

ESHH 1130

AU 2019 Mid-Term Review (*fully posted 10 Oct 2019 @ 5:30pm*)**Chapter 1****Organization of Environmental Responsibility****1. Federal**

- a. US Congress (House & Senate) enacts environmental laws, aka statutes
- b. US EPA promulgates rules/regulations (administrative) that amplify laws
 - i. US EPA delegates certain programs to states - eg. CWA, CAA, etc
 - ii. Ohio EPA is in US EPA's Region V - it provides oversight & assistance

2. State

- a. **Ohio General Assembly** (House & Senate) enacts environmental laws, aka statutes
- b. **Ohio EPA** - promulgates rules/regulations (administrative) that amplify laws
- c. established 1972. 5 District Offices throughout the state. Central Office issues most actions of the director including permits. Regulates a variety of environmental programs
- d. Other agencies - ODA, ODNR, ODH

3. Municipalities

- a. 3 types - cities, villages, townships
- b. Environmental activities include planning & zoning and local boards of health

4. Places you'll find Environmental Cases in Ohio

- a. Judiciary: Common Pleas Court (1 ct in each county, 88) > Appellate Court (12 districts) > Supreme Court (highest court)
- b. Administrative: ERAC
 - i. Only final actions from Director can be appealed to ERAC
 - ii. ERAC can vacate, affirm, or modify. ERAC appeals go to Appellate court
 - iii. Standard: ERAC determines whether director's action was lawful & reasonable

5. Ways to Enforce Environmental Laws

- a. AGO - enforces Ohio laws & regs through *civil* (injunctive relief & penalties) & criminal actions. These are filed in Common Pleas court.
- b. Director - can issue DFFO ordering compliance with laws and permits
- c. Verified Complaints - can be filed by citizens
- d. Self Audit - self reporting to OEPA

Permitting Process Overview

Permit Application - most applications filed in the District Offices, where initial review happens. Then sent to central office for more tech review & issuance. If denied, applicant can appeal. Director's final action goes in the Director's Journal (online)

Public Records & Open Meetings

Theory: Government is the people's government, therefore most records are available and meetings are open. (Freedom of Information is Federal. Public Records Law is Ohio)

Chapter 15

(Chapter 15 is really just an expansion of a few of the topics above)

ERAC

1. **Jurisdiction** - Statewide Jurisdiction over certain final actions of the Director of Ohio EPA, ODA, and local boards of health. Final actions include rules, emergency orders, permits, and plans.
2. **Who's there & What happens** - 3 commissioners
 - a. Appellant - party who files the appeal. Can be company, citizen group, individual, another gov't agency. Individuals can represent themselves (pro se)
 - b. Appellee - party who opposes the appeal, includes the AGO & permit holder (company).
 - c. Director has to file Certified Record documenting everything that she considered to make decision that's on appeal.
 - d. Follow rules of evidence. Discovery process (depositions between the parties)
 - i. Standard of review is "lawful & reasonable"
 - e. If you don't like ERAC's decision, appeal to district court. Nearly always the 10th

How Environmental Laws & Regs are Enforced

1. **Federal**- most enforcement done at state level. Fed steps in if state doesn't/won't. Fed has citizen suits.
2. **State** - statute of limitations is 5 years
 - a. AGO is the Chief Law Officer - files civil suits & prosecutes enviro crimes.
 - b. Director -
 - i. Works closely w regulated community to ensure compliance. Start small- NOV's > DFFO (appealable) > enforcement actions. Lots of give & take in the beginning.
 - ii. Director investigates Verified Complaints (appealable) filed by citizens
3. **Common law** - These are typically pursued by individuals not agencies
 - a. Negligence (failure to do something a reasonable person would do),
 - b. Nuisance (unreasonable interference with use and enjoyment of property)
 - c. Trespass (an intrusion on your property that interferes with your exclusive possession of that property and causes substantial damage)

Chapter 2**Enforcement of Ohio's Air Pollution Control (APC) Laws****Air Emissions Overview**

