

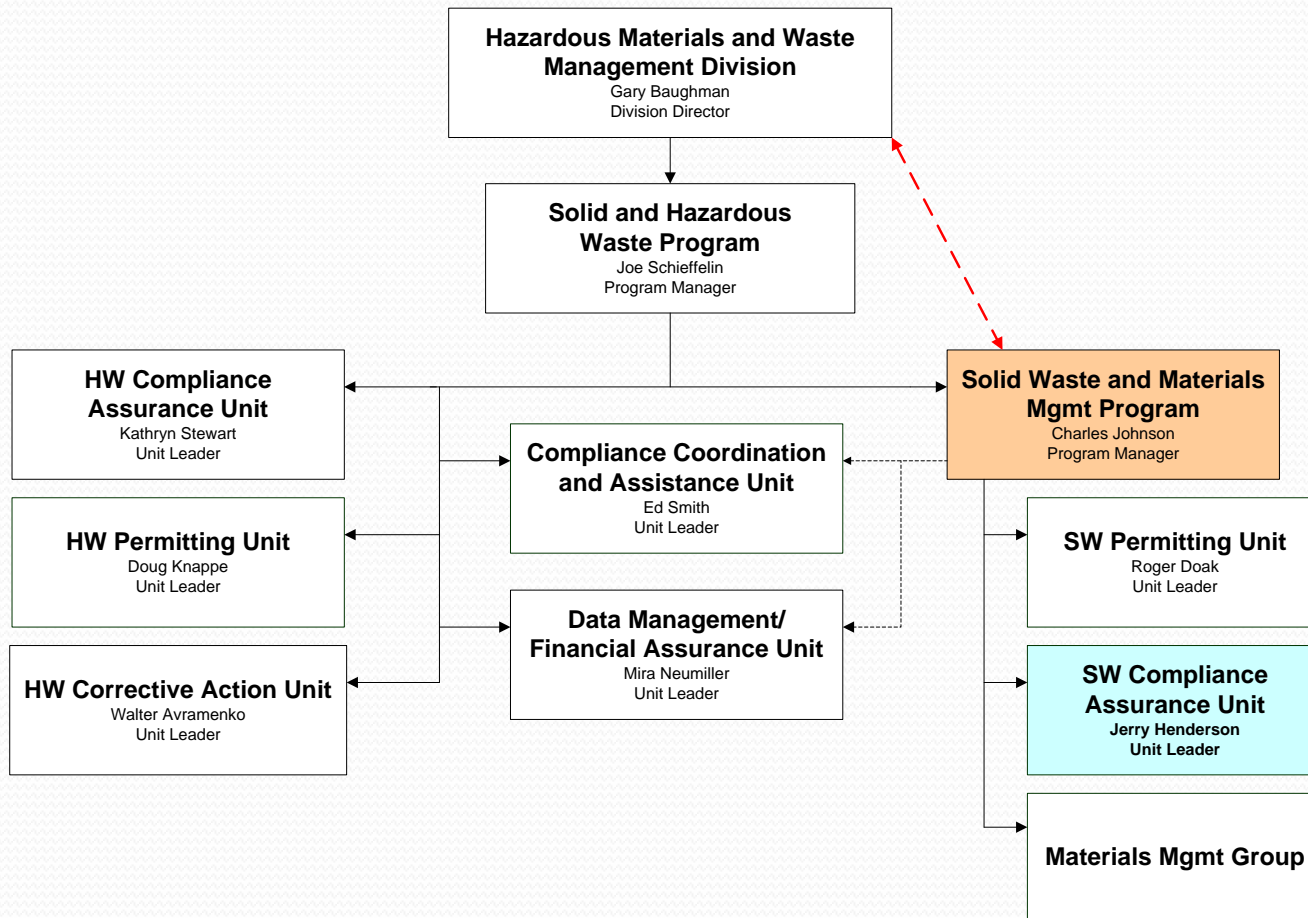
# Regulation of Waste Impoundments

Solid Waste and Materials Management Program,  
Jerry Henderson

# Solid Waste and Material Management Program Overview

- Organizational Structure
- Broad range of facility types
- Provide regulatory oversight to roughly 500 solid waste disposal sites in Colorado

