

A dark blue background featuring a faint, lighter blue silhouette of a world map. The map shows the continents of North America, South America, Europe, Africa, Asia, and Australia. The text is overlaid on this background.

Rochester Water Reclamation Plant Impacts of Mayo Alkaline Hydrolysis

NACWA

2014 National Pretreatment and Pollution
Prevention Workshop

May 16, 2014
Minneapolis, MN

Rochester and The Mayo Clinic



- ◆ 2013 population 106,000
- ◆ WRP Flow 13.5 MGD_{AA}

- ◆ Mayo Clinic 150 Year Anniversary
- ◆ Mayo Clinic Employees 35,000+
- ◆ 1 million visitors per year



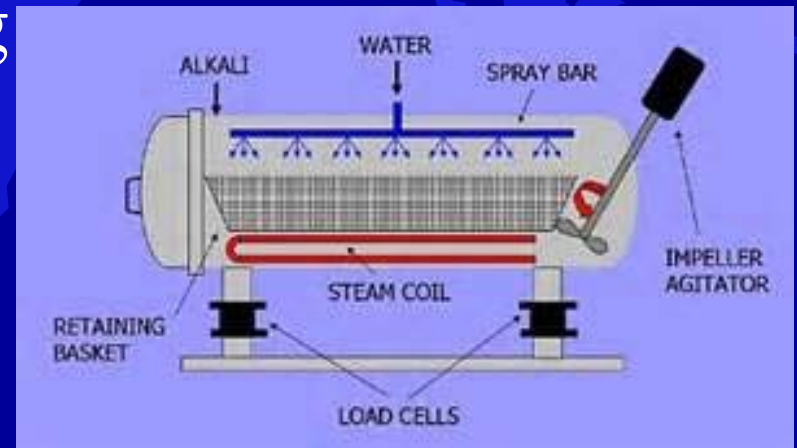


Mayo Downtown Rochester Campus



Alkaline Hydrolysis

- ◆ Mayo Clinic approached WRP in 2003
- ◆ WRP Reviewed Prohibited Substances
- ◆ No Basis to Deny Installation
- ◆ Compared with Embalming
- ◆ Must Meet Local Limits
- ◆ WRP Requested Data



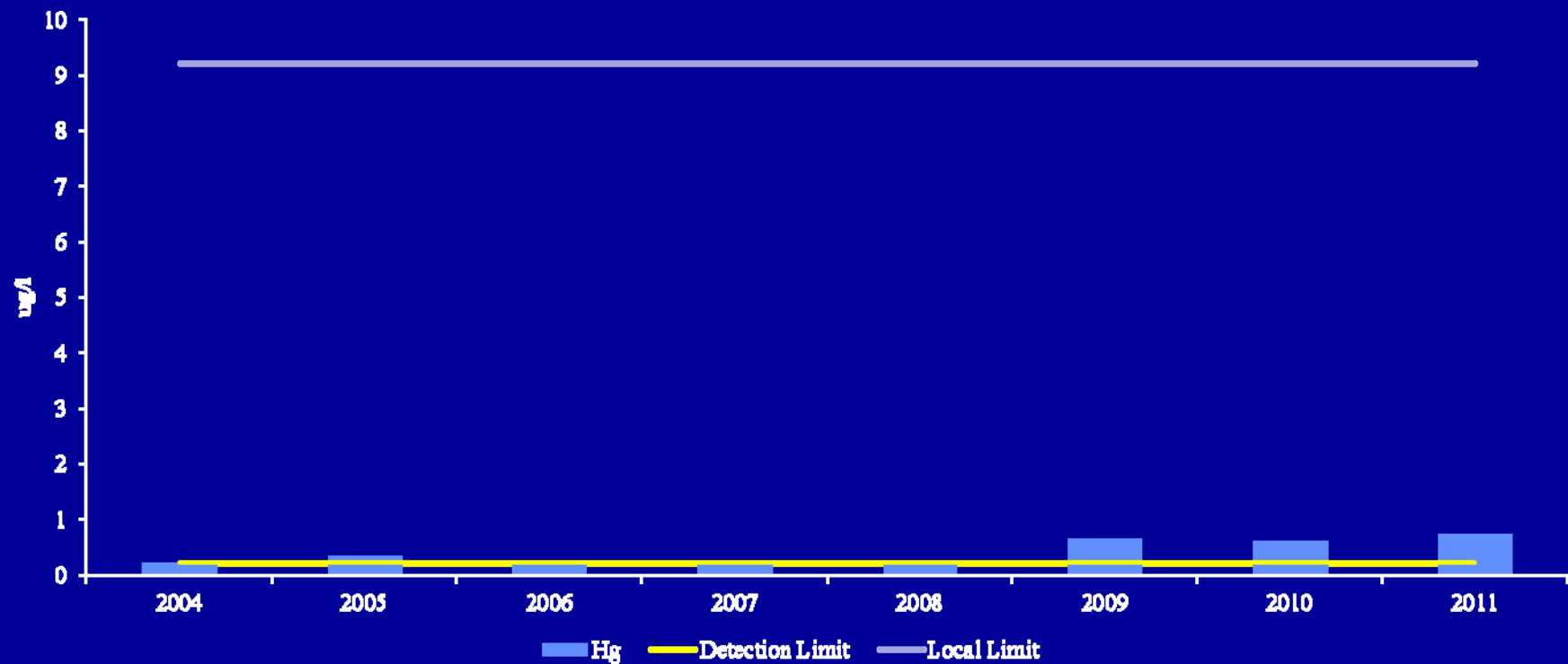
Alkaline Hydrolysis

- ◆ Local Limits Apply at Point of Discharge
- ◆ Located in Stable Building
- ◆ Began Operation in 2006
- ◆ Concerns
 - Mercury
 - pH



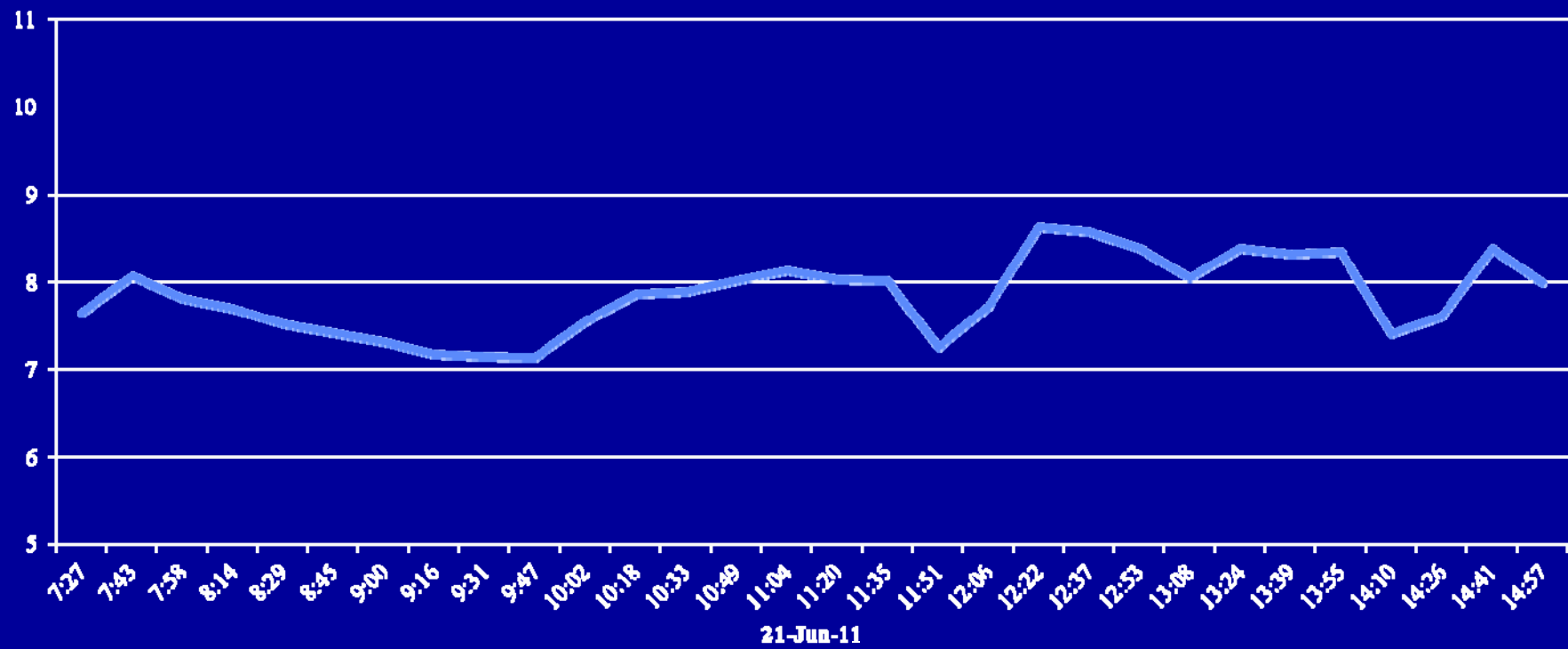
Mercury

Mayo Stabile Hg

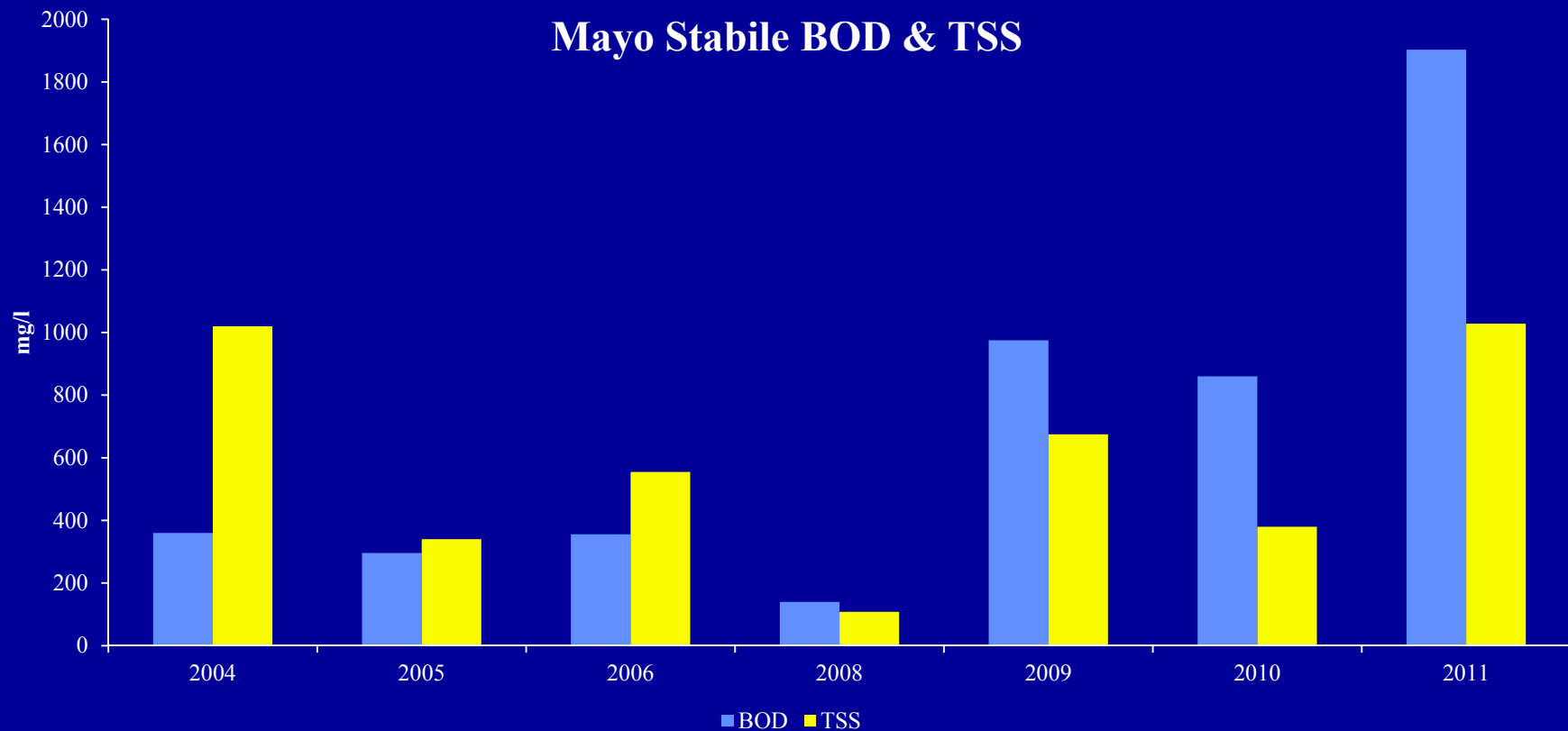


pH

Mayo Stabile pH



Added Surcharge to Stabile Bldg.



Conclusion

- ◆ Not a Prohibited Discharge
- ◆ Low Metals Concentration
- ◆ Probably safer than discharging embalming fluids
- ◆ Discharge Meets Ordinance Requirements
- ◆ Mayo discharge is in a large building
- ◆ Other locations may need pH adjustment



David Lane
Rochester Water Reclamation Plant
507-328-2656

dlane@rochestermn.gov