1. **Federal** - Main law is the Clean Air Act (CAA), which set NAAQS to protect public health and welfare.
 - a. Sets NAAQS pollutants 1. Sulfur dioxide, 2. Particulate matter, 3. Carbon monoxide, 4. Ozone, 5. Nitrogen dioxide, 6. Lead. States are required to meet NAAQS standards via State Implementation Plans (SIPs)
 - i. Two types of NAAQS status - Attainment areas (where NAAQS are met) & Non-Attainment areas (not met)
 1. An area can be in attainment for some pollutants and not others.
 2. Permits in non attainment areas are more restrictive
 - b. Feds also set up Title V program, set standards for hazardous air pollutants (NESHAPS) and pollutants that form acid rain, requires BAT, phased out ozone depleting compounds,
2. **State** - purpose is to protect & enhance the quality of the state's air.
 - a. OEPA has broad powers
 - i. Promulgate rules to
 1. Set levels of air pollution
 2. Set permit requirements
 3. Monitor air quality
 - ii. Issue orders to abate pollution
 - b. State Permits
 - i. De minimus - no permit
 - ii. Small Source - PTIO w BAT
 - iii. Large Source - PTI & Title V w BAT

Ohio's APC Program

1. **New Source Permits**
 - a. An Owner or Operator of a new source must get a PTIO or PTI/TitleV before building or modifying the source. Only modification that increase "allowable emissions" are considered a new source.
 - b. PTIO steps - 1. Complete application, 2. Submit to DO or Local Air Agency, 3. DO sends to CO for further review (app must show BAT)
 - i. BAT - Best Available Technology is used in the new source.
 - c. If approved, OEPA will issue a draft, proposed, or final PTIO
 - d. Applicant must begin construction within 18 months.
 - e. In some instances, applicants can get a general permit. Used when same processes are used all the time. Eg dry cleaners, parking lots,
2. **New Source Review (example of the sliding scale of enviro impact)**
 - a. US EPA sets NAAQS. The required control technology to reach NAAQS is BACT for Attainment areas and LAER for Non-Attainment areas. (sliding scale of enviro impact.)

- i. In Attainment areas, the goal is PSD (Prevention of Significant Deterioration) and it applies to any stationary source that has the potential to emit <250tpy of any criteria pollutant.
- ii. In Non-Attainment areas, the goal here is to move the needle toward attainment and the review is called “non-attainment new source review” (not very fancy!) and the threshold for review is potential to emit 100tpy.

3. Air Toxic Policy

- a. Ohio upgraded the federal policy and singled out some air toxics to specifically address by setting Ohio standards for that toxic - Maximum Ambient Ground Level Concentration (MAGLC).
 - i. A new or modified source must use BAT to control air toxics, if it exceeds 80% of the MAGLC. If less than 80%, must simply certify that to OEPA.

4. Hazardous Air Pollutants (NESHAPS & MACTS)

- a. USEPA set National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for “major sources.”
 - i. A major source is a stationary source with potential to emit 10tpy or more of any one HAP or 25tpy+ of any combination of HAPS
 - 1. Maximum Achievable Control Technology (MACT) is the standard of control for NESHAPS. This is balanced with cost.

TITLE V Permits

- 1. Applies to Major Sources of air pollution
 - a. Ohio EPA issues Title V after Fed review. They are federally enforceable and VERY complex.
 - b. **Who has to get them?** If applicant has potential to emit (PTE)
 - i. 10tpy+ of any single HAP
 - ii. 25tpy+ of any combo of HAP
 - iii. 100tpy+ of any NAAQS
 - c. If you can, go for a synthetic minor. The owner agrees to artificially suppress its PTE either physically or operationally. Eg. change operating hours, better control tech, better input materials, etc.

Shale Oil & Gas Development

- 1. Shale operations can get General Permits. It's a known operation, with de minimus impact

***Knowing when these terms apply will help you: BACT, LAER, MACT, BAT

Chapter 3**Water Pollution Control****1. Ohio EPA Authority**

- a. Comprehensive authority to control discharges to waters of the state. No discharge of pollutants without OEPA permit.
 - i. USEPA delegated this authority to OEPA via CWA (CWA goal: restore and maintain the chemical, physical and biological integrity of the waters.)
 - ii. Water laws found in R.C. 6111
 - 1. OEPA must develop plans to protect and improve water quality, promulgate rules, issue permits, establish grants, public notice, liaison with other agencies.

