OSSON®

Environmental Permitting for Emerging Data Centers





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Environmental Permitting and Compliance for Data Centers



Permitting/Compliance



Consumption

- Air Permitting
- Due Diligence
- Wastewater
- Stormwater
- RCRA/Hazardous Waste
- SPCC

- Energy
- Water





Air Permitting

EMISSION UNITS

- Emergency Generators
- Cooling Towers
- Fuel Storage Tanks

REGULATORY CONSIDERATIONS

- Attainment Status
- Permitting
- Modeling
- Commencing Construction



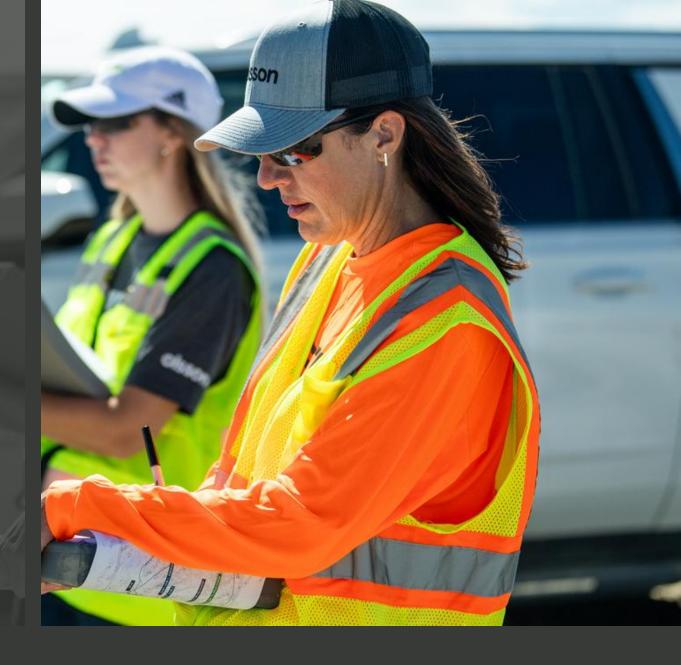
Due Diligence



Noise Modeling and Background Acoustics Surveys

Phase I ESA

- ASTM E1527-21 or E2247-16
- To evaluate business environmental risk.
- Identify soil or groundwater contamination



Wastewater



APPLICABILITY

PERMITTING

 Required prior to industrial wastewater discharge

REGULATORY CONSIDERATIONS

- Sampling
- Reporting
- Recordkeeping



Stormwater

CONSTRUCTION GENERAL PERMIT

Applicability

Regulatory Considerations

- Erosion controls
- Inspections

INDUSTRIAL GENERAL PERMIT

Applicability

Regulatory Considerations

- Plan maintenance
- Inspections
- Training



Resource Conservation and Recovery Act

HAZARDOUS WASTE

- Generator classification
- Waste streams

NON-HAZARDOUS WASTE





Spill Prevention Control and Countermeasures (SPCC) / Facility Response Plan (FRP)

APPLICABILITY

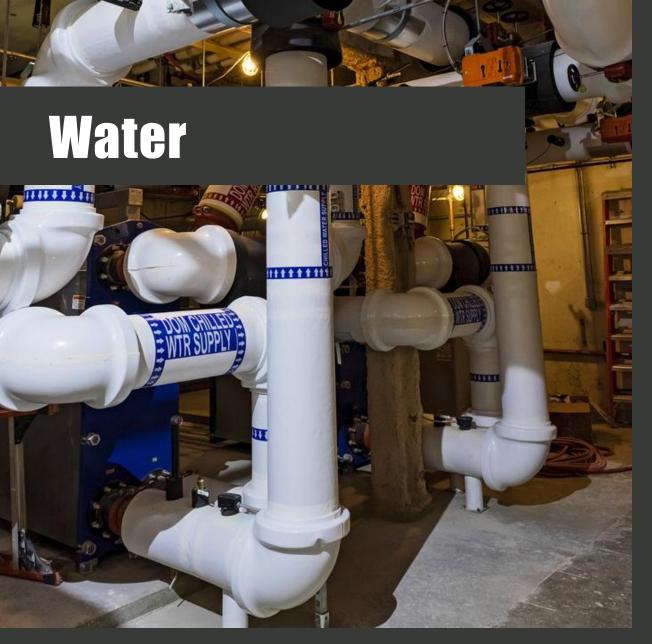
SPCC PLAN PURPOSE

- Prevention measures
- Control measures
- Countermeasure strategies

REGULATORY CONSIDERATIONS

- Plan maintenance
- Inspections
- Training









Water Use

- Direct/Indirect
- Cooling
- Evaporative Cooling v. Air Cooling
- WUE v. PUE

- Local Considerations
- Relative Impact
- Future Considerations



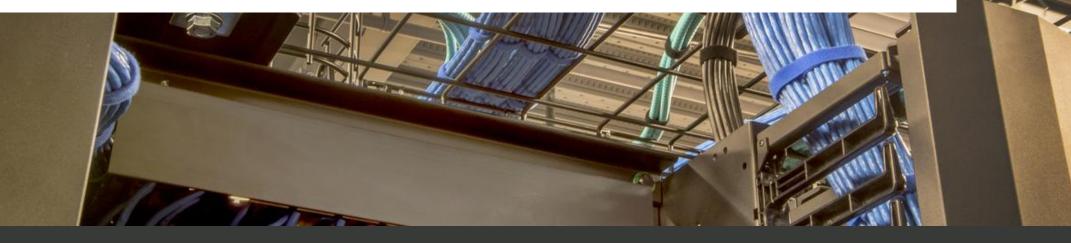
Energy Considerations

- Is data center load growth 2025 2030 "2X" or "10X"?
- How will this load be served?
- Who is going to pay for it?



Thank You & Questions

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