
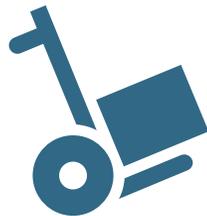
Self-Transporters

- Generators that transport their medical waste.



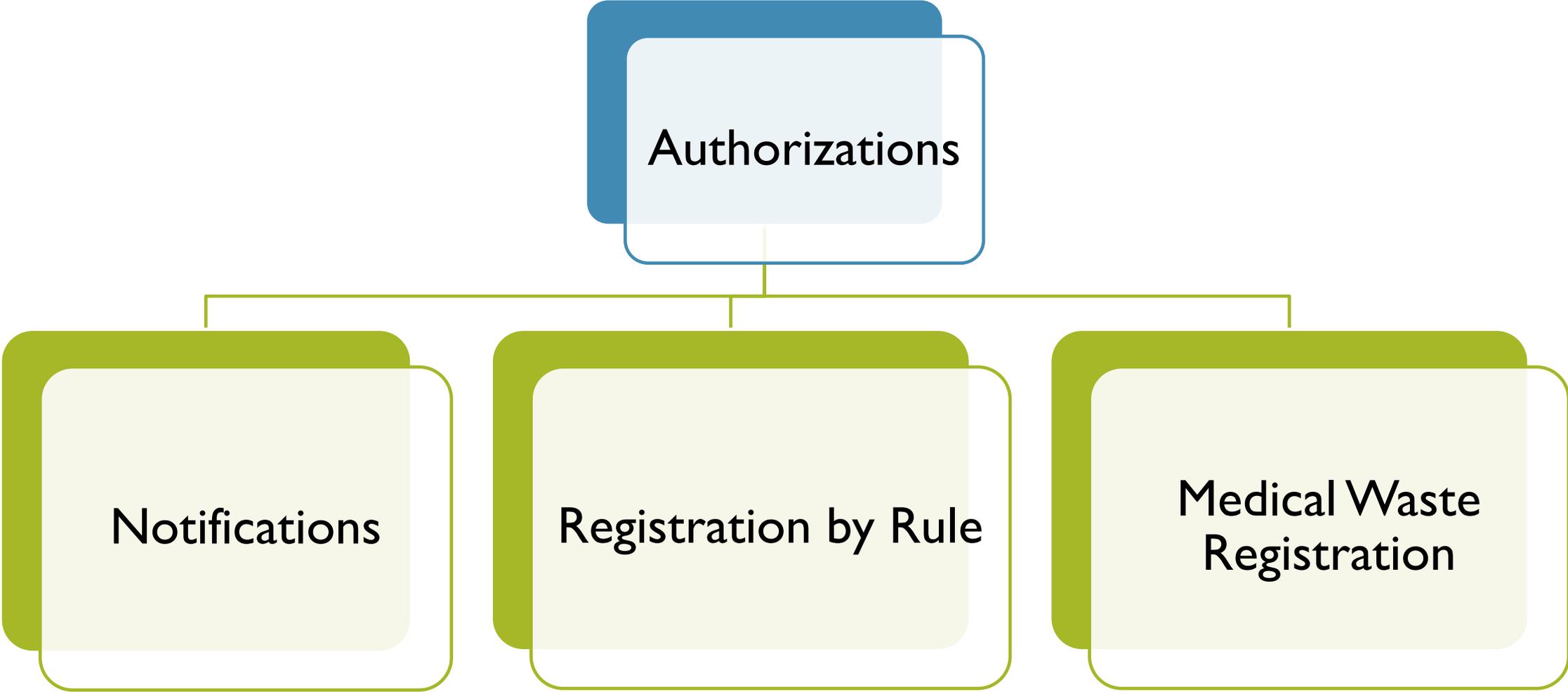
PROCESSOR

- Facilities that process medical waste that was generated off-site.
- Processing includes storing and treating medical waste.





WHAT AUTHORIZATION DO I NEED?



