



Georgia Risk Assessment  
Guidance (GRAGs)  
Update  
GIEC- EPD Workshop  
May 4, 2023

# Agenda

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Mission

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Relation to other guidance documents

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Pathways

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Applicability

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Ideas

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Technical Advisory Committee (TAC)

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Outline

# Mission

- ▶ To produce guidance for conducting human health and ecological risk assessments on the exposure to contaminated environmental media that
  - ▶ Is protective of human health and the environment;
  - ▶ Reflects the most current science / is scientifically defensible
  - ▶ Promotes consistency while allowing for flexibility
  - ▶ Provides options for conducting risk assessments (e.g., streamlined and site specific)
  - ▶ Engages stakeholders

# Relation of other EPD Guidance Documents



# Pathways to be evaluated in risk assessment (not including eco)

## ▶ Soil

- Leaching – consult GA EPD Soil to Groundwater Pathway FAQs
- Surface (0-1 ft below ground surface)
  - Direct Contact
  - Possible application of Area Averaging Guidance
- Subsurface >1 ft bgs to groundwater table
  - Direct Contact

## ▶ Groundwater – Direct Contact, discharge to surface water

## ▶ Surface Water – Do concentrations exceed instream standards?

## ▶ Indoor Air Vapor Intrusion – consult GA EPD VI Guidance

# Applicability

- ▶ Guidance will be primarily for human health risk assessments. Ecological risk assessments will be discussed, but will mostly include references to EPA or other guidances.
- ▶ Guidance would primarily be applicable for RCRA or HWMA Order facilities. Some portions of the document would be applicable to HSRA, VRP, and Brownfield sites.
- ▶ Guidance will not address corrective action.
- ▶ Guidance will include references to other guidances when applicable
- ▶ Cumulative Risk Thresholds: ELCR of 1E-05 and HI of 1 for each pathway per receptor
  - ▶ If risk exceeds these thresholds, corrective action will be required for that pathway

# Ideas for the guidance

- ▶ Human Health Direct Contact
  - ▶ **Step 1:** Screening Level Risk Assessment > COPCs
    - ▶ Screen maximum detected concentration in media against screening criteria or other applicable value (background concentration)
  - ▶ **Step 2:** 3 options
    - ▶ **Clean up to RSLs** (UU/UE designation)
      - ▶ Perform **streamlined risk assessment** to determine where to focus efforts to reduce risk
        - ▶ Would utilize CSM, templates, default assumptions and exposure parameters, and the RSL calculator to determine risk to receptors.
        - ▶ Revisit streamlined risk assessment or baseline risk assessment after cleanups are conducted to verify if contamination is below risk thresholds.
    - ▶ Perform **baseline risk assessment** to determine risks for each pathway for each receptor scenario using site-specific exposure parameters.

# Technical Advisory Committee

- ▶ Collection of multi-disciplined experts in the field
  - ▶ Risk assessors
  - ▶ Corrective action specialists/practitioners/consultants
  - ▶ Attorney
- ▶ Assisting with drafting of document
- ▶ Providing innovative ideas
- ▶ Assisting with the design of streamlining



# TAC members

- ▶ Chris Saranko, risk assessor, Geosyntech
- ▶ Beth Blalock, attorney, Gilbert Harrell Law Firm
- ▶ Timmerly Bullman, Principal Engineer & Director, Montrose Env. Group
- ▶ Sara Mathews, risk assessor, wood plc
- ▶ Tamara Sorrell, risk assessor, Brown and Caldwell
- ▶ Len Diprima, Executive Vice President, United Consulting
- ▶ Kevin Koporec, risk assessor, EPA Region 4
- ▶ David Brownlee, Manager, GA EPD Response and Remediation
- ▶ Sarah Visser, Assistant Branch Chief, GA EPD LPB
- ▶ Risk Assessment Program, GA EPD LPB – Jill, Ro, Jinnie and Amy

# Outline

- ▶ Need your input
- ▶ You can provide input by:
  - Index cards
  - Email [amy.potter@dnr.ga.gov](mailto:amy.potter@dnr.ga.gov)