# Organizational Structure



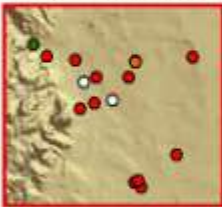
## Solid Waste Sites and Facilities

Landfills (hi workload area)	Transfer Stations	Recycling Centers (hi growth area)
Infectious Waste Facilities	Compost Facilities (hi growth area)	Waste Impoundments
Commercial Exploration and Production Waste Facilities	Scrap Tire Facilities	Waste Tire Haulers
Groundwater & Soil Remediation sites	Property Redevelopment	Asbestos Contaminated Soil Redevelopment Projects

# Colorado Department of Public Health and Environment Solid Waste Sites



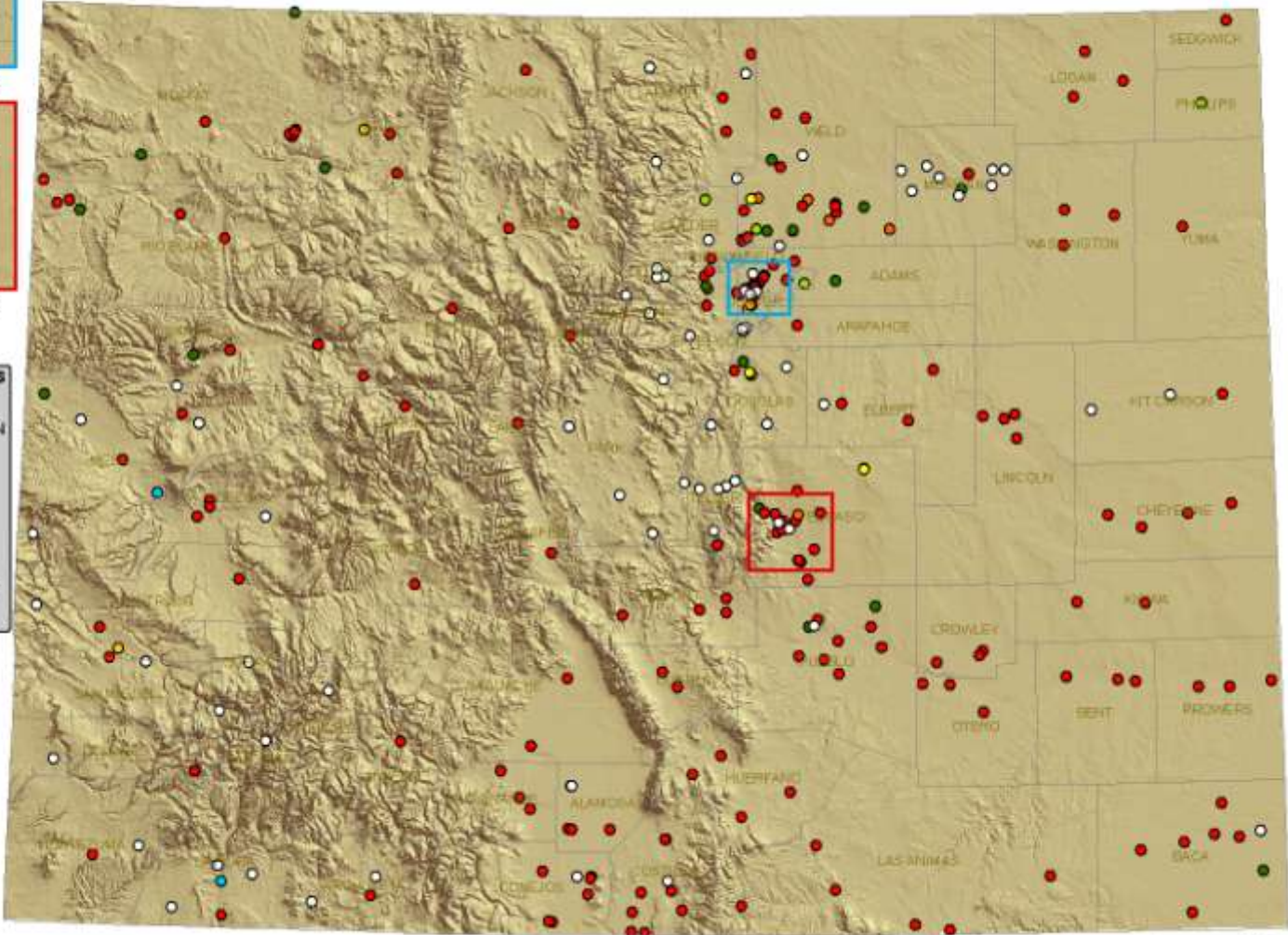
Denver Metro Area



Colorado Springs Metro Area

**SOLID WASTE FACILITIES**

- LANDFILL
- TRANSFER STATION
- IMPOUNDMENT
- COMPOST
- INCINERATOR
- RECYCLING
- AUTOCLAVE
- LAND FARMING
- LAND APPLICATION
- CONST AND DEM



**Solid and Hazardous Waste Program**

# Applicable Statutes and Regulations

- Solid Wastes Disposal Sites and Facilities Act, CRS 30-20-100.5, et. seq.
- Regulations Pertaining to Solid Waste Sites and Facilities, 6 CCR 1007-2

# The Big Picture

- The Act and Regulations prohibit disposal of solid waste except in at a location with and certificate of designation for waste disposal, unless otherwise exempted.
- 30-20-102. Unlawful to operate site and facility without certificate of designation-exceptions
  - “(3)... any person other than a governmental unit may dispose of the person’s own solid wastes on the person’s own property,..... shall be an approved site for which obtaining a certificate of designation .... shall be unnecessary.”

# Permitting Process

- Local governing body issues the CD and SUP (by any other name)
- CDPHE role is to provide technical and regulatory review of engineering design and operation report (which is part of the CD application)
- CDPHE makes recommendation to local gov't....  
Unless one's own waste on one's own property

# Regulatory Changes

- Section 9 of the Regulations concerns waste impoundments.
- Section 9 currently being revised  
<http://www.cdphe.state.co.us/hm/sw/section9/index.htm>
