

## COAL ASH: A SILENT THREAT

### WHY COAL ASH IS BAD FOR HUMAN HEALTH

Coal ash is a byproduct of burning coal for electricity. It contains multiple harmful substances that can pose **significant health risks when ingested, inhaled, or absorbed** through the skin, including:

#### **Arsenic:**

Linked to skin cancer, lung cancer, and heart disease

#### **Lead:**

A neurotoxin that can damage the nervous system, especially in children

#### **Mercury:**

Linked to neurological damage, kidney problems, and reproductive issues

#### **Selenium:**

Linked to hair loss, skin problems, and neurological disorders

#### **Fine Particulate Matter:**

Tiny particles that can penetrate deep into the lungs and bloodstream, causing respiratory problems, cardiovascular disease, and premature death

### Health Effects of Coal Ash Exposure

- Respiratory diseases
- Cardiovascular diseases
- Cancer
- Neurological disorders
- Reproductive problems



### How to Protect Yourself from Coal Ash

- Avoid contaminated areas
- Filter your water
- Wash fruits and vegetables thoroughly
- Be aware of local air quality alerts



## How Coal Ash is Regulated in the United States

### Key Regulatory Aspects:

The **Coal Ash Disposal Rule** sets federal standards for coal ash disposal, with requirements for:

- The structural integrity of coal ash impoundments
- Groundwater monitoring and corrective actions
- Operating criteria for coal ash units
- Record keeping and public disclosure
- Post-closure standards for inactive impoundments

State regulations for coal ash disposal may be more stringent than federal standards, and coal ash can receive a Hazardous Waste Designation if it contains high levels of toxic substances.

### Measuring Coal Ash Pollution

- Air quality monitoring
- Water quality testing
- Soil testing



### Challenges and Ongoing Efforts:

#### Enforcement:

Ensuring compliance with coal ash regulations can be challenging, and enforcement efforts may vary across different states.

#### Legacy Sites:

Addressing the legacy of coal ash disposal sites that existed before the current regulations were in place is a complex issue.

#### Beneficial Use:

The use of coal ash in beneficial applications, such as construction materials, is a growing area of interest, but it requires careful regulation to ensure that it does not pose environmental risks.