2. Water Quality Standards - establish & describe the health of the stream

- a. EVERY lake or stream segment in the state is classified by 2 types of Water Quality Standards (WQS) Refer to the WQS diagram I drew on the board for a visual
 - i. WQS are ambient standards describing the conditions of the water (not permittee discharges). Very complex to set.
 - 1. Type 1 - Designated Use/Beneficial Use - describes existing or potential uses of a water body. (it's set up like the chart I passed around)
 - a. 3 General Uses -
 - i. Aquatic life - WWH, EWH, CWH, etc
 - ii. Water supply - public or private
 - iii. Recreation - bathing, primary, secondary
 - 2. Type 2 - Water Quality Criteria
 - a. 3 major components -
 - i. Narrative (Free Froms: algae, odors, scum, color etc . . .)
 - ii. Numeric criteria - Whole Effluent Toxicity (WET) how much toxicity can water tolerate
 - iii. Biological & Nutrient Criteria - what is causing water impairment.

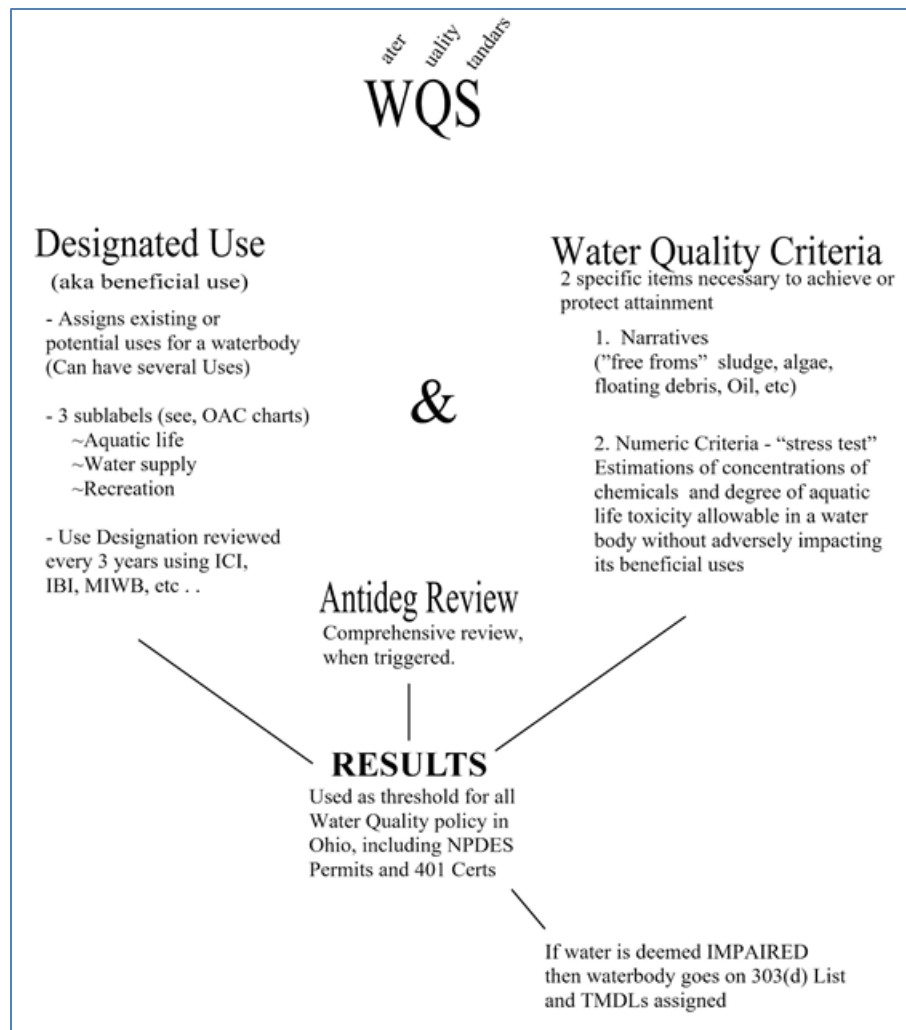
3. Total Maximum Daily Loads - what do we do with impaired waters... 303(d) List 'em

- a. TMDL is a written, quantitative assessment of water quality problems in a water body. (Like a visit to the doctor for testing, diagnosis, and leave w a prescription & PT to heal.)
- b. Every state must set 303(d) list every 3 years - list of impaired waters that require TMDL assessment to improve the water quality.
- c. OEPA uses 12-step process to develop and utilize TMDL

4. Watershed Issues

- a. Pollutant trading is a viable solution to managing pollutants in a watershed.