Authorizations

Notifications

Registration by Rule

Medical Waste
Registration

NOTIFICATIONS (NOTICE OF INTENT)

On-Site Treatment by Generator

- Small Quantity Generators (SQG)
- Large Quantity Generator (LQG)

Hospitals Operating as a Medical Waste Collection System

- Located in an incorporated area with a population of <25,000 & county <1 million, or
- In an unincorporated area not within the extraterritorial jurisdiction (ETJ)

REGISTRATION BY RULE

- Transporter
 - Transports untreated medical waste and is NOT the generator of waste.
- Self-Transporter
 - Large Quantity Generator (LQG)
- Mobile On-Site Treatment
 - Plan to treat untreated medical waste on-site and is NOT the generator of the waste.

MEDICAL WASTE REGISTRATION

- Transfer facilities
- Storage facilities
- Processing facilities
 - Off-site treatment

Texas Commission on Environmental Quality
Application for a Medical Waste Registration

[Facility Name]

Registration [number, if issued]

[City], [County] County, Texas

[Initial Application Date]

[Application Revision Date, if applicable]

Prepared for

[Name of Applicant]

[Applicant Street Address]

[Applicant City, State, Zip Code]

Prepared by

[Contact Name, Title]

[Firm Name]

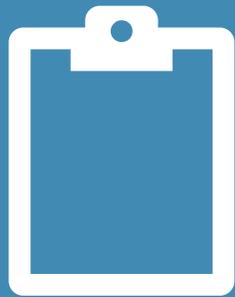
[TBPE Firm Registration Number]

[Firm Street Address]

[City, State, Zip Code]

AUTHORIZATION NOT REQUIRED

- Authorization not required by TCEQ when:
 - Generators (SQG & LQG) store on-site [[30 TAC 326.31\(a\)](#)]
 - SQG self-transport to an authorized treatment facility [[30 TAC 326.31\(b\)](#)]
 - Use United States Postal Service (USPS) or an equivalent delivery to transport untreated medical waste [[30 TAC 326.31\(d\)](#)]
 - Interstate transport
 - If you transport waste that does not originate or terminate in Texas [[30 TAC 326.31\(e\)](#) & [30 TAC 326.53\(b\)\(16\)](#)]



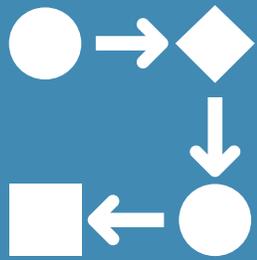
WHAT FORMS ARE REQUIRED?

TCEQ Application Forms

		Correspondence Cover Sheet	Core Data Form	Application Forms			
Type		TCEQ-20714	TCEQ-10400	TCEQ-20788	TCEQ-00426	TCEQ-00427	TCEQ-20789
Notification	On-Site Treatment by Generator: SQG	x		x			
	On-Site Treatment by Generator: LQG	x		x			
Registration by Rule	Mobile On-Site Treatment	x				x	
	Self-Transporter: LQG	x			x		
	Transporter	x			x		
Medical Waste Registration	Transfer Facilities	x	x				x
	Storing Facilities	x	x				x
	Processing Facilities	x	x				x