- During transition period, many sites are attempting to implement facility upgrades that will be compliant with the new Section 9.
- Transition
  - Old Regs – enforcement discretion until new regs in place
  - New Regs: implementation schedule, same CBGW standards same duty to protect groundwater and the environment, same requirements  
<http://www.cdphe.state.co.us/hm/sw/section9/index.htm>

# Section 9 Scope and Applicability

- Waste Impoundment
  - Storage
  - Treatment
  - Processing
- Section 9 does not apply to all water treatment plants, only those that manage treatment residuals in impoundments.
- Impoundment can include a natural or non-engineered depression designed to impound waste.
- Discharges to land or surface water would require a WQCD discharge permit.

# Exemptions

- Stormwater
- Raw Water
- Secondary Containment
- Tanks
- Radiation Control Act
- Biosolids
- Temporary Holding Pond

# Type A Requirements

- Access control
- Stormwater controls
- Closure
- Post closure care
- Financial Assurance

# Type B Engineering Design and Operation Report Outline

- Design: Liner, leak detection, freeboard monitoring, stormwater controls, groundwater monitoring
- Construction Quality Assurance Plan (independent P.E. certifies built in accordance with the design)
- Operations: Waste Characterization Plan, Personnel Training, Contingency Plan
- Closure Plan and Post Closure Care Plan
- Financial Assurance

# Next Steps

- Finalize the regulation and cost benefit analysis by end of the year
- Complete sampling of drinking water sludge to inform the rulemaking
- Bring rule to the solid and hazardous waste commission by February 2012
- <http://www.cdphe.state.co.us/hm/sw/section9/index.htm>

# Contact Information

- Charles Johnson, Solid Waste Program Manager,  
303-692-3348, [charles.johnson@state.co.us](mailto:charles.johnson@state.co.us)
- Joe Schieffelin, Solid and Hazardous Waste Program  
Manager, 303-692-3356
- Jerry Henderson, Compliance Assurance Unit Leader,  
303-692-3455, [jerry.henderson@state.co.us](mailto:jerry.henderson@state.co.us)