*****SEE GRAPHIC BELOW*****



Point Source Discharge Permitting

1. **PTIs** - must have PTI to install or modify any wastewater disposal system (point source)
 - a. Modification means any physical change or change in operation that materially increases quantities, characteristic, or concentration of discharge. Does not include certain processes or private systems.
 - b. PTI process - detailed plans submitted to DO before construction
 - i. Director standard to issue: must find that the installation and operation will not violate applicable laws, including WQS.

2. **NPDES Program (think of this as the operating permit)**
 - a. NPDES is a 5-year point source discharge permit governing discharge of any liquid gaseous or solid waste substance resulting from industry, mfg, garbage or domestic sewage and dredged or fill material. Basically, the discharge of anything but water into waters of the state.
 - b. Permit process - detailed permit submitted to DO, OEPA CO will issue draft permit first, public notice and comment period, then final permit issued.
 - i. Permit will include limits, sampling and monitoring requirements and reporting requirements to OEPA

3. Pretreatment Program

- a. Regulates the discharges of wastewater from industrial or commercial facilities to POTWs. Entities sending wastewater to POTW under this program are called Indirect Dischargers
- b. POTWs set the standards of wastewater it will accept. Industry must pre-treat water to a certain level before it gets to POTW, so POTW doesn't have the burden to clean industry wastewater for it.
- c. POTW must be OEPA-approved to do this (like feds delegating to state). If no OEPA approval, then OEPA sets the standard for the POTW.
- d. Significant Industrial Use - special group of 50 industries that have federal pre-treatment standards, too.

4. Settling Effluent Limits & Other Permit Terms

- a. NPDES permit writers follow two steps
 - i. Ensure that permit imposes any applicable industry-specific technology-based limitation. State can add more limits, but this is minimum.
 1. Limits can be mass or concentration based. And can address chronic or acute toxicity (daily limits & monthly limits)
 - ii. Ensure that Indicators are met. These are trickier to establish.

Storm Water Discharge Permitting

1. What is covered? Any storm water runoff, snow melt runoff, and surface runoff and drainage.
2. 2 Types of NPDES Storm Water Discharge Permits - General & Individual
 - a. General - file Notice of Intent to be covered. If you can't get that, then must apply for Individual, which is arduous. (qualify for the general permit if you can)
 - i. 3 Types of General Permits -- Industrial, Municipal, & Construction

Antidegradation Review

Every permit must be evaluated to see if Antideg Review is required

1. What is Antideg - Antideg describes the conditions under which water quality may be lowered in surface water. Antideg:
 - a. Purpose: Existing designated uses and water quality criteria must be maintained and protected.
 - b. When: If water quality will be lowered, then antideg review required.
 - c. Public participation is important
 - d. Sliding Enviro scale - Higher quality water receives higher scrutiny to impact.

Underground Injection Wells

1. Regulates the underground injection of sewage, industrial waste, and other liquid wastes into wells. Covered in the Safe Drinking Water Act
 - a. Need a permit to drill new or convert well to UI well.
 - b. Director will look at CWA, Safe Drinking Water Act, and RC. 6111
2. 3 Types of UI Wells
 - a. Class I - large volumes of hazardous and nonhazardous liquid wastes thousands of feet below ground in porous formations. Deep Wells.

- b. Class IV - hazardous or radioactive wastes in wells that may be near drinking water aquifer. Mostly prohibited. Approved in VERY limited circumstances.
- c. Class V - shallow wells for non-hazardous waste.

Chapter 4

Wetlands & Streams

Jurisdiction

1. Fed -
 - a. Under Commerce Power, fed has authority over waters of the US. (Rivers and Harbors Act, 1899) Set out "Navigable Waters" - waters used or capable of being used for commercial navigation
 - b. Then, CWA in 1972 - expanded navigable waters to include "waters of the US" (Big disputes & power grabs in water jurisdiction - "significant nexus" to waters of US is the current test)
 - i. CWA prohibits the discharge of pollutants without a 404 permit from Army Corp
2. State jurisdiction over Wetlands & Streams
 - a. States have delegated authority under CWA for primary implementation and enforcement of CWA