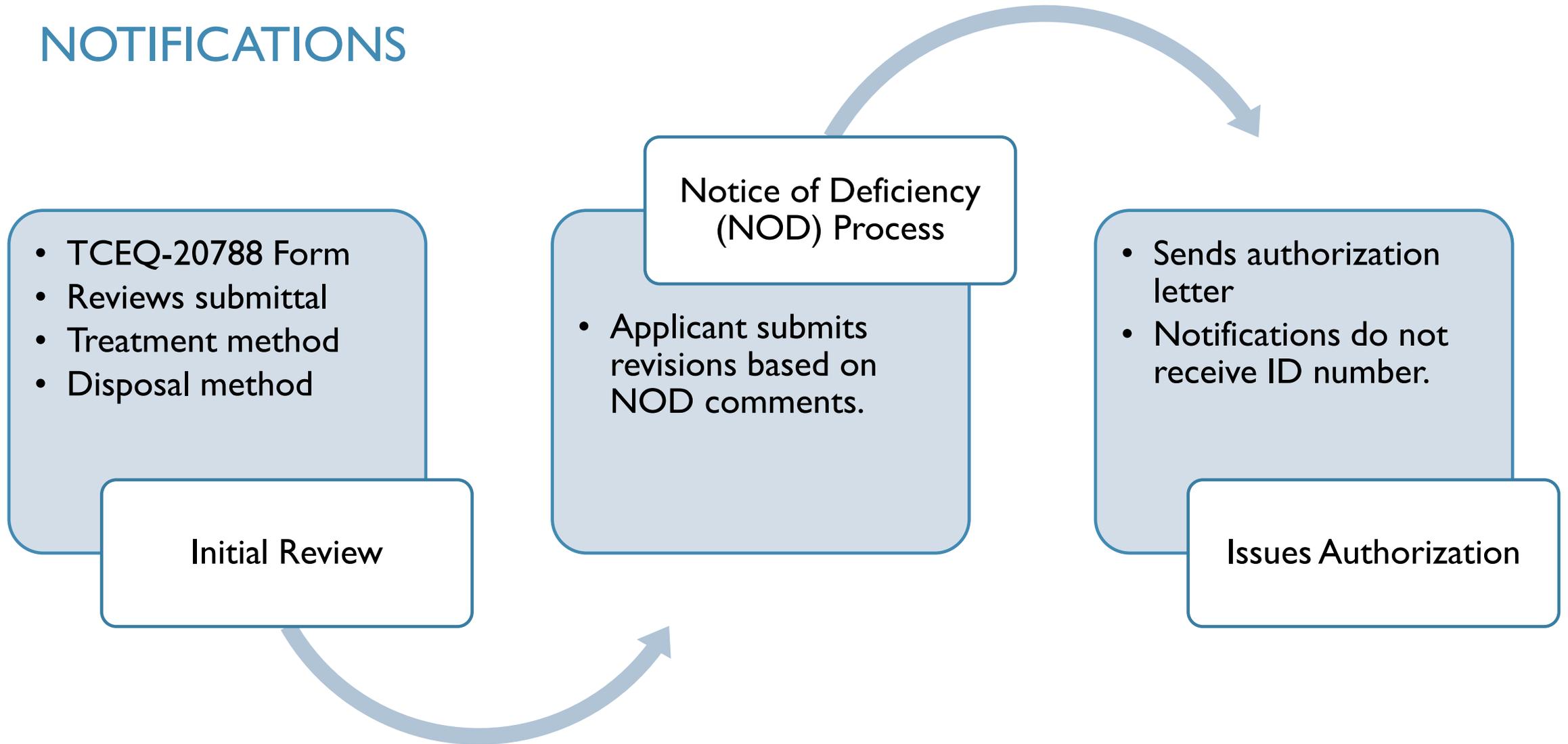
TCEQ Application Forms

		Correspondence Cover Sheet	Core Data Form	Application Forms			
Type		TCEQ-20714	TCEQ-10400	TCEQ-20788	TCEQ-00426	TCEQ-00427	TCEQ-20789
Notification	On-Site Treatment by Generator: SQG	Reviewed by MSW Permits Section		x			
	On-Site Treatment by Generator: LQG			x			
Registration by Rule	Mobile On-Site Treatment	Reviewed by Registration & Reporting Section				x	
	Self-Transporter: LQG				x		
	Transporter				x		
Medical Waste Registration	Transfer Facilities	Reviewed by MSW Permits Section					x
	Storing Facilities						x
	Processing Facilities						x



APPLICATION PROCESS

NOTIFICATIONS



Preliminary Initial Review

- Core Data Form
- Website Posting
- Application Fee
- Complete Application Form
- Complete Maps
- Issues Registration No.

Initial Technical Review

- Reviews Submittal

Declaration of Technical Completion and Final Action

- Moves to Executive Director

Application Determined Preliminary Complete

Notice of Application and Opportunity to Request a Public Meeting (NAORPM) gets published.

Notice of Deficiency (NOD) Process

- Applicant submits revisions based on NOD comments.

Response to Comments is written and mailed to commenters.

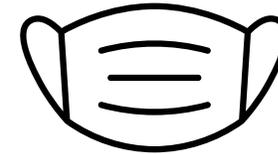
Public Meeting is held if requested.



WHAT IS COVID-19 RELATED WASTE?

COVID-19 RELATED WASTE

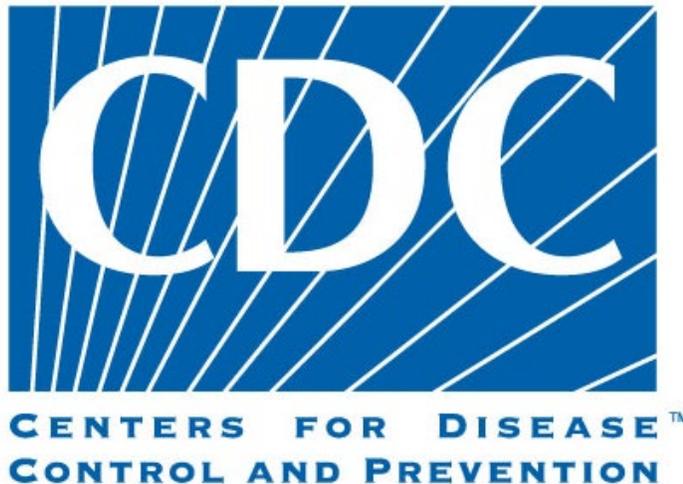
- Certain wastes from health care-facilities, businesses, and individuals can include:
 - Discarded single-use plastics (gloves, masks, bottles of sanitizers)
 - Tissues
 - Textile waste (bedding, towels, clothing)
 - Daily sanitizing (cleaners, paper towels, etc.)
 - Test kits
 - Vaccines



WASTE HANDLING

- **COVID-19 medical waste** is handled the same as **regulated medical waste**
 - Untreated COVID-19 waste can be transported and treated with other untreated medical waste
 - Personal protective equipment (PPE), wipes, absorbent pads, and residual disinfectant generated from handling COVID-19 waste is not considered medical waste unless it becomes contaminated with medical waste
 - Best management practices are recommended when handling and disposing of waste
- **COVID-19 Rapid Test Kits**
 - Used test kits should be handled as regulated medical waste
 - Unused test kits and reagent can be disposed of as municipal solid waste

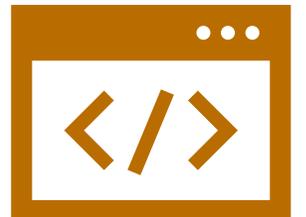
CDC RECOMMENDATIONS FOR CLEANING AND DISINFECTING



- Dedicate a lined trash can for any ill person
- Double-bag contaminated waste and PPE
- Place bagged waste in a rigid container
- Wash hands with soap and water or used an alcohol-based hand sanitizer immediately after removing gloves or handling trash bags

INFORMATION AVAILABLE AT:

- TCEQ's Medical Waste Website
 - https://www.tceq.texas.gov/permitting/waste_permits/
- Texas Department of State and Health Services
 - <https://www.dshs.state.tx.us/phs/medical.aspx?terms=medical%20waste>
- Centers for Disease Control and Prevention (CDC)
 - <https://www.cdc.gov>
- Occupational Safety and Health Administration (OSHA)
 - <https://www.osha.gov>
- World Health Organization
 - <https://www.who.int/en/>
- National Institute for Occupational Safety and Health (NIOSH)
 - <https://www.cdc.gov/NIOSH/>
- NIEHS Worker Training Program
 - <https://tools.niehs.nih.gov/wetp/index.cfm?id=2554>





SIGN UP FOR GOVDelivery

[https://public.govdelivery.com/accounts/
TXTCEQ/subscriber/new](https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new)

QUESTIONS/COMMENTS?



- Kristen A. Hernandez
- Kristen.Hernandez@tceq.texas.gov
- 512-239-5090

- Municipal Solid Waste Permits Section
- MSWPER@tceq.texas.gov
- 512-239-2335

- Registration and Reporting Section
- WASTEVAL@tceq.texas.gov
- 512-239-6413