

# North Dakota Department of Health Environmental Health Section Update

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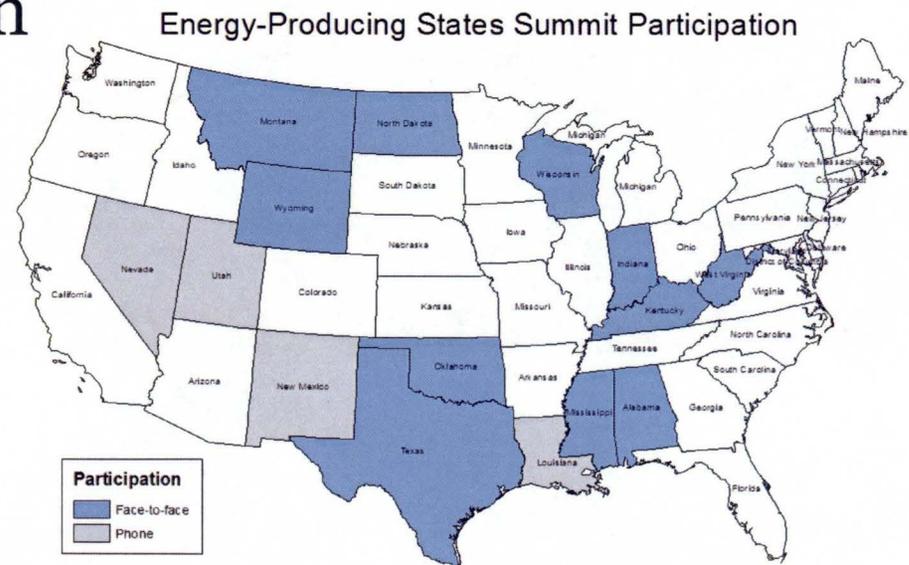
**NORTH DAKOTA**  
DEPARTMENT *of* HEALTH

# Objectives

- 111(d) Proposed GHG Regulations
- Tesoro Pipeline Remediation Update (Tioga)
- Spill Response – Brine Issues?
- TENORM

# Energy Producing States Summit

- April 16 & 17, 2014
- Bismarck State College – National Energy Center
- EPA HQ – Joe Goffman
- Good attendance
- 15 states participated



# Discussion Points

- Goal of endpoint of 111(d)
- Flexibility for states
- State control
- Time
- Stranded assets
- Impact on regional electric rates
- Affordability
- Reliability
- Amending NSR
- Applicability test
- Uniqueness of states
- Credit for previous actions
- CO<sub>2</sub> exemption for biomass
- Mass-base vs. rate-base
- Baseline dates (2005)

## Discussion Points cont.

- Trading
- Economic impact
- Useful life
- Clear & defensible guidance
- Federal investment in clean coal technology
- Regional plans
- Sub-categorization for fuel sources
- Stakeholder engagement
- Reciprocity agreements among states
- Achievable Standards
- Inside – outside fence?
- State determination of performance standards
- Proven technology
- State resources

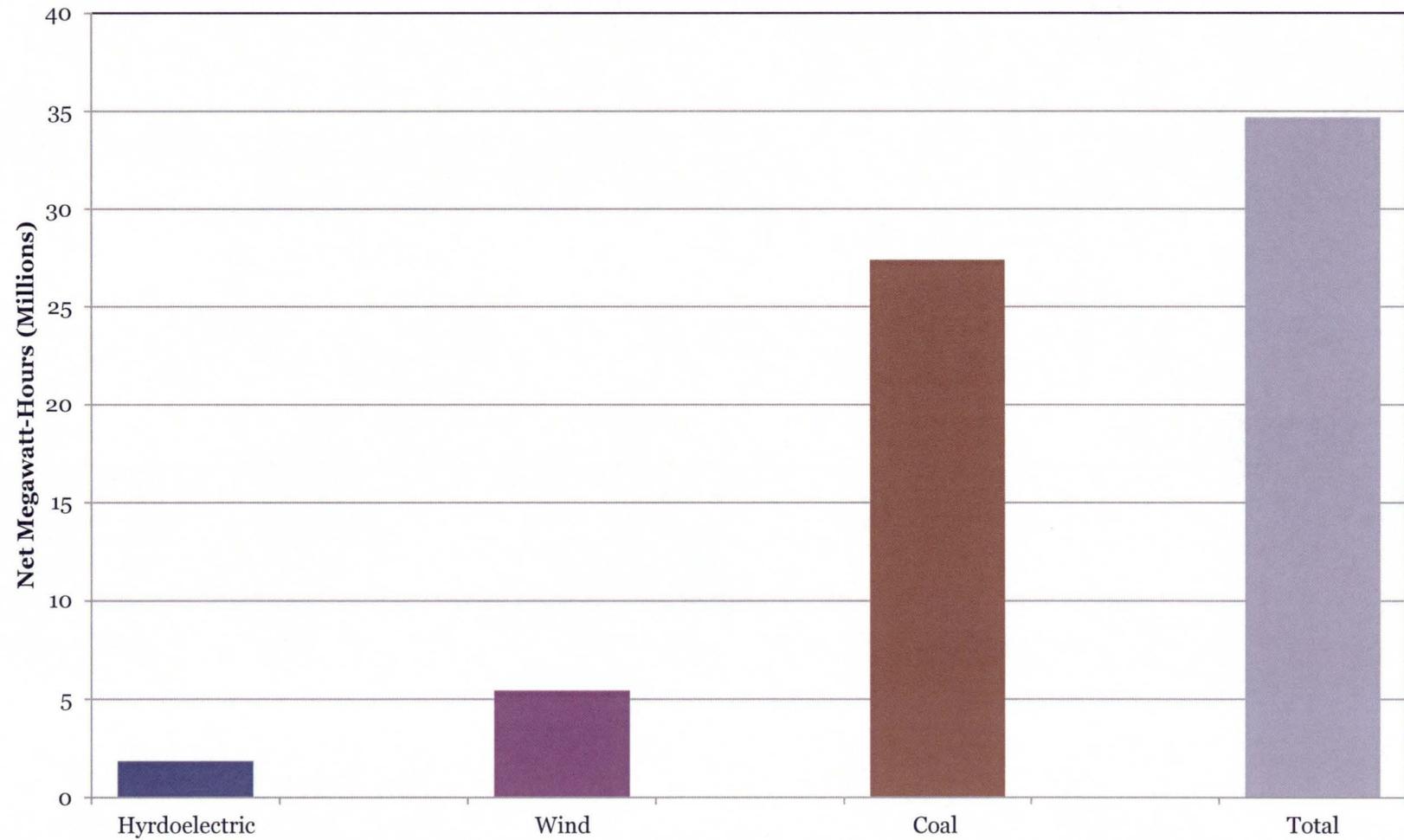
## Outcome - Next Steps

- Letter to Office of Management & Budget
- Signed by 12 states – submitted May 23, 2014
- Highlights
  - States should have lead role
  - Timeline needs to be extended
  - Affordability, accessibility and reliability
  - Controls must be applicable & available
- Conference call planned for late June/early July

# EPA's 111(d) Proposal

- Directed at existing power plants – June 2, 2014
- Reduce CO<sub>2</sub> emissions by 30% by 2030
- EPA Identified ND Goals
  - 1817 lb/MWh by 2020
  - 1783 lb/MWh by 2030
  - ND currently at 1994 lb/MWh for all sources including:
    - Power plants
    - Wind (Question on who gets the credit)
- 120 day comment period (October 16, 2014)

## North Dakota Electrical Generation 2013



# Options for Achieving EPA Goals

- Efficiency improvements at plants & transmission
- Controls (very expensive – available & proven technology)
- Fuel switching or dispatching changes with natural gas (40% less CO<sub>2</sub> than coal)
- Retiring coal units/replace with gas
- Offset with renewable sources
  - Wind
  - Solar
  - New Hydro
- Demand side energy efficiency

# First Impressions

- ND CO<sub>2</sub> emissions currently down 11% from 2005
  - 2005 – 37 million tons    2013 – 33 million tons
- In 2013 ND renewable generation = 21%
- ND ranks 6<sup>th</sup> in nation “Wind Energy Potential”
- Industry Reaction & Comments
  - Mildly encouraged that levels can be met
  - Allow states flexibility to decide
  - Allow states more time
    - June 2016 date for state plan submittal challenge

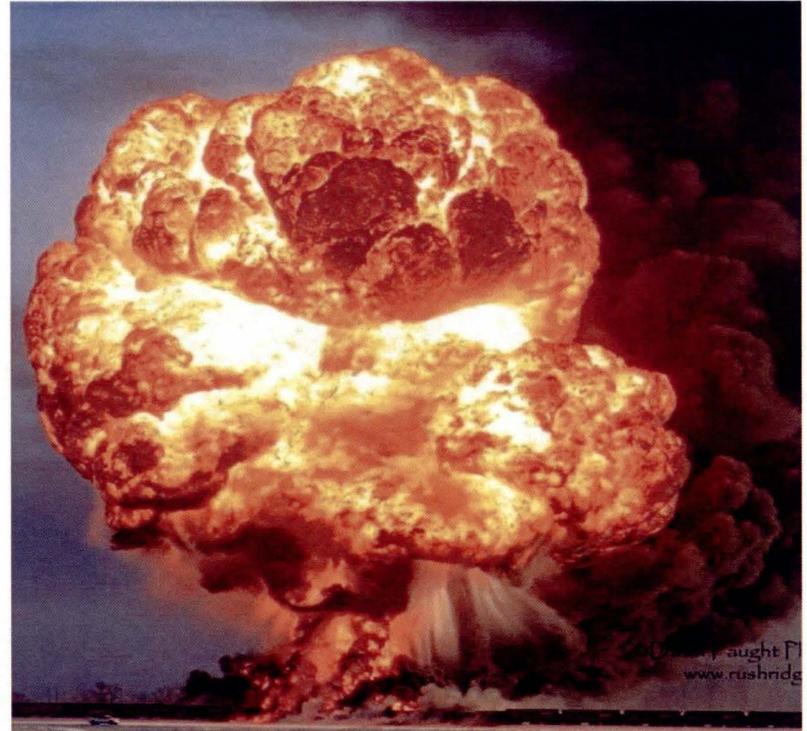
# Areas of Concern

- Need to examine the calculations
  - EPA has offered to meet with ND – no date set
- More time is needed
  - Need to determine if Regional Compact is desirable
  - What role does PSC play?
  - Is legislation necessary?
- Decouple from other CAA areas
  - Major modifications impacts (111(b) - PSD)
- Allocation of credits for renewable sources
- Will EPA allow state deference

## Next Steps

- Participate in Q & A sessions with EPA/states
- One-on-One meeting with EPA
- More conversations with energy producing states
- Discussions with industry
- Participation with Western States Governor's Forum
- Prepare comments
  - Due October 16, 2014

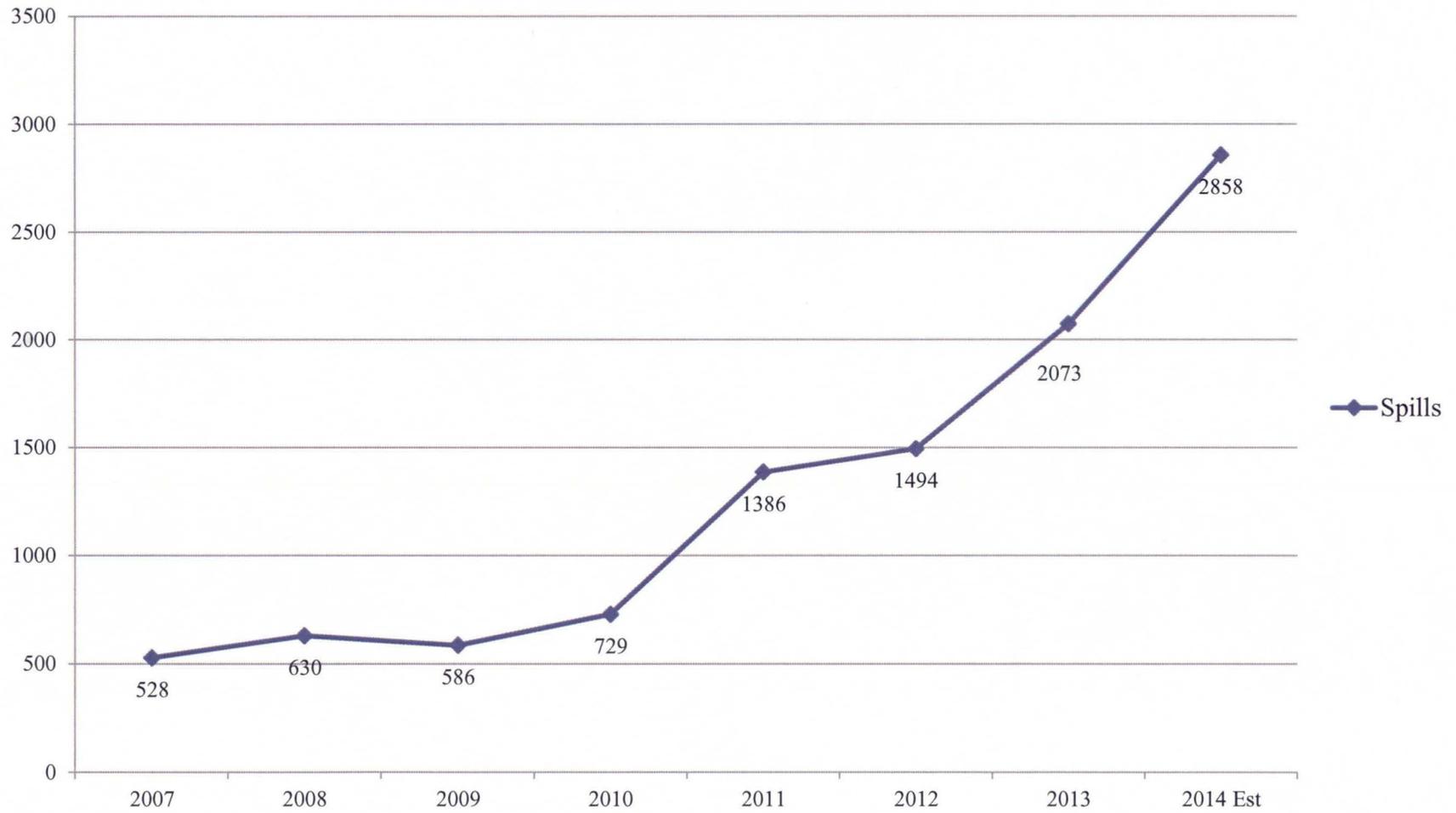
# Emergency/Spill Response



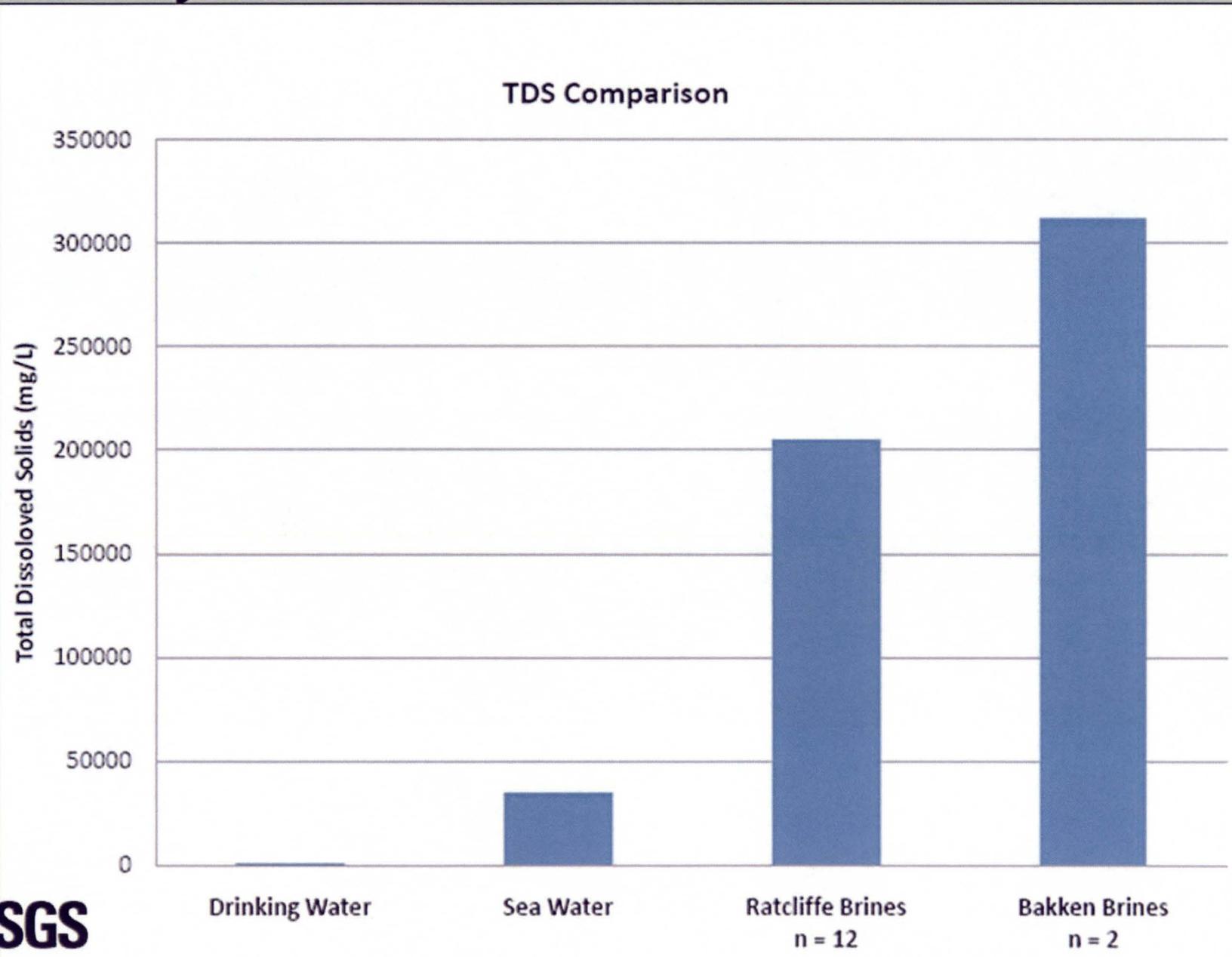


# Water Quality - Soil Impacts



**Number of Spills by Year**

# Chemistry of Co-Produced Waters in the United States

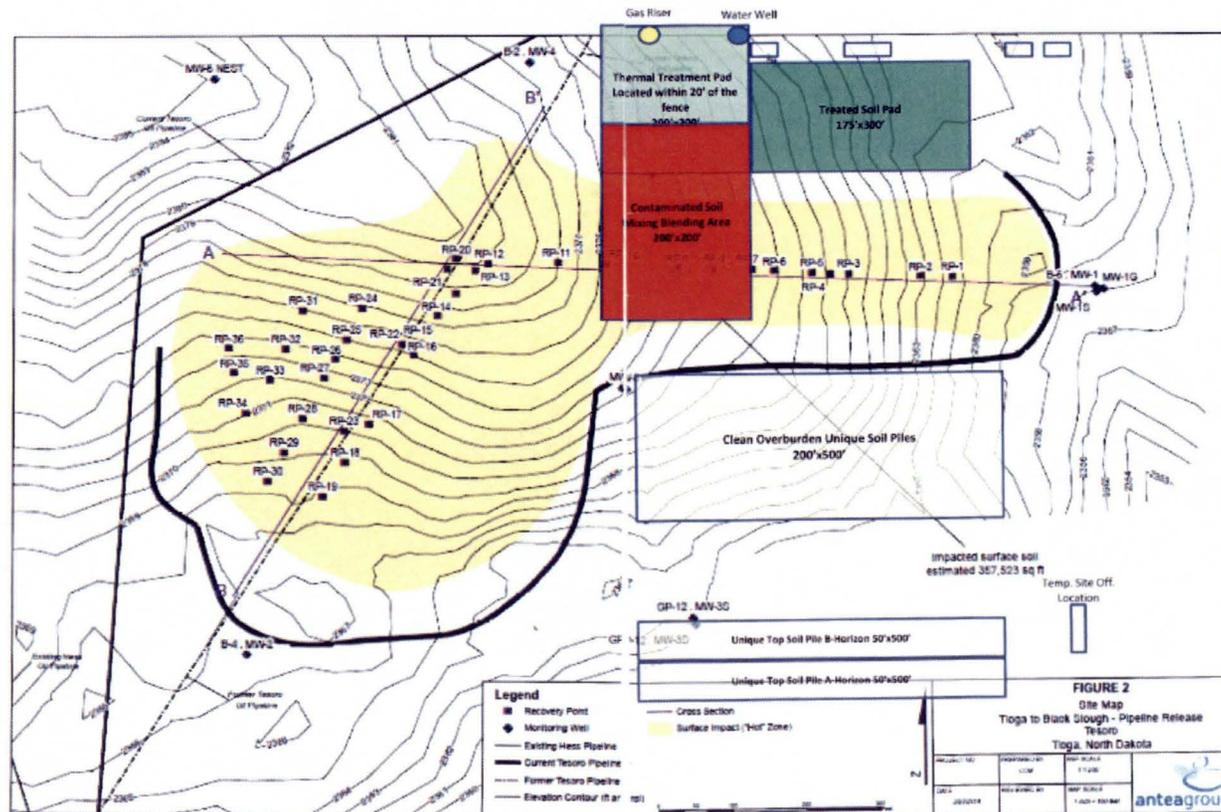


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**Dead vegetation and  
Damaged soil from  
Salt-water/brine  
Release**

# Tesoro Pipeline Remediation Update









# TENORM

- Technically
- Enhanced
- Naturally
- Occurring
- Radioactive
- Material





# Solid Waste Challenges

- Appropriate TENORM regulation
  - Illegal dumping
  - Providing opportunities for proper disposal
- Public education and perceptions
- Industry awareness and responsibility
- Field inspections – presence
- Enforcement
- Capacity development