Types of Wetlands & Streams

Wetlands

1. Definition - those areas that are inundated or saturated by surface ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (swamps, marshes, bogs, etc)
 - a. Not always wet. Need 2 of 3 - sufficient hydrogeology, hydrogeological plants, hydrogeological type soils.
 - i. Have dynamic boundaries. There's a national database with aerial photos.
 - ii. ORAM (Ohio Rapid Assessment Method) - common assessment form.
 1. Wetlands categorized as 1, 2, or 3 (lowest quality is 1)

Stream Types

1. Streams not always wet, don't always carry flow. 3 Types
 - a. Intermittent - carry flow only part of year (eg. dry during hot summer)
 - b. Ephemeral - carry flow only during runoff event (rain, snowmelt, etc)
 - c. Perennial - carry flow year round.

Wetland and Stream Permits

CWA 404 Permit

1. CWA prohibits discharge of any pollutant into jurisdictional waters without a permit.
2. Army Corp issues a 404
 - a. If area > .5 acre or specified stream length must get 404 Individual permit
 - b. If area < .1 of acre, no permit required. But need post construction notice.
 - c. If area is between the two, then Nationwide permit acceptable.
3. 404 Permits must also take into consideration other applicable laws. Eg. Endangered Species Act, National Historic Preservation Act

State 401 Certification

1. OEPA must certify that any impact to streams and wetland will be in compliance with state water quality stds. The review of proposed impacts is called “antidegradation review”
 - a. Process - application submitted (strictly tied to antideg regulations), Public notice and comment period, then certification issued.
2. Analysis - Highly dependant on wetland classification
 - a. Category 1 - must show: 1. No practical alternative with less impact; 2. Storm water and water quality controls will be installed; 3. Impact will not cause significant degradation to aquatic ecosystem; and 4. replaced by Cat 2 or Cat 3 wetland
 - b. Category 2 - Same as Cat 1 PLUS more in depth review of possible project alternatives and minimization plans AND must be “necessary to accommodate an important social and economic development in the area where water body is located.”
 - c. Category 3 - Same as Cat 2, PLUS a presumption that Cat 3 deserves protection and alternatives exist. Must meet a public need, not just public benefit.
3. OEPA also permits wetland impacts in Isolated Wetlands.

Mitigation Requirements

Army Corp and OEPA have a “No Net Loss of Wetlands” policy. Better the wetland quality, higher the cost (cost, mitigation credits, or replacement project) to impact it. If impact to Cat 2 or 3, then mitigation must be in same watershed.

Chapter 7**History**

1. Regulation of Drinking Water has increased over time. As we discovered the importance of sanitation, regulations increased. Now, after several high profile events (Flint), regulation is again attempting to keep up with increasing drinking water needs. Current drinking water statutes found in RC 6109

Public Water Systems**Defining a PWS**

1. A water system is regulated if it is a “system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if the system has at least 15 service connections and/or regularly serves at least 25 individuals”
 - a. Regularly Serves means serving and average of at least 25 people daily at least 60 days a year.
 - b. A system must get an annual license to operate.

Plan Approval - (like a PTI)

1. Must receive plan approval from Ohio EPA prior to installation or substantial change of PWS. The plan must include BAT for drinking water

Regulation of Water Source & Well-Siting

1. Ohio’s regs focus on “treatability” and “available quantity”
 - a. PWS wells have set back requirements to ensure quality & treatability of source
 - b. PWS wells must be placed in geologic formations that have sufficient quantity. Tested by draw downs and pump tests for well capacity

Classifying PWSs

1. **Operator Classifications** - Class A, I, II, III, and IV (people)
 - a. Classification based on 1. Potential for health risk at source and through system; 2. Complexity of PWS; 3.. Amount of water consumption.
2. **Classification of PWS Based on Size**
 - a. PWS categorized based on size of population it serves.
 - i. Community Water System (CWS) has at least 15 connections used by year-round residents or the CWS regularly serves at least 25 year-round residents.
 1. NonCommunity Water System (NCWS) is anything else.
 - a. Can have transient and non-transient NCWS
3. **Classification of PWS Based on Water Source**
 - a. Surface Water systems draw from open sources like rivers and require higher intake monitoring than Ground Water systems, which draw from aquifers or other semi closed sources.

Keeping PWS Water Safe**Maximum Contaminant Levels & Treatment**

1. Regulatory backbone of federal Safe Drinking Act are treatment standards for water piped to humans.
 - a. Primary Maximum Contaminant Levels (MCLs) - are the upper limits of permissible contaminants in “finished” water. Federally reviewed every 5 years.

- b. Secondary MCLs. - established by Ohio, advisable maximum level of a contaminant that affects aesthetics. Color, taste, odor, etc . . but does not cause harm
2. Public drinking water must meet MCLs from PWS to your faucet, which is determined by extensive monitoring requirements and testing by certified labs.

Other Safeties

1. All cross connections are banned and must have a backflow stopper valve installed at connections.
2. Public notice is required for certain violations. Language and time prescribed in Ohio's regulations. Also must publish an annual report available to the public.

Private Water Systems

1. A private water system is any water system for public consumption that is not a PWS.
 - a. Regulated by local health departments.

Chapter 8**History of Waste Regulation**

1. Before 1972, Ohio Department of health oversaw construction & operation of waste facilities and local boards of health managed the licenses. After 1972, OEPA managed construction (PTI) and local boards manage operation & inspections.
 - a. Now in Division of Materials and Waste Management (DMWM)

Managing Solid Waste

(New goal is to look at waste to determine whether it is beneficial use, recyclable, or unwanted. Reevaluating by-products of life to classify as unwanted.)

Definitions

1. "Solid Wastes" - unwanted residual solid or semisolid materials that result from industrial, commercial, ag, and community operations.
 - a. Includes - garbage, scap tires, combustible and noncombustible materials, and street dirt & debris
 - b. "Unwanted" - based on surrounding circumstances, the material is ready for disposal.
2. "Solid Waste Facility" - any site location tract of land or building used for transfer, incineration, composting sanitary landfilling or other method of disposal or transfer of solid waste.
3. Beneficial Use - name for new OEPA program to address the use of items that used to be considered waste.

Permits to Install and Licenses

1. Ohio bans the open burning or dumping of solid waste. So the effect is that waste can only be disposed of in a properly permitted and license facility. And no person can operate a waste facility without a permit.
2. Process - Submit application to DMWM, with geology & hydrogeology report and demonstrate that the new site will be designed, operated & closed in accordance w Ohio law. And provide financial assurance for closure & post closure operations.
 - a. The Director may not issue a permit unless the applicant demonstrates:
 - i. Proposed site not within a state park
 - ii. Applicant qualified to operate it
 - iii. Neither applicant nor key employee convicted of specific crimes
 - iv. Applicant has a history of environmental compliance and is currently in substantial compliance with environmental laws & regs.
3. Must get a yearly operating license from local board of health
4. PTI & License are transferable, but must meet original standards.

Operational Guidelines

1. A solid waste facility may not accept asbestos, bulk liquids, PCBs, infectious waste, hazardous waste, yard waste, radioactive waste, aluminum.
2. General operations - can not cause a nuisance, so must have controls on noise, dust, and odor control, suppression and control of insects, rodents, and other vectors.
 - a. Daily cover can be tarps or soil, need daily record keeping, leachate management, gas management, waste placement,

Solid Waste Transfer Facilities

A solid waste transfer facility is used to transfer solid wastes from one vehicle or container to another for eventual transport to disposal facility.

1. Permitting process is similar to solid waste facility, but do not need annual license. May only accept what is acceptable in solid waste landfill

Scrap Tires

“**Scrap Tires**” - are unwanted or discarded tires that have been removed from their original use by the original owner or mfg.

1. Transportation - Ohio law prohibits the transportation of scrap tires for storage, processing, or disposal except to: 1. Scrap tire recovery facility; 2. Scrap tire monocell/monofill; 3. Storage facility; 4. Incinerator; 5. Beneficial use; and 6. Outside state.

Residual Waste

Ohio EPA allows for the classification of Residual Solid Waste and permits landfills for that sole and specific purpose

Managing Construction & Demolition Debris

What is it?

C&DD is material resulting from the alteration, construction, or destruction of manmade structures. R.C. 3714

1. Permitting managed by Ohio EPA. Less rigorous than solid waste but still has regs for construction, closure, and material acceptance.
2. C&DD landfills may only accept C&DD waste, except:
 - a. Incidental pkging materials.
 - b. Land clearing waste (not yard waste, which is landscaping waste)
 - c. Asbestos materials, unless have an air permit from DAPC.
2. **Licensing** - Managed by local boards of health where OEPA has delegated authority

Managing Hazardous Waste

What is HW?

1. HW is a substance that, once it becomes waste, is either a “listed” HW or a characteristic (TICR) HW. Listed appears in OAC. Characteristic is because it is toxic, ignitable, corrosive, or reactive (TICR).
 - a. Mixers - if Listed HW + nonHW = HW But TICR HW + nonHW = HW only if it retains the TICR characteristics.
 - b. A material only become waste only when it is discarded.
 - c. Ohio EPA has Cradle to Grave treatment of HW

Obtaining a HW Facility Permit

1. Process - submit application for installation and operation. Must include detailed plans. Public comment period is extensive. Sliding scale of regulation! All aspects of HW are highly regulated.
2. Siting criteria prohibition - Can not be within 2000' of:
 - a. Residence, school, hospital, or prison;
 - b. Naturally occurring wetland; and
 - c. Floodplain where facility not constructed for 100 year floodplain

Shale and Clay Product Waste

1. Prohibit person from using, managing, or disposing of certain structural products created from clay or shale in a manner that causes:
 - a. Exceedance of water quality std
 - b. Exceedance of primary or secondary MCLs
 - c. Emission of air contaminant

Hazardous Waste Generator Requirements

1. HW generators are categorized by amount of HW they create.
 - a. Conditionally Exempt Small Quantity Generators (CESQGS) - < 100kg/month. Need only keep good records that must be shown when requested.
 - b. Small Quantity Generator (SQGs) 100-1000kg/month and can not store >6000kg on site. Middle level requirements and record keeping.
 - c. Large Quantity Generator (LQG) - HUGE record keeping requirements and allowed to store less on site for a shorter time than SQGs.

Hazardous Waste Transporter Requirements

1. A HW transporter must register with PUCO and get a USEPA identification number. Must travel with a manifest.

Managing Recyclable Materials

1. Recycling involves the use, reuse, or reclamation of a material. HW that is recycled is a "recyclable material"
 - a. Rules that apply to Generators, Transporters, and Storage Facilities apply to HW Recyclers
 - i. Generators & Transporters must notify OEPA that they engage in these businesses. Storage facilities need operational permits.
 - b. Some Recyclable HW requires specialized permits and other seemingly HW is exempt. Read regs
2. May not Speculatively Accumulate recyclable materials. Must have a legitimate plan.

Managing Solvent Wipes

1. Special rules to exempt them from HW regs.
2. How to manage them:
 - a. Must be stored and transported in closed, non-leaking containers that are capable of holding liquid.
 - b. 180 day limit on site and no free liquid when shipped in properly identified containers.

Managing Electronic Waste

1. E-Waste is growing. We recycle it because it contains harmful and beneficial use materials like chromium, cadmium, mercury, and beryllium, nickel, zinc, and brominated flame retardants. These display TICR HW characteristic. Look for an increase in incentives and regulations for e-waste
2. CRT Waste
 - a. Applies only to business not individual. Up to 4lbs of lead in a screen. Specific rules for various stages of recycling. Of course, can't speculatively accumulate these either.

Managing Medical & Infections Waste

1. OEPA much less of a player in these regs now. And PUCO registers transporters.
2. Classification of generators:
 - a. Small generator < 50lb - no reporting but must segregate and properly dispose
 - b. Large generator > 50lb - must register w OEPA and segregate and properly dispose. More documentation, etc.
3. Infectious Treatment Facilities
 - a. PTIs submitted to DMWM and operating license from local board of health.
 - i. Types of facility activities include incineration, autoclaving, chemical treatment fo cultures etc

Background Checks

1. Individuals or entities applying for solid, infectious, or HW facility permit must file disclosure forms to Ohio EPA and submit to background checks by BCI's Environmental Background Investigation Unit & FBI. This must be done every 3 years.
2. As noted above - the Director may NOT issue a permit or license
 - a. unless she finds the applicant can properly operate the facility;
 - b. Applicant and key employees have not committed any of 21 listed crimes; and
 - c. Applicant has a history of compliance with environmental laws in Ohio and other jurisdictions.

Coal Combustion Residue

Feds want to regulate it as solid waste. Ohio specifically exempts it as solid and regulates in 6111 (water) We'll see how that turns out in the next few years. May not be a big deal bc state has fewer coal